California Environmental Quality Act
Biological Resources Mitigation Report

White Rock Springs Ranch

Sacramento County, California

Prepared For:

Raintree Investment Corporation

September, 2015

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

The following table outlines the Mitigation Measures for Biological Resources as required by the Mitigation and Monitoring Reporting Program (MMRP) for the Folsom South of U.S. Highway 50 Specific Plan Project prepared by the City of Folsom. The White Rock Springs Ranch (or "Folsom 138") Project is included within the Folsom South of U.S. Highway 50 Specific Plan Project. The permits and/or reports that correspond to the mitigation measures (as application) are provided in the attachments referenced in the table.

Mitigation Measure	Compliance Action	Status	Attachment (if applicable)
3A.3-1a	Design Stormwater Drainage Plans and Erosion and Sediment Control Plans to avoid and minimize erosion and runoff to all wetlands and other waters that are to remain within the Project area and use low impact development features.	Not completed, will need to be completed by the Project's Engineer.	
3A.3-1b	Secure Clean Water Act Section 404 Permit and implement all permit conditions; ensure no net loss of functions and waters of the U.S. and waters of the State.	*404* - Letter of Permission (LOP) issued by USACE on September 18, 2014 for impacts to 0.921 acres of waters of the U.S. Credits purchased from Westervelt Ecological Services, LLC. On December 10, 2014 for impacts to waters of the U.S. All permit conditions must be met prior t impacting waters of the U.S. *401* – Water Quality Certification issued by the Central Valley RWQCB on August 8, 2014 for impacts to 0.921 acre of impacts to	*Attachment A, B, and C*

Mitigation Measure	Compliance Action	Status	Attachment (if applicable)
		waters of the U.S. All permit conditions must be met prior to impacting waters of the U.S.	
3A.3-2a	Avoid direct loss of Swainson's Hawk and other raptor nests.	Pre-construction surveys to be conducted within 14 days of construction activities.	
3A.3-2b	Prepare a Swainson's Hawk Mitigation Plan.	A Swainson's Hawk mitigation plan has been prepared for the Folsom 138 project. The City will need to review and approve.	*Attachment D*
3A.3-2c	Avoid and minimize impacts to Tricolored Blackbird nesting colonies.	Not completed. No suitable nesting habitat for tricolored blackbirds. However, surveys will be conducted concurrently with nesting raptor surveys under mitigation measure 3A.3-2a to ensure no nesting tricolored blackbirds occur on-site. Additionally, will monitor for any new information on listing status or habitat mitigation requirements and mitigate if needed.	
3A.3-2d	Avoid and minimize impacts to special-status bat roots.	Not applicable, no roosting habitat on-site.	

Mitigation Measure	Compliance Action	Status	Attachment (if applicable)
3A.3-2e	Obtain and Incidental Take Permit (ITP) under Section 10(a) of the federal Endangered Species Act (ESA); develop and implement a Habitat Conservation Plan (HCP) to compensate for the loss of vernal pool habitat.	Not applicable. The currently land use plan for Folsom 138 requires a CWA Section 404 permit, which involves a federal action and eliminates the need for a Section 10 ITP, HCP.	
3A.3-2f	Obtain an ITP under Section 109a) of the federal ESA; develop and implement a HCP to compensate for the loss of Valley Elderberry Longhorn Beetle (VELB) habitat.	Not applicable. The currently land use plan for Folsom 138 requires a CWA Section 404 permit, which involves a federal action and eliminates the need for a Section 10 ITP, HCP.	
3A.3-2g	Secure take authorization for federally listed vernal pool invertebrates and implement all permit conditions.	Completed. On April 2, 2014, the U.S. Fish and Wildlife Service (USFWS) issued a Biological Opinion (BO) for the FSASP, of which Folsom 138 is a part. The BO concluded that no federally listed vernal pools invertebrates occur on-site based on protocol level surveys, and therefore, no mitigation for impacts is necessary.	*Attachment E*
3A.3-2h	Secure take authorization for federally listed VELB and implement all permit conditions.	Completed. On April 2, 2014, USFWS issued a BO for the FPASP, of which Folsom 138 is a part. The BO concluded	*Attachment E*

Mitigation Measure	Compliance Action	Status	Attachment (if applicable)
		that no VELB habitat (elderberry shrubs) is present on-site, and therefore, no mitigation for impacts is necessary.	
3A.3-3	Conduct special-status plant surveys; implement avoidance and mitigation measure or compensatory mitigation.	Completed. Special-status plant surveys were conducted on Folsom 138 in April and July of 2014. No special-status plant species were found.	*Attachment F*
3A.3-4a	Secure and implement Section 1602 Streambed Alteration Agreement (SAA).	A Maser SAA for the FPASP (which includes Folsom 138) was issued in February 2014. A sub-notification for Folsom 138 will be submitted to CDFW for approval prior to any construction activities.	*Attachment G*
3A.3-4b	Conduct surveys to identify and map valley needlegrass grassland; implement avoidance and minimization measures or compensatory mitigation.	Completed. A valley needlegrass grassland survey was conducted by ECORP in April 2015. A letter report was prepared that summarized the survey and provided avoidance and mitigation measures for the Project	*Attachment H*
3A.3-5	Conduct tree survey, prepare and implement oak woodland mitigation plan, replace native oak trees removed, and	Two valley oak trees located on-site are within the designated open space area. No impacts	

Mitigation Measure	Compliance Action	Status	Attachment (if applicable)
	implement measures to avoid and minimize indirect impacts on oak trees retained on-site.	will occur, hence no mitigation is necessary. During construction a root protection zone will be established for each oak tree to ensure no indirect impacts occur.	
3B.3-1a* *applies to the "water" components of the Specific Plan	Secure Clean Water Act Section 404 Permit and implement all permit conditions; ensure no net loss of functions and waters of the U.S. and waters of the State.	Not applicable. Waterline alignment is not part of the Folsom 138 project.	
3B.3-1b*	Maximum use of trenchless technology for conveyance pipeline design.	Not applicable. Waterline alignment is not part of the Folsom 138 project.	
3B.3-1c*	Restore all waters impacted by trenching and temporary construction staging areas to pre-project contours and conditions.	Not applicable. Waterline alignment is not part of the Folsom 138 project.	
3B.3-2*	Conduct pre-construction survey for western spadefoot toad and western pond turtle and if found, implement avoidance and compensation measures.	Not applicable. Waterline alignment is not part of the Folsom 138 project.	

LIST OF ATTACHMENTS

Attachment A – Mitigation Credit Receipts

Attachment B – USACE Correspondence:

- Jurisdictional Determination Verification Letter
- SHPO Letter
- USACE Clean Water Act Section 404 Letter of Permission (SPK-2008-0036)

Attachment C – RWQCB Clean Water Act Section 401 Technically Conditioned Water Quality Certification (WDID# 5A34CR00597)

Attachment D – Swainson's Hawk Mitigation Plan

Attachment E – USFWS Biological Opinion (File Number 81420-2010-F-0620-1)

Attachment F – Special-Status Plant Survey

Attachment G – Final Lake or Streambed Alternation Agreement (Notification No. 1600-2012-0198-R2) Folsom Plan Area Specific Plan, Master Agreement

Attachment H – Valley Needlegrass Grassland Survey

ATTACHMENT A

Mitigation Credit Receipts

Cosumnes Floodplain Mitigation Bank
AGREEMENT FOR SALE OF MITIGATION CREDITS
PERMIT NO. **SPK-2008-00326 (Folsom 138)**
SPK-2007-02159 (Portion of Backbone)

This Agreement is entered into this 18 day of NOVEMBER, 2014, by and between WESTERVELT ECOLOGICAL SERVICES, LLC (Bank Sponsor) and GRAGG RANCH RECOVERY ACQUISITION, LLC (Project Applicant), jointly referred to as the "Parties," as follows:

RECITALS

A. The Bank Owner has developed the Cosumnes Floodplain Mitigation Bank located in Sacramento County, California; and

B. The Bank was approved by the U.S Army Corps of Engineers (USACE), U.S Environmental Protection Agency (USEPA), National Marine Fisheries Service (NMFS) and California Department of Fish and Wildlife (CDFW) (jointly referred to as "Agencies") on **September 30, 2009**, and is currently in good standing with these agencies; and

C. The Bank has received approval from the Agencies to offer riparian wetlands and seasonal wetlands under the Clean Water Act and riparian forest, Scrub Shrub, and Shaded Riverine Aquatic (SRA) credits through the *Cosumnes Floodplain Mitigation Bank Enabling Instrument* (Bank Agreement); and

D. Project Applicant is seeking to implement the **Folsom 138 Project** described on Exhibit "A" attached hereto (Project), which would unavoidably and adversely impact **0.921 acres** of Seasonal wetland, marsh, seep, intermittent drainage and riparian wetlands. Project Applicant seeks to compensate for the loss of these seasonal wetland, marsh, seep, intermittent drainage and ditch by purchasing Credits from the Bank; and

E. Project Applicant has been authorized by Permit No. **SPK-2008-00326**, to purchase from the Bank 1.8105 floodplain mosaic wetland (re-establishment) credits and 0.024 floodplain riparian (re-establishment) credits. Project Applicant has also been authorized under Permit No. **SPK-2007-02159** to purchase 0.0957 floodplain mosaic wetland (re-establishment) credits upon confirmation by the Bank Owner of credit availability/adequate balance of credits remaining for sale; and

F. Project Applicant desires to purchase from Bank and Bank desires to sell to Project Applicant a total of **1.9062 floodplain mosaic wetland (re-establishment) credits** and **0.024 floodplain riparian (re-establishment) credits**;

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Bank hereby sells to Project Applicant and Project Applicant hereby purchases from Bank 1.8105 floodplain mosaic wetland (re-establishment) credits ($217,260) and 0.024 floodplain riparian (re-establishment) credits ($1,800) under **SPK-2008-00326** and 0.0957 floodplain mosaic wetland (re-establishment) credits ($11,484) under **SPK-2007-02159** for a total purchase price of **$230,544**. The Bank will then deliver to Project Applicant an executed Bill of Sale in the manner and form as attached hereto and marked Exhibit "B". The purchase price for said credits shall be paid by cashier's check or, at the option of Bank, wire transfer of funds according to written instructions by Bank to Project Applicant.

2. The sale and transfer herein is not intended as a sale or transfer to Project Applicant of a security, license, lease, easement, or possessory or non-possessory interest in real property, nor the granting of any interest of the foregoing.

3. Project Applicant shall have no obligation whatsoever by reason of the purchase of the Credits, to support, pay for, monitor, report on, sustain, continue in perpetuity, or otherwise be obligated or liable for the success or continued expense or maintenance in perpetuity of the credits sold, or the Bank. Pursuant to the Bank Agreement and any amendments thereto, Bank shall monitor and make reports to the appropriate agency or agencies on the status of any Credits sold to Project Applicant. Bank shall be fully and completely responsible for satisfying any and all conditions placed on the Bank or the Credits by all state or federal jurisdictional agencies.

4. The Credits sold and transferred to Project Applicant for SPK-2008-00326 & SPK-2007-02156 permits shall be non-transferable and non-assignable to another permit, and shall not be used as compensatory mitigation for any other Project or purpose, except as set forth herein.

5. Project Applicant hereby commits to purchase the Credits and in association therewith shall tender payment for the Credits no later than 45 days from the dates of this agreement.

6. Upon purchase of the credits specified in paragraph D above, the Bank shall submit to the parties listed in the Notices section of the Bank Agreement / Bank Enabling Instrument, copies of the: a) Agreement for Sale of Credits; b) Bill of Sale; c) Payment Receipt; and d) an updated ledger. The updated inventory / ledger must detail: i) Project Applicant; ii) Project Name; iii) Status (sale complete/sale not complete); iv) Credit Sale Date; v) Service File Number; vi) U.S. Army Corps of Engineers File Number (if applicable); vii) Total Number of Credits Authorized to Sell; viii) Total Number of Credits Sold to Date (inclusive); and ix) Balance of all Credits Available. The inventory / ledger should include all sales data from bank opening/establishment to the present.

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first above written.

BANK:

WESTERVELT ECOLOGICAL SERVICES, LLC
Cosumnes Floodplain Mitigation Bank Sponsor

By: _____ Date: 11/10/2014

PROJECT APPLICANT:

GRAGG RANCH RECOVERY ACQUISITION, LLC

By: _____ Date: 12/18/14

Exhibit "A"

DESCRIPTION OF PROJECT
TO BE
MITIGATED

Permit No. **SPK-2008-00326**. Development project located in Eastern Sacramento County with the Folsom SOI Development area. Project applicant is purchasing 1.8105 floodplain mosaic wetland (re-establishment) credits and 0.024 floodplain riparian (re-establishment) credits under SPK-2008-00326

Permit Applicant is also mitigating for a portion of the Backbone Infrastructure Permit (SPK-2007-02159) by purchasing 0.0957 floodplain mosaic wetland (re-establishment) credits

Exhibit "B"
Cosumnes Floodplain Mitigation Bank
SPK-2008-00326 (Folsom 138)
SPK-2007-02159 (Folsom SOI Backbone Infrastructure)
BILL OF SALE

In consideration of **$230,544**, receipt of which is hereby acknowledged, COSUMNES FLOODPLAIN MITIGATION BANK Sponsor does hereby bargain, sell and transfer to GRAGG RANCH RECOVERY ACQUISITION, LLC 1.8105 floodplain mosaic wetland (re-establishment) credits ($217,260) and 0.024 floodplain riparian (re-establishment) credits ($1,800) under **SPK-2008-00326** and 0.0957 floodplain mosaic wetland (re-establishment) credits ($11,484) under **SPK-2007-02159** for a total purchase price of **$230,544** in the *Cosumnes Floodplain Mitigation Bank* in Sacramento County, California, developed, and approved by the U.S. Army Corps of Engineers, U. S. Environmental Protection Agency, California Department of Fish and Wildlife, and National Marine Fisheries Service.

Westervelt Ecological Services represents and warrants that it has good title to the credits, has good right to sell the same, and that they are free and clear of all claims, liens, or encumbrances.

Westervelt Ecological Services covenants and agrees with the buyer to warrant and defend the sale of the credits hereinbefore described against all and every person and persons whomsoever lawfully claiming or to claim the same.

DATED: 12/19/2014

WESTERVELT ECOLOGICAL SERVICES, LLC
Cosumnes Floodplain Mitigation Bank Sponsor

By: _____

Exhibit "C"

Cosumnes Floodplain Mitigation Bank
PAYMENT RECEIPT

PARTICIPANT INFORMATION

Name:	Gragg Ranch Recovery Acquisition, LLC
Address:	
Telephone:	858.500.6782
Contact:	Matt Villalobos – Senior Development Director

PROJECT INFORMATION

Project Description:	Folsom 138
Project File Number:	SPK-2008-00326 SPK-2007-02159
Species/Habitat Affected:	Seasonal wetland, marsh, seep, intermittent drainage and riparian
Credits to be Purchased:	**SPK-2008-00326** 1.8105 floodplain mosaic wetland (re-establishment) credits and 0.24 floodplain riparian (re-establishment) credits **SPK-2007-02159 0.0957** floodplain mosaic wetland (re-establishment) credits
Payment Amount:	$219,060 (SPK-2008-00326) & $11,484 (SPK-2007-02159) Total = $230,544
Project Location:	Sacramento County
County/Address:	Sacramento County

PAYMENT INFORMATION

Payee:	WESTERVELT ECOLOGICAL SERVICES, LLC
Payer:	GRAGG RANCH RECOVERY ACQUISITION, LLC
Amount:	Two Hundred Thirty Thousand Five Hundred Forty Four Dollars ($230,544)

Method of payment: Cash ~~Check~~ Wire No. 10325942 Money Order No.

Received by: _____ Date: 12/19/2014
(Signature)

Name: TRAVIS Hemmen Title: Project Manager

VAN VLECK RANCH MITIGATION BANK
AGREEMENT FOR SALE OF MITIGATION CREDITS
PERMIT NO: SPK-2008-0036 (Folsom 138)

This Agreement is entered into this 18 day of NOVEMBER **2014,** by and between WESTERVELT ECOLOGICAL SERVICES, LLC (Bank Sponsor) and GRAGG RANCH RECOVERY ACQUISITION, LLC (Project Applicant), jointly referred to as the "Parties," as follows:

RECITALS

A. The Bank Owner has developed the Van Vleck Ranch Mitigation Bank located in Sacramento County, California; and

B. The Bank was approved by the U. S. Fish and Wildlife Service (Service), U.S Army Corps of Engineers (Corps), U.S. Environmental Protection Agency (EPA), and California Department of Fish and Game (DFG) (jointly referred to as "Resource Agencies") on **April 3, 2009**, and is currently in good standing with these agencies; and

C. The Bank has received approval from the Resource Agencies to offer *vernal pool preservation credits* for sale as compensation for the loss of vernal pool fairy shrimp (*Branchinecta lynchi*), *vernal pool creation credits* as compensation for impacts to vernal pools as regulated by the State and federal Endangered Species Act and the Clean Water Act, and Swainson's hawk (*Buteo swainsoni*) through the *Van Vleck Ranch Mitigation Bank Enabling Instrument* (Bank Agreement); and

D. Project Applicant is seeking to implement the **Folsom 138 Project** described on Exhibit "A" attached hereto (Project), which would unavoidably and adversely impact listed vernal pool habitat and Swainson's Hawk foraging habitat and seeks to compensate for the loss of vernal pool crustacean and Swainson's Hawk habitat by purchasing **vernal pool creation credits** from the Bank; and

E. Project Applicant has been authorized to purchase from the Bank **0.047 vernal pool creation credits** upon confirmation by the Bank Owner of credit availability/adequate balance of credits remaining for sale; and

F. Project Applicant desires to purchase from Bank and Bank desires to sell to Project Applicant **0.047 vernal pool creation credits**;

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. Bank hereby sells to Project Applicant and Project Applicant hereby purchases from Bank **0.047 vernal pool creation credits** for the purchase price of **$12,925**. The Bank will then deliver to Project Applicant an executed Bill of Sale in the manner and form as attached hereto and marked Exhibit "B". The purchase price for said credits shall be paid by cashier's check or, at the option of Bank, wire transfer of funds according to written instructions by Bank to Project Applicant.

2. The sale and transfer herein is not intended as a sale or transfer to Project Applicant of a security, license, lease, easement, or possessory or non-possessory interest in real property, nor the granting of any interest of the foregoing.

3. Project Applicant shall have no obligation whatsoever by reason of the purchase of the Credits, to support, pay for, monitor, report on, sustain, continue in perpetuity, or otherwise be obligated or liable for the success or continued expense or maintenance in perpetuity of the credits sold, or the Bank. Pursuant to the Bank Agreement and any amendments thereto, Bank shall monitor and make reports to the appropriate agency or agencies on the status of any Credits sold to Project Applicant. Bank shall be fully and completely responsible for satisfying any and all conditions placed on the Bank or the Credits by all state or federal jurisdictional agencies.

4. The Credits sold and transferred to Project Applicant shall be non-transferable and non-assignable, and shall not be used as compensatory mitigation for any other Project or purpose, except as set forth herein.

5. Project Applicant hereby commits to purchase the Conservation Credits and in association therewith shall tender payment for the Conservation Credits no later than **December 21, 2014.**

6. Upon purchase of the credits specified in paragraph D above, the Bank shall submit to the parties listed in the Notices section of the Bank Agreement / Bank Enabling Instrument, copies of the: a) Agreement for Sale of Credits; b) Bill of Sale; c) Payment Receipt; and d) an updated ledger. The updated inventory / ledger must detail: i) Project Applicant; ii) Project Name; iii) Status (sale complete/sale not complete); iv) Credit Sale Date; v) Service File Number; vi) U.S. Army Corps of Engineers File Number (if applicable); vii) Total Number of Credits Authorized to Sell; viii) Total Number of Credits Sold to Date (inclusive); and ix) Balance of all Credits Available. The inventory / ledger should include all sales data from bank opening/establishment to the present.

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first above written.

BANK:

WESTERVELT ECOLOGICAL SERVICES, LLC
Van Vleck Ranch Mitigation Bank

By: _____ Date: 11/10/2014

PROJECT APPLICANT:

GRAGG RANCH RECOVERY ACQUISITION, LLC

By: _____ Date: 12/14/14

Exhibit "A"

DESCRIPTION OF PROJECT
TO BE
MITIGATED

*****

Permit No. **SPK-2008-00326**. Development project located in Eastern Sacramento County with the Folsom SOI Development area.

Exhibit "B"

BILL OF SALE

Permit No: SPK-2008-00326 (Folsom 138)

In consideration of **$785,750**, receipt of which is hereby acknowledged, WESTERVELT ECOLOGICAL SERVICES, LLC does hereby bargain, sell and transfer to GRAGG RANCH RECOVERY ACQUISITION, LLC (Project Applicant), **0.047 vernal pool creation credits** in the *Van Vleck Ranch Mitigation Bank* in Sacramento County, California, developed, and approved by the U.S. Army Corps of Engineers, Environmental Protection Agency, U. S. Fish and Wildlife Service, and California Department of Fish and Game.

Westervelt Ecological Services represents and warrants that it has good title to the credits, has good right to sell the same, and that they are free and clear of all claims, liens, or encumbrances.

Westervelt Ecological Services covenants and agrees with the buyer to warrant and defend the sale of the credits hereinbefore described against all and every person and persons whomsoever lawfully claiming or to claim the same.

DATED: 12/19/2014

WESTERVELT ECOLOGICAL SERVICES, LLC
Van Vleck Ranch Mitigation Bank

By: _____

VAN VLECK RANCH MITIGATION BANK
MITIGATION CREDITS: PAYMENT RECEIPT

PARTICIPANT INFORMATION

Name: Gragg Ranch Recovery Acquisition, LLC

Address:

Telephone: 858.500.6782

Contact: Matt Villalobos – Senior Development Director

PROJECT INFORMATION

Project Description: Folsom 138

Permit File Number: SPK-2008-00326

Species/Habitat Affected: Vernal Pool Habitat

Credits to be Purchased: 0.047 vernal pool creation credits

Payment Amount: $12,925

Project Location: Eastern Sacramento County, South of Folsom

County/Address: Sacramento County

PAYMENT INFORMATION

Payee: WESTERVELT ECOLOGICAL SERVICES, LLC

Payer: GRAGG RANCH RECOVERY, LLC

Amount: Twelve Thousand Nine Hundred Twenty Five Dollars ($12,925)

Method of payment: Cash ~~Check~~ Wire No. 10325942 Money Order No.

Received by: T H
(Signature) Date: 12/19/2014

Name: TRAVIS Hemmen Title: Project Manager

ATTACHMENT B

USACE Correspondence:

Jurisdictional Determination Verification Letter

SHPO Letter

USACE Clean Water Act Section 404 Letter of Permission (SPK-2008-0036)

Folsom 138
2007-212
BTG|CWH|File|REG
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orig.

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

February 6, 2009

Regulatory Division (SPK-2008-00326)

Folsom White Rock Investors, LLC.
Attn: Mr. Brian Cutting
111 Woodmere Drive, Suite 190
Folsom, CA 95630

Dear Mr. Cutting:

We are responding to your consultant's request for an approved jurisdictional determination for the Folsom 138 Project. This approximately 138-acre site is located at the northeast corner of the intersection of Placerville Road and White Rock Road in Section 15, Township 9 North, Range 8 East, MDBM, Latitude 38.6356° North, Longitude -121.0878° West, near the City of Folsom, Sacramento County, California.

Based on available information, we concur with the estimate of waters of the United States, as depicted on the February 20, 2008 Folsom 138 Wetland Delineation drawing prepared by ECORP Consultin, Inc. Approximately 2.533-acres of waters of the United States, including wetlands, are present within the survey area. These waters are regulated under Section 404 of the Clean Water Act since they are tributary to Alder Creek.

This verification is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This letter contains an approved jurisdictional determination for your subject site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331.

A Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form is enclosed. If you request to appeal this determination you must submit a completed RFA form to the South Pacific Division Office at the following address: Administrative Appeal Review Officer, Army Corps of Engineers, South Pacific Division, CESPD-PDS-O, 1455 Market Street, San Francisco, California 94103-1399, Telephone: 415-503-6574, FAX: 415-503-6646.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the NAP. Should you decide to submit an RFA form, it must be received at the above address by 60 days from the date of this letter. It is not necessary to submit an RFA form to the Division Office if you do not object to the determination in this letter.

You should provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

This determination has been conducted to identify the limits of Corps of Engineers' Clean Water Act jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

We appreciate your feedback. At your earliest convenience, please complete our customer survey at *http://www.spk.usace.army.mil/customer_survey.html*. Your passcode is "conigliaro".

Please refer to identification number SPK-2008-00326 in any correspondence concerning this project. If you have any questions, please contact Lisa Gibson at our Sacramento Office, 1325 J Street, Room 1480, Sacramento California 95814-2922, email *lisa.m.gibson2@usace.army.mil*, or telephone 916-557-5288. You may also use our website: *www.spk.usace.army.mil/regulatory.html*.

Sincerely,

Original Signed

Kathleen A. Dadey, PhD
Chief, California South Branch

Enclosure(s)

Copy Furnished without enclosure(s)

Ms. Jana Milliken, Sacramento Valley Branch, Endangered Species Division, U.S. Fish and Wildlife Service, 2800 Cottage Way, Suite W2605, Sacramento, California 95825-3901
Mr. Paul Jones, U.S. Environmental Protection Agency, Region IX, Wetlands Regulatory Office (WTR-8), 75 Hawthorne Street, San Francisco, California 94105-3901
Mr. Kent Smith, California Department of Fish and Game, Region 2, 1701 Nimbus Road, Rancho Cordova, California 95670-4599
Mr. Bill Orme, Storm Water and Water Quality Certification Unit, Central Valley Regional Water Quality Control Board, 11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114
Ms. Gail Furness de Pardo, City of Folsom, Permitting, Inspections and Planning Department, 50 Natoma Street, Folsom, California 95630-2614
Ms. Francine Dunn, EDAW, 2022 J Street, Sacramento, CA 95811
Mr. Bjorn Gregerson, ECORP Consulting, Inc., 2525 Warren Drive, Rocklin, CA 95677

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

September 18, 2014

Regulatory Division (SPK-2008-00326)

RainTree Investment Corporation
Attn: Mr. Matt Villalobos
1925 Palomar Oaks Way, Suite 204
Carlsbad, California 92008

Dear Mr. Villalobos:

This letter of permission (LOP) authorizes your proposed activities in approximately 0.921 acres of waters of the United States, including 0.018 acre of vernal pool, 0.084 acre of seasonal wetland, 0.521 acre of seasonal wetland swale, 0.246 acre of seep, 0.040 acre of marsh, and 0.012 acre of intermittent drainage for the construction of a residential development on the Folsom 138 site. The proposed project is located within the Folsom South of U.S. Highway 50 Specific Plan Area, north of White Rock Road, and east of Placerville Road, in Section 15, Township 9 North, Range 9 East, Mount Diablo Meridian, Latitude 38.62932° North, Longitude 121.09146° West, in the City of Folsom, Sacramento County, California.

The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer. **Work in waters of the United States must be in accordance with the following conditions of authorization and the General LOP Conditions listed in Attachment A, "General LOP Conditions":**

Special Conditions:

1. Prior to the initiation of construction activities in waters of the U.S. associated with each phase of construction you shall submit to this office, for review and approval, a plan-view drawing of the work proposed to be conducted within that phase, and cross-section view drawings of all road and utility line crossings of waters of the U.S., as well as pre-construction color photographs of the upstream and downstream area of each crossing. The compass angle and location of each photograph shall be identified on the plan-view drawing. In addition, you shall include a description of any deviations (including changes in phasing sequence or boundaries of phases) from the authorized work, including the amount and type of waters that would be impacted, and the amount and type of compensatory mitigation that would be required. You shall ensure that the description provided includes information regarding any temporary impacts to waters of the U.S.

2. Prior to the initiation of each phase of development, you shall compensate for the permanent loss of waters of the U.S. within that phase through the purchase of mitigation credits from the Cosumnes Floodplain Mitigation Bank and/or the Toad Hill Mitigation Bank at the following compensation to impact ratios for aquatic resources identified on the *Folsom 138 Preserve and Impact Map* drawing, dated August 8, 2014, prepared by ECORP Consulting, Inc.

a. To compensate for the permanent loss of marshes, you shall purchase floodplain mosaic re-establishment credits from the Cosumnes Floodplain Mitigation Bank at a ratio of 1:1.

b. To compensate for the permanent loss of intermittent drainages, you shall purchase floodplain riparian re-establishment credits from the Cosumnes Floodplain Mitigation Bank at a ratio of 2:1.

c. To compensate for the permanent loss of seasonal wetlands and seasonal wetland swales, you shall purchase floodplain mosaic re-establishment credits from the Cosumnes Floodplain Mitigation Bank at a ratio of 1.3:1.

d. To compensate for the permanent loss of seeps, you shall purchase floodplain mosaic re-establishment credits from the Cosumnes Floodplain Mitigation Bank at a ratio of 4:1.

e. To compensate for the permanent loss of vernal pools, you shall purchase vernal pool establishment credits from the Toad Hill Mitigation Bank at a ratio of 1:1.

3. You shall establish and maintain, in perpetuity, an minimum 3.51-acre preserve containing 1.475 acres of preserved waters, consisting of 0.635 acre of seasonal wetland, 0.578 acre of seasonal wetland swale, and 0.263 acre of seeps, as depicted on the enclosed *Folsom 138 Preserve and Impact Map* drawing, dated August 8, 2014, prepared by ECORP Consulting, Inc. The purpose of this preserve is to ensure that functions of the aquatic environment are protected. Prior to the initiation of construction activities in waters of the U.S. you shall submit to us for review and approval, a proposed plan for the phasing of the preserve. No construction in waters of the U.S. shall commence until we have provided written approval of the phasing plan for the preserve, and the Phase 1 preserve has been established. For subsequent phases of the preserve, no construction in waters of the U.S. shall commence within that phase until that phase of the approved preserve has been established. Any changes to the preserve boundary or phasing of the preserve shall be submitted to and specifically approved in writing, by this office prior to establishment of the preserve or initiation of construction activities in waters of the U.S. for that phase.

4. You shall place all areas required to be preserved as identified in Special Condition 3, under a permanent conservation easement for each approved phase prior to the initiation of construction activities for that phase within waters of the U.S. Permanent legal protection shall be established for all preserve areas through the recordation of conservation easements by phase, as well as the designation of all areas of preserve as prohibited for development and public access by notes on the Final Subdivision Map, following approval of the legal instrument by this office. The boundaries of all areas designated as preserve will

be distinctly separate from, and outside of, the boundaries of all private, commercial, institutional, and industrial parcels.

a. You shall develop a specific and detailed preserve management plan for the on-site preserve. This plan shall be submitted to and specifically approved, in writing, by this office prior to initiation of construction activities within waters of the U.S. This plan shall describe in detail any activities that are proposed within the preserve areas and the long term funding and maintenance of each of the preserve areas.

b. You shall not construct any roads, utility lines, outfalls, trails, benches, firebreaks or other structure, and shall not conduct any grading, mowing, grazing, planting, discing, pesticide use, burning, or other activities within the preservation areas without specific, advance written approval from this office, unless authorized by this permit and shown on the *Carpenter Ranch – Proposed Preserve & Impact Plan* drawing, dated June 18, 2014, prepared by ECORP Consulting, Inc., the preserve management plan, or other map approved by this office. You shall not construct any outfalls that flow toward the preserve without prior approval of this office. If approved, outfalls shall be designed such that they do not contribute to erosion of upland areas or stream channels within the preserve.

5. To prevent unauthorized fills and unforeseen impacts to preserved waters, you shall install fencing and appropriate signage around the entire outer boundary of the preserve required in Special Condition 4, prior to initiation of each phase of construction activities within waters of the U.S. You shall ensure that all fencing surrounding preserved areas allows unrestricted visibility of these areas to discourage vandalism, destruction or disturbance, as well as enable wildlife passage. Examples of appropriate fencing include post-and-cable, wrought iron or similar type. You shall place signage at all access points into preserved areas and ensure signage contains the Corps identification number (SPK-2008-00326), contact information for the preserve manager and a statement that the site is a wetland preserve.

6. Prior to the establishment of any phase of the preserve required by Special Conditions 4 and 5, you shall implement the following financial assurance measures to ensure long-term viability of the preservation areas:

a. Establish a fully-funded endowment, or other Corps-approved funding mechanism, for each phase to provide for maintenance and monitoring of on-site preservation areas. Information on the proposed endowment holder, funding mechanism, and/or the proposed endowment agreement shall be provided to this office for approval prior to establishment.

b. Designate an appropriate conservation-oriented third-party entity to function as preserve manager and to hold the required conservation easements. Information on the proposed conservation easement holder shall be provided to this office for approval prior to designation.

c. Record permanent conservation easements for each phase maintaining all preservation areas as wetland preserve and/or wildlife habitat in perpetuity. Copies of the proposed conservation easement language shall be provided to this office for approval prior to recordation.

d. Provide copies of the recorded documents for each phase to this office no later than 15 days prior to the start of construction of any phase of the activities authorized by this permit.

7. The third-party entity selected to hold the conservation easements required by Special Condition 7 (Grantee), shall not assign its rights or obligations under the required conservation easements except to an organization/individual qualified to hold such interests under the applicable laws and committed to holding these easements exclusively for conservation purposes. This office shall be notified in writing of any intention to reassign the conservation easements to a new Grantee and shall approve the selection of the grantee. The new Grantee shall accept the assignment in writing and a copy of this acceptance shall be provided to this office. The conservation easements shall then be re-recorded and indexed in the same manner as any other instrument affecting title to real property. A copy of the newly recorded conservation easements shall be furnished to this office within 90 days of recordation.

8. You shall ensure that trenching activities in waters of the U.S. associated with the installation of utility lines do not result in the draining of any water of the U.S., including wetlands. This may be accomplished through the use of clay blocks, bentonite, or other suitable material (as approved by this office) to seal the trench. For utility line trenches, during construction, you shall remove and stockpile, separately, the top 6 – 12 inches of topsoil. Following installation of the utility line(s), you shall replace the stockpiled topsoil on top and seed the area with native vegetation. All plans for utility lines in waters of the U.S. shall be reviewed and approved by this office prior to initiation of construction activities in waters of the U.S., as required by Special Condition 1.

9. Prior to initiation of any phase of construction activities within waters of the U.S., you shall employ construction best management practices (BMPs) within 50-feet of all waters of the U.S. to be avoided. Methods shall include the use of appropriate measures to intercept and capture sediment prior to entering waters of the U.S., as well as erosion control measures along the perimeter of all work areas to prevent the displacement of fill material. All BMPs shall be in place prior to initiation of any construction activities for that phase and shall remain until construction activities are completed. You shall maintain erosion control methods until all on-site soils are stabilized. You shall submit a description of and photo-documentation of your BMPs to our office with information required in Special Condition 1.

10. You shall implement the attached Programmatic Agreement (PA), entitled *First Amended Programmatic Agreement between the U.S. Army Corps of Engineers and the California Office of Historic Preservation Regarding the Folsom Plan Area Specific Plan*, Sacramento County, California, and signed by these entities, in its entirety. This office has been designated the lead federal agency responsible for implementing and enforcing the PA as signed. If you fail to comply with the implementation and associated enforcement of the PA this office may determine that you are out of compliance with the conditions of the Department of the Army permit and suspend the permit. Suspension may result in modification or revocation of your authorization.

11. To ensure your project complies with the Federal Endangered Species Act, you must implement all of the applicable mitigating measures proposed as part of your project description, which are identified in Reasonable and Prudent Measure 1 in the enclosed U.S. Fish and Wildlife Service Biological Opinion (Number 81420-2010-F-0620-1, dated April 2, 2014). If you are unable to implement any of the proposed measures, you must immediately notify the Corps and the U.S. Fish and Wildlife Office so we may consult as appropriate, prior to initiating the work, in accordance with Federal law.

12. You shall notify this office of the start and completion dates for each phase of the authorized work within 10 calendar days prior to the initiation of construction activities within waters of the U.S., and 10 calendar days following completion of construction activities.

13. You are responsible for all work authorized herein and ensuring that all contractors and workers are made aware of and adhere to the terms and conditions of this permit authorization. You shall ensure that a hard copy of the permit and associated drawings are available for quick reference at the project site until all construction activities are completed.

14. Prior to the initiation of construction activities within each phase, you shall clearly identify the limits of all construction areas in that phase. The markers shall be of a material, and placed in a manner, that prevents construction equipment from entering any waters of the U.S. required to be preserved in Special Condition 4. You shall maintain such identification properly until construction has been completed and soils have been stabilized. You are prohibited from undertaking any activity (e.g. equipment usage or materials storage) that impacts waters of the U.S. outside of the permit limits.

15. You shall use only clean and non-toxic fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.

16. All crossings of seasonal wetland swales and intermittent drainages, where the upstream or downstream portions of the feature are intended to be avoided, shall be conducted when the project area is naturally dewatered, or is dewatered in accordance with a Corps approved dewatering plan. No work shall be conducted in flowing waters.

General Conditions:

1. The time limit for completing the work authorized by this permit ends on **September 17, 2019**. If you find that you need more time to complete the authorized activity, submit a request for time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of these requirements if you abandon the permitted activity. This permit may be transferred upon request provided the work complies with the terms and conditions of this authorization. When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on

the new owner(s) of the property. Should you wish to cease to maintain the authorized activity or abandon it without a good faith transfer, you must obtain a permit modification from this office.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register.

4. You must insure that the work complies with the conditions of Section 401 water quality certification for this project.

5. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

6. You must sign the enclosed Compliance Certification and return it to this office within 45 days after completion of the authorized work.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal projects.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5.

6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

This letter contains an initially proffered permit for your proposed project. If you object to this decision, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this decision, submit a completed RFA form to the South Pacific Division Office at the following address: Tom Cavanaugh, Administrative Appeal Officer, Army Engineer District-South Pacific (CESPD-PDS-O), 1455 Market Street, San Francisco CA 94103-1399, Phone 415-503-6574, FAX 415-503-6646.

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the NAP fact sheet. It is not necessary to submit an RFA for the Division Office if you do not object to the decision in this letter.

We appreciate your feedback. At your earliest convenience, please tell us how we are doing by completing the customer survey on our website under *Customer Service Survey.*

Please refer to identification number SPK-2008-00326 in any correspondence concerning this project. If you have any questions, please contact Lisa Gibson at 1325 J Street, Room 1350, Sacramento, California 95814, by email at *Lisa.M.Gibson2@usace.army.mil*, or telephone at 916-557-5288. For more information regarding our program, please visit our website at *www.spk.usace.army.mil/Missions/Regulatory.aspx*.

For and on the behalf of Colonel Michael J. Farrell, District Engineer.

Sincerely,

for Kathleen A. Dadey, PhD.
Chief, CA South Branch
Regulatory Division

Enclosures

cc: (w/o encls)

Mr. Bjorn Gregerson, ECORP Consulting, Inc., 2525 Warren Drive, Rocklin, California, 95677

Ms. Leana Rosetti, U.S. Environmental Protection Agency, Region IX, Wetlands Regulatory Office (WTR-8), 75 Hawthorne Street, San Francisco, California 94105-3901

Ms. Tina Bartlett, California Department of Fish and Wildlife, Region 2, 1701 Nimbus Road, Rancho Cordova, California 95670-4599

Ms. Elizabeth Lee, Storm Water and Water Quality Certification Unit, Central Valley Regional Water Quality Control Board, 11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114

Ms. Kellie Berry, Sacramento Valley Branch, Endangered Species Division, U.S. Fish and Wildlife Service, 2800 Cottage Way, Suite W2605, Sacramento, California 95825-3901

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

March 3, 2014

Regulatory Division (SPK-2008-00326)

Ms. Carol Roland-Nawi, Ph.D.
State Historic Preservation Officer
California Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, California 95816

Dear Dr. Roland-Nawi:

In accordance with the 36 CFR 800.4 (b)(2) and 36 CFR 800.14, the U.S. Army Corps of Engineers (Corps) and the California State Historic Preservation Officer executed a Programmatic Agreement (PA) on July 6, 2011, and a First Amended Programmatic Agreement (FAPA) on October 3, 2013, to meet the requirements of Section 106 of the National Historic Preservation Act (NHPA) for the proposed Folsom South of U.S. Highway 50 Specific Plan (Specific Plan). Each individual project within the Specific Plan, including the Folsom 138 Project, must comply with stipulations of the FAPA that include, but are not limited to, evaluation of significance, determination of effect, and the resolution of adverse effects to historic properties.

On August 13, 2009, we consulted with your office, and on 19 October, 2009, you concurred on the boundaries of the Area of Potential Effects (APE) and definition of the undertaking (COE090818A). On December 10, 2012, we submitted to your office the cultural resources inventory and evaluation plan for the larger Specific Plan permit area, which included the Folsom 138 permit area, a subset of the Specific Plan APE. We also circulated the report to all of the concurring parties to the PA, including the tribes, historical society, and applicants in December 2012.

On October 15, 2013, the Folsom 138 permit applicant, Mr. Michael McDonnell of Raintree, conducted a site visit with their consultant, Ms. Lisa Westwood of ECORP Consulting, Incorporated, and representatives of the United Auburn Indian Community of the Auburn Rancheria (UAIC) and the Shingle Springs Band of Miwok Indians (SSBMI).

In accordance with the September 2013 *Folsom South of US Highway 50 Specific Plan Project Historic Properties Management Plan* (HPMP) and Stipulation 9.D of the FAPA, we circulated the cultural resource identification and evaluation report on December 18, 2013. In a letter dated January 8, 2014, you concurred that two sites, the White Rock Springs Ranch, P-34-0906, a historic ranch/inn site, and The White Rocks P-34-0249 (CA-SAC-222), a bedrock mortar multi-component site, were eligible for inclusion in the National Register of Historic Places (NRHP).

On January 27, 2014, we received copy of a comment letter, dated January 21, 2014, to Ms. Westwood, from Chairman Gene Whitehouse of the UAIC (Enclosure 1). The UAIC

requested the site records for P-34-0249 be updated and a paid UAIC Tribal Monitor present during the site visit for the site record update. Chairman Whitehouse stated the site is considered sacred and ceremonial by the local Tribal community, is eligible for inclusion in the NRHP, and is a Traditional Cultural Property (TCP). The UAIC requested further consultation on the determinations of eligibility and mitigation of effects to all resources in the Folsom 138 permit area. The UAIC also requested to be kept apprised of the status of the NHPA Section 106 process for other projects within the Specific Plan.

The site record for P-34-0249 was last updated on October 29, 2013. We believe this record accurately depicts the current condition of the site. P-34-0249 was determined to be a TCP and eligible for inclusion in the NRHP under Criteria A, C, and D. The Corps is continuing consultation with the UAIC and other consulting parties regarding potential effects to Historic Properties within the Folsom 138 permit area. The Corps is also continuing consultation with the consulting parties in accordance with the FAPA for the other projects within the Specific Plan.

In accordance with Section A of Stipulation 5 of the FAPA, we have applied the criteria of adverse effect and have determined that issuing a permit would result in an adverse effect on historic properties. P-34-0906 will be impacted by the proposed project. The location of P-34-0906 will be completely graded and filled by the proposed project. P-34-0249 will be avoided by the proposed project. P-34-0249, and an approximately 100-foot radius buffer, will be placed into an open space conservation easement with an open space management plan to be preserved in perpetuity.

The applicant has provided the enclosed December 23, 2013, draft *Finding of Effect Report for the Non-Backbone Folsom 138 Permit Area, Folsom South of U.S. Highway 50 Specific Plan Project, Sacramento County, California* (FoE), prepared by ECORP Consulting. In accordance with Section B of Stipulation 5 of the FAPA, we request your review and comment on our finding of adverse effect provided herein within thirty (30) days. In accordance with Section B of Stipulation 5 of the FAPA, we are also providing a copy of the FoE by way of this letter to the concurring and consulting parties to the PA and FAPA, including the tribes, historical society, and applicants, for review and comment. These parties will also have thirty (30) days to comment on the FoE.

We request review and comments on the draft report be provided by April 4, 2014. Please refer to identification number SPK-2008-00326 in any correspondence concerning the Folsom 138 Project. If you have any questions, please contact Ms. Erin E. Hess at our Regulatory Division, Sacramento District, U.S. Army Corps of Engineers, 1325 J Street, Room 1350, Sacramento, California, 95814-2922, erin.e.hess@usace.army.mil, or telephone (916) 557-6740.

Sincerely,

Lisa Gibson
Senior Project Manager
California South Branch

Enclosure

cc:
Mr. David Miller, City of Folsom, 50 Natoma Street, Folsom, CA 95630
Mr. Patrick Maxfield, Folsom Historical Society, 823 Sutter Street, Folsom, CA 95630-2440
Mr. Daniel Fonseca, Shingle Springs Band of Miwok Indians, 5281 Honpie Road, Placerville, CA 95667
Mr. Jason Camp, United Auburn Indian Community, 10720 Indian Hill Road, Auburn, CA 95603
Mr. Steven Hutchason, Wilton Rancheria, 9300 W. Stockton Boulevard, Suite 200, Elk Grove, CA 95758
Mr. Jim Ray, MacKay & Somps Engineers, 1552 Eureka Road, Suite 100, Roseville, CA 95661

cc: (w/o encl)
Mr. Michael McDonnell, RainTree Investment Corporation, 110 Tiburon Boulevard, Suite 203, Mill Valley, CA 94941
Mr. Matt Villalobos, RainTree Investment Corporation, 1925 Palomar Oaks Way, Suite 204, Carlsbad, CA 92008
Mr. Eric Gragg, 4944 Tommar Drive, Fair Oaks, CA 95628
Ms. Lisa Westwood, ECORP Consulting, 2525 Warren Drive, Rocklin, CA 95677

ATTACHMENT C

RWQCB Clean Water Act Section 401 Technically Conditioned Water Quality Certification
(WDID# 5A34CR00597)

20 August 2014

Matt Villalobos
Raintree Investment Corporation
1925 Palomar Oaks Way, Suite 204
Carlsbad, CA 92008

CERTIFIED MAIL
7013 2250 0000 3465 2008

CLEAN WATER ACT §401 TECHNICALLY CONDITIONED WATER QUALITY CERTIFICATION; RAINTREE INVESTMENT CORPORATION FOLSOM 138 PROJECT (WDID#5A34CR00597), SACRAMENTO COUNTY

This Order responds to the 24 December 2013 application submitted by Raintree Investment Corporation (Applicant) for the Water Quality Certification of the Folsom 138 Project permanently impacting 0.921 acre of waters of the United States.

This Order serves as certification of the United States Army Corps of Engineers' Individual Permit (SPK-2008-00326) under §401 of the Clean Water Act, and a Waste Discharge Requirement under the Porter-Cologne Water Quality Control Act and State Water Board Order 2003-0017-DWQ.

WATER QUALITY CERTIFICATION STANDARD CONDITIONS:

1. This Order serves as a Water Quality Certification (Certification) action that is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to §13330 of the California Water Code and §3867 of the California Code of Regulations.

2. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to §3855(b) of the California Code of Regulations, and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

3. The validity of any non-denial Certification action shall be conditioned upon total payment of the full fee required under §3860(c) of the California Code of Regulations.

4. This Certification is no longer valid if the project (as described) is modified, or coverage under §404 of the Clean Water Act has expired.

5. All reports, notices, or other documents required by this Certification or requested by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) shall be signed by a person described below or by a duly authorized representative of that person.

    (a) For a corporation: by a responsible corporate officer such as (1) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function; (2) any other person who performs similar policy or decision-making functions for the corporation; or (3) the manager of one or more manufacturing, production, or operating facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
    (b) For a partnership or sole proprietorship: by a general partner or the proprietor.
    (c) For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

6. Any person signing a document under Standard Condition number 5 shall make the following certification:

    "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

TECHNICAL CERTIFICATION CONDITIONS:

In addition to the above standard conditions, the Applicant shall satisfy the following:

1. The Applicant shall notify the Central Valley Water Board in writing seven (7) days in advance of the start of any work within waters of the United States and waters of the State. The notification shall include the name of the project and the WDID number, and shall be sent to the Central Valley Water Board Contact indicated in this Certification.

2. Except for activities permitted by the United States Army Corps of Engineers under § 404 of the Clean Water Act, soil, silt, or other organic materials shall not be placed where such materials could pass into surface water or surface water drainage courses.

3. The Applicant shall maintain a copy of this Certification and supporting documentation (Project Information Sheet) at the Project site during construction for review by site personnel and agencies. All personnel (employees, contractors, and subcontractors) performing work on the proposed project shall be adequately informed and trained regarding the conditions of this Certification.

4. The Applicant shall perform surface water sampling[1]:
   a) when performing any in-water work;
   b) in the event that project activities result in any materials reaching surface waters; or
   c) when any activities result in the creation of a visible plume in surface waters.

   The monitoring requirements in Table 1 shall be conducted by taking a sample of the ambient conditions before work begins in the work area, and sampling during work in the work area. The sampling frequency may be modified for certain projects with written approval from Central Valley Water Board staff.

Table 1:

Parameter	Unit	Type of Sample	Minimum Sampling Frequency	Required Analytical Test Method
Turbidity	NTU	Grab(1)	Every 4 hours during in-water work	(2, 4)
Settleable Material	mL/L	Grab(1)	Every 4 hours during in-water work	(2)
Visible construction related pollutants (3)	Observations	Visual Inspections	Continuous throughout the construction period	—

(1) Grab samples shall not be collected at the same time each day to get a complete representation of variations in the receiving water.
(2) Pollutants shall be analyzed using the analytical methods described in 40 Code of Federal Regulations Part 136; where no methods are specified for a given pollutant, the method shall be approved by Central Valley Water Board staff.
(3) Visible construction-related pollutants include oil, grease, foam, fuel, petroleum products, and construction-related, excavated, organic or earthen materials.
(4) A hand-held field meter may be used, provided the meter utilizes a USEPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring shall be maintained onsite.

[1] Sampling is not required in water bodies that are being permanently filled; provided there is no outflow connecting the water bodies to surface waters.

Surface water monitoring shall occur at mid-depth. A surface water monitoring report shall be submitted to the Central Valley Water Board Contact indicated in this Certification within two weeks of initiation of sampling and every two weeks thereafter. In reporting the monitoring data, the Applicant shall arrange the data in tabular form so that the sampling locations, date, constituents, and concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the project complies with Certification requirements. The report shall include surface water sampling results, visual observations, and identification of the turbidity increase in the receiving water applicable to the natural turbidity conditions specified in the turbidity criteria below.

If no monitoring is conducted, the Applicant shall submit a written statement to the Central Valley Water Board Contact indicated in the Certification stating, "No monitoring was required." with the Notice of Completion.

5. The Central Valley Water Board adopted a *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised October 2011 (Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Turbidity and settleable matter limits are based on water quality objectives contained in the Basin Plan and are part of this Certification as follows:

   a) Activities shall not cause turbidity increases in surface water to exceed:
      i. where natural turbidity is less than 1 Nephelometric Turbidity Units (NTUs), controllable factors shall not cause downstream turbidity to exceed 2 NTUs;
      ii. where natural turbidity is between 1 and 5 NTUs, increases shall not exceed 1 NTU;
      iii. where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent;
      iv. where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs; and
      v. where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

      Except that these limits will be eased during in-water working periods to allow a turbidity increase of 15 NTUs over background turbidity. In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected. Averaging periods may only be used with prior approval of the Central Valley Water Board staff.

   b) Activities shall not cause settleable matter to exceed 0.1 mL/L in surface waters.

6. The Applicant shall notify the Central Valley Water Board immediately if the above criteria for turbidity and settleable matter, or other water quality objectives are exceeded.

7. In-water work shall occur during periods of low water level and no precipitation.

8. Refueling of equipment within a floodplain or within 300 feet of a waterway is prohibited. If critical equipment must be refueled within 300 feet of the waterway, spill prevention and countermeasures must be implemented to avoid spills. Refueling areas shall be provided with secondary containment including drip pans and/or placement of absorbent material. No hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, or other construction-related potentially hazardous substances should be stored within a floodplain or within 300 feet of a waterway. The Applicant must perform frequent inspections of construction equipment prior to utilizing it near surface waters to ensure leaks from the equipment are not occurring and are not a threat to water quality.

9. The Applicant shall develop and maintain onsite a project-specific Spill Prevention, Containment and Cleanup Plan outlining the practices to prevent, minimize, and/or clean up potential spills during construction of the project. The Plan must detail the project elements, construction equipment types and location, access and staging and construction sequence.

10. Silt fencing, straw wattles, or other effective management practices must be used along the construction zone to minimize soil or sediment along the embankments from migrating into the waters of the United States through the entire duration of the project.

11. The use of netting material (e.g., monofilament-based erosion blankets) that could trap aquatic dependent wildlife is prohibited within the project area.

12. All areas disturbed by project activities shall be protected from washout and erosion.

13. All temporarily affected areas shall be restored to pre-construction contours and conditions upon completion of construction activities.

14. All hydroseeding shall be performed with California native seed mix.

15. All materials resulting from the project shall be removed from the site and disposed of properly.

16. This Certification does not allow permanent water diversion of flow from the receiving water. This Certification is invalid if any water is permanently diverted as a part of the project.

17. The discharge of petroleum products, any construction materials, hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, raw cement, concrete, asphalt, paint, coating material, drilling fluids, or other construction-related potentially hazardous substances to surface water and/or soil is prohibited. In the event of a prohibited discharge, the Applicant shall notify the Central Valley Water Board Contact within 24-hours of the discharge. Activities shall not cause visible oil, grease, or foam in the receiving water.

18. The Applicant shall comply with all California Department of Fish and Wildlife requirements, including those requirements described in Lake or Streambed Alteration Agreement No. 1600-2012-0198-R2.

19. The Applicant shall submit a copy of the Biological Opinion to the Central Valley Water Board contact within 14 days of issuance by the United States Fish and Wildlife Service.

20. The Applicant shall comply with all United States Fish and Wildlife Service requirements, including those requirements described in the Biological Opinion.

21. The Applicant shall provide the copy of the signed, final permanent conservation easement established for the Folsom 138 Project once it has been approved.

    A minimum of a 50-foot buffer zone will need to be placed around the conservation easement from the property line and any structures on the project site to the maximum extent practicable.

    The riparian vegetation within the buffer zone of the wetland and drainage channel within the project area shall be maintained to the maximum extent practicable.

    The non-development and meandering wetland and drainage easement may only be modified, not abandoned. The modification of the non-development and meandering wetland and drainage easement may not alter the natural wetland drainage channel on the project site.

    No grading is permitted within the non-development and meandering wetland and drainage easement, and no grading or placement of physical barriers is permitted in the conservation easement.

    No grading, placement of physical barriers, public trails or fire lanes are permitted within the perpetual conservation easement along the unnamed vernal pools, seasonal wetlands, seasonal wetland swale, seep, and marsh.

    A copy of this Certification must be provided to the Open Space Preserve Manager, or any other person or entity making decisions on management activities within the preserve area.

    The Applicant shall submit to the Central Valley Water Board a complete copy of the Long Term Mitigation Plan, including a copy of the recorded conservation easement, within 30 days of approval by the United States Army Corps of Engineers (USACE). Vegetation management, including, but not limited to, the application of herbicides, grazing, burning, mowing, or removal, must not occur within the perpetual conservation easement along unnamed vernal pools, seasonal wetlands, seasonal wetland swale, seep, and marsh, unless such management is approved by the USACE (eg. fire prevention measures).

    To protect the integrity of the mitigation site and avoid unanticipated future impacts, no roads, utility lines, trails, benches, equipment or fuel storage, grading, firebreaks, mowing, grazing, planting, discing, pesticide use, burning, or other structures or activities shall be constructed or occur within the on-site and off-site mitigation, preservation, and avoidance areas without specific, advance written approval from the United States Army Corps of Engineers.

22. The Applicant shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2009-0009-DWQ for discharges to surface waters comprised of storm water associated with construction activity, including, but not limited to, demolition, clearing, grading, excavation, and other land disturbance activities of one or more acres, or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres.

23. The Conditions in this Certification are based on the information in the attached "Project Information Sheet." If the actual project, as described in the attached Project Information Sheet, is modified or changed, this Certification is no longer valid, until amended by the Central Valley Water Board.

24. The Applicant shall implement each of the mitigation measures specified in the certified Environmental Impact Report for the project, as they pertain to biology, hydrology and water quality impacts as required by § 21081.6 of the Public Resource Code and § 15097 of the California Code of Regulations

25. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under state and federal law. The applicability of any state law authorizing remedies, penalties, process, or sanctions for the violation or threatened violation constitutes a limitation necessary to ensure compliance with this Certification.

    (a) If the Applicant or a duly authorized representative of the project fails or refuses to furnish technical or monitoring reports, as required under this Certification, or falsifies any information provided in the monitoring reports, the applicant is subject to civil liability, for each day of violation, and/or criminal liability.

    (b) In response to a suspected violation of any condition of this Certification, the Central Valley Water Board may require the Applicant to furnish, under penalty of perjury, any technical or monitoring reports the Central Valley Water Board deems appropriate, provided that the burden, including cost of the reports, shall be in reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

    (c) The Applicant shall allow the staff of the Central Valley Water Board, or an authorized representative(s), upon the presentation of credentials and other documents, as may be required by law, to enter the project premises for inspection, including taking photographs and securing copies of project-related records, for the purpose of assuring compliance with this Certification and determining the ecological success of the project.

26. The Applicant shall provide a Notice of Completion (NOC) no later than 30 days after the project completion. The NOC shall demonstrate that the project has been carried out in accordance with the project description in the Certification and in any approved

amendments. The NOC shall include a map of the project location(s), including final boundaries of any on-site restoration area(s), if appropriate, and representative pre and post construction photographs. Each photograph shall include a descriptive title, date taken, photographic site, and photographic orientation.

27. Prior to commencing construction, the Applicant shall provide evidence of all on-site and off-site compensatory mitigation to the Central Valley Water Board. Evidence of mitigation includes, but is not limited to, the purchase of mitigation credits at a ratio of 1:1 for vernal pools, 1.3:1 for seasonal wetlands, 1.3:1 for seasonal wetland swales, 4:1 for seeps, 1:1 for marsh, and 2:1 for intermittent drainages or as required by the United States Army Corps of Engineers.

    Compensatory mitigation must comply with the effective policy at the time of Certification, which ensures no overall net loss of wetlands for impacts to waters of the State.

    Evidence of compliance with compensatory mitigation requirements include providing a recorded executed perpetual conservation easement grant with Sacramento County as proposed in the 401 Water Quality Certification application and a letter from the approved compensatory mitigation bank. The letter must: (a) be on the compensatory mitigation bank's letterhead; (b) be signed by an authorized representative of the compensatory mitigation bank; (c) indicate the United States Army Corps of Engineers' SPK number; (d) describe the project name and location; and (e) detail the type of compensatory mitigation credits purchased for the project's impacts.

CENTRAL VALLEY WATER BOARD CONTACT:

Trevor Cleak, Environmental Scientist
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-8114
trevor.cleak@waterboards.ca.gov
(916) 464-4684

CALIFORNIA ENVIRONMENTAL QUALITY ACT:

The City of Folsom is the Lead Agency responsible for compliance with the California Environmental Quality Act for the Folsom 138 Project pursuant to § 21000 et seq. of the Public Resources Code. The City of Folsom certified an Environmental Impact Report/Environmental Impact Statement, and the Statement of Findings of Fact and Statement of Overriding Considerations on 14 June 2011. The City of Folsom filed a Notice of Determination with the State Clearinghouse on 15 June 2011 (State Clearinghouse Number 2008092051). Significant and unavoidable impacts identified in the Statement of Overriding Considerations include impacts to water quality.

The Central Valley Water Board is a responsible agency for the project. Impact analysis was provided at a programmatic level throughout the Environmental Impact Report/Environmental

Impact Statement. The Central Valley Water Board has determined that the Environmental Impact Report/Environmental Impact Statement is in accordance with the requirements of the California Environmental Quality Act.

The Central Valley Water Board has reviewed and evaluated the impacts to water quality identified in the Environmental Impact Report/Environmental Impact Statement. The mitigation measures discussed in the Environmental Impact Report/Environmental Impact Statement were adopted to avoid and/or minimize water quality impacts. The mitigation measures discussed in the Environmental Impact Report/Environmental Impact Statement to minimize project impacts are required by this Certification.

With regard to the remaining impacts identified in the Environmental Impact Report/Environmental Impact Statement, the corresponding mitigation measures proposed are within the responsibility and jurisdiction of other public agencies.

WATER QUALITY CERTIFICATION:

I hereby issue an Order certifying that any discharge from the Folsom 138 Project (WDID#5A34CR00597) will comply with the applicable provisions of § 301 ("Effluent Limitations"), § 302 ("Water Quality Related Effluent Limitations"), § 303 ("Water Quality Standards and Implementation Plans"), § 306 ("National Standards of Performance"), and § 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Resources Control Board Water Quality Order No. 2003-0017 DWQ "Statewide General Waste Discharge Requirements For Dredged Or Fill Discharges That Have Received State Water Quality Certification (General WDRs)".

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited and all proposed mitigation being completed in compliance with the conditions of this Certification, Raintree Investment Corporation's application package, and the attached Project Information Sheet, and (b) compliance with all applicable requirements of the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised October 2011.

for Pamela C. Creedon
Executive Officer

Enclosures: Project Information Sheet

cc: Distribution List, page 14

PROJECT INFORMATION SHEET

Application Date: 24 December 2013

Applicant: Matt Villalobos
Raintree Investment Corporation
1925 Palomar Oaks Way, Suite 204
Carlsbad, CA 92008

Applicant's Agent: ECORP Consulting
2525 Warren Drive
Rocklin, CA 95677

Project Name: Folsom 138 Project

Application Number: WDID#5A34CR00597

Date Application Deemed Complete: 6 June 2014

Type of Project: Residential Development

Timeframe of Project Implementation: 1 April to 30 November until expiration of the Certification

Project Location: Folsom, CA, Section 15, Township 9N, Range 8E, Quadrangle Clarksville, California, Latitude: N 38° 37' 52" and Longitude: W 121° 05' 27"

County: Sacramento

Receiving Water(s) (hydrologic unit): Unnamed vernal pools, seasonal wetlands, seasonal wetland swale, seep, marsh, and intermittent drainage. Sacramento Hydrologic Basin, Middle Sierra Hydrologic Unit #532.22, Cosumnes HA, Upper Deer HSA

Water Body Type: Wetland, vernal pools, streambed

Designated Beneficial Uses: The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised October 2011 (Basin Plan) has designated beneficial uses for surface and ground waters within the region. Beneficial uses that could be impacted by the project include, but are not limited to: Municipal and Domestic Water Supply (MUN); Agricultural Supply (AGR); Industrial Supply (IND); Hydropower Generation (POW); Groundwater Recharge (GWR); Water Contact Recreation (REC-1); Non-Contact Water Recreation (REC-2); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); Preservation of Biological Habitats of Special Significance (BIOL); Rare, Threatened, or Endangered Species (RARE); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); and Wildlife Habitat (WILD). A

comprehensive and specific list of the beneficial uses applicable for the project area can be found at http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/index.shtml.

303(d) List of Water Quality Limited Segments: Unnamed vernal pools, seasonal wetlands, seasonal wetland swale, seep, marsh and intermittent drainage tributary to Alder Creek are the receiving waters for the Folsom 138 Project. The unnamed vernal pools, seasonal wetlands, seasonal wetland swale, seep, marsh and intermittent drainage tributary to Alder Creek are not listed on the 303(d) list; therefore, this project will not impact an impaired water body. The most recent list of approved water quality limited segments is found at: http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml

Project Description: The Folsom 138 Project will develop approximately 138 acres of land in eastern Sacramento County, currently located within the proposed Folsom Area Specific Plan. The project will construct residential villages and neighborhood parks, and establish a conservation easement. The conservation easement will preserve approximately 1.475 acres of wetlands onsite. The project site contains approximately 2.396 acres of waters of the United States, of which 1.475 acres would be preserved and not impacted.

The project will permanently impact 0.921 acre of waters of the United States from mass grading of the project site.

Preliminary Water Quality Concerns: Construction activities may impact surface waters with increased turbidity and settleable matter.

Proposed Mitigation to Address Concerns: The Applicant will implement Best Management Practices to control sedimentation and erosion. This Certification requires all work to be conducted during periods of low flow. The Applicant will stop work if Basin Plan criteria are exceeded or observations indicate an exceedance of a water quality objective.

Excavation/Fill: Approximately 750 cubic yards of native fill will be placed into 0.921 acre of waters of the United States.

Dredge Volume: None

California Integrated Water Quality System Impact Data: The Project will permanently impact 0.921 acre of wetland and stream channel from fill activities.

Table 2: Impacts from Fill Activities

Water Feature Type	Permanent			Temporary		
	Acre(s)	Linear Feet	Cubic Yards	Acre(s)	Linear Feet	Cubic Yards
Wetlands						
Vernal pool	0.018	-	-	-	-	-
Seasonal wetlands	0.084	-	-	-	-	-
Seasonal wetland swale	0.521	-	-	-	-	-
Seep	0.246	-	-	-	-	-
Marsh	0.040	-	-	-	-	-
Wetlands Total	0.909	-	-	-	-	-
Stream Channel						
Intermittent drainage	0.012	-	-	-	-	-
Stream Total	0.012	-	-	-	-	-
Total Impacts	**0.921**	-	-	-	-	-

United States Army Corps of Engineers File Number: SPK-2008-00326

United States Army Corps of Engineers Permit Type: Individual Permit

California Department of Fish and Wildlife Lake or Streambed Alteration Agreement: 1600-2012-0198-R2

Possible Listed Species: None

Status of CEQA Compliance: The City of Folsom certified an Environmental Impact Report/Environmental Impact Statement and Statement of Overriding Considerations on 14 June 2011. Significant and unavoidable impacts identified in the Statement of Overriding Considerations include impacts to water quality. The City of Folsom filed a Notice of Determination with the State Clearinghouse on 15 June 2011 (State Clearinghouse Number 2008092051).

The Central Valley Water Board will file a Notice of Determination with the State Clearinghouse as a responsible agency within five (5) days of the date of this certification.

Compensatory Mitigation: Prior to commencing construction, the Applicant shall provide evidence of all on-site and off-site compensatory mitigation to the Central Valley Water Board. Evidence of mitigation includes, but is not limited to, the purchase of mitigation credits at a ratio of 1:1 for vernal pools, 1.3:1 for seasonal wetlands, 1.3:1 for seasonal wetland swales, 4:1 for

seeps, 1:1 for marsh, and 2:1 for intermittent drainages or as required by the United States Army Corps of Engineers, whichever is greater.

Application Fee Provided: Total fees of $1,614.00 have been submitted to the Central Valley Water Board as required by § 3833(b)(3)(A) and § 2200(a)(3) of the California Code of Regulations.

DISTRIBUTION LIST

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Patrick Moeszinger
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State Water Resources Control Board

Jason A. Brush (Electronic copy only)
Wetlands Office Supervisor (WTR-8)
United States Environmental Protection Agency

ECORP Consulting
2525 Warren Drive
Rocklin, CA 95677

ATTACHMENT D

Swainson's Hawk Mitigation Plan

Swainson's Hawk Mitigation Plan

Folsom 138

Sacramento County, California

Prepared For:
Raintree Investment Corporation

September 1, 2015

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

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PROJECT PRESERVE/IMPACT 4
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INTRODUCTION

The Folsom 138 Project is part of the Folsom Plan Area Specific Plan (FPASP). The FPASP is an approximately 3,500 acre area in eastern Sacramento County and is within the eastern edge of the known range of the state-threatened Swainson's hawk (SWHA) (*Buteo swainsoni*). Per the requirements of the Mitigation Monitoring and Reporting Program (MMRP) for the FPASP each project applicant needs to prepare and implement a SWHA mitigation plan acceptable to the Lead Agency (City of Folsom) and the California Department of Fish and Wildlife (CDFW). This mitigation plan has been prepared for the Folsom 138 Project (Project) to mitigate for the loss of SWHA foraging habitat.

PROPERTY LOCATION

The 137±-acre Project site is located south of Highway 50 at the northeast corner of the intersection of Placerville Road and White Rock Road in eastern Sacramento County, California (Figure 1. *Project Location and Vicinity*). The Project site corresponds to a portion of Section 15, Township 9 North, and Range 8 East (MDBM) of the "Clarksville, California" 7.5-minute quadrangle (USGS 1980).

REGIONAL SWAINSON'S HAWK STATUS

SWHA is a migratory species that winters from Mexico south to Argentina in South America, and spends the breeding season in agricultural and grassland plains in western North America. Individuals have been seen wintering in the Central Valley and Sacramento/San Joaquin Delta.

In the Central Valley of California, SWHA's typically nest in mature trees within riparian corridors and in scattered trees adjacent to agricultural fields or pastures, which serve as the primary foraging areas (California Department of Fish and Game [CDFG] 1994). It has been documented that a variety of factors, including crop types, agricultural practices, and harvesting regimes, can have a significant effect on both the availability and abundance of prey items in these areas (CDFG 1994).

DOCUMENTED SWAINSON'S HAWK NESTS

According to CDFW's California Natural Diversity Database (CNDDB) and data collected by Estep Environmental Consulting, there are several previously documented active SWHA nest locations within 10 miles of the FPASP, however there have been no active SWHA nests documented within the FPASP (Figure 2. *Swainson's Hawk Occurrences*) (CDFW 2014, Estep Environmental Consulting 2007). CNDDB occurrence No. 200 is a record of individual SWHAs observed in 1979 and 1982 at the Scott Road/White Rock Road intersection. No nest was found at this location. Therefore the closest known active nest is approximately one mile southwest of the FPASP (CNDDB Occurrence No. 2234). There are no known SWHA nests east of the Project site in El Dorado or Amador counties.

Specific Plan Area Boundary

Folsom 138 Property Boundary

SPECIFIC PLAN AREA

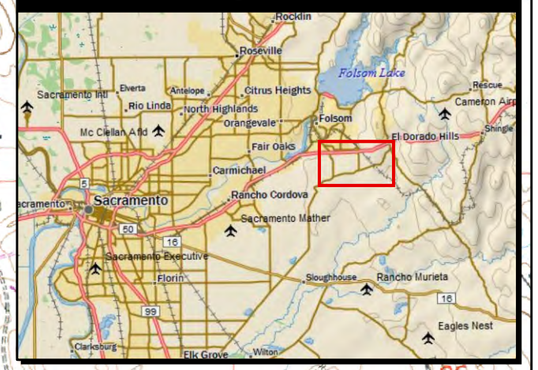
Folsom 138

Sacramento County, California
§15, T.09N, R.08E, MDBM
Latitude: 38° 37' 52.19" N
Longitude: 121° 5' 26.62" W
Watersheds: Lower American (18020111) & Upper Cosumnes (18040013)

Scale in Feet
0 1,000 2,000

Clarksville (1980, NAD27)
CA 7.5-minute Topographic Quadrangle
US Geological Survey

VICINITY



Location: J:\GIS_Maps\2005-429_Folsom_Area_South_GroupSite_Vicinity\FPASP_Vicinity_F138_20140808.mxd (JSwager, 8/8/2014) - JSwager

Map Date: 8/8/2014
Service Layer Credits: Copyright:© 2012 DeLorme

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ENVIRONMENTAL CONSULTANTS

Figure 1. Project Location and Vicinity

2005-429 Folsom Plan Area Specific Plan

Figure 2.
Swainson's Hawk Occurrences

Map Features

- Specific Plan Boundary
- Folsom 138

Distance From Specific Plan Boundary

- 1 mile
- 5 miles
- 10 miles

Swainson Hawk Occurrences

- Swainson's Hawk Nest (Estep 2007)[1]
- Swainsons's Hawk Occurrrences (CNDDB 2015)[2]
- CNDDB Polygon Extent [2]

[1]Estep Environmental Consulting 2007. Digitized from PDF.

[2]CDFG California Natural Diversity Database (CNDDB), August 2015 GIS Update.

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Base Source: ESRI

Map Date: 8/31/2015

DRAFT

2013-098 Folsom 138

Miles
0 3

Location: J:\GIS_Maps\2005-429_Folsom_Area_South_Group\SSS_Survey_and_Mapping\Swainsons_Hawk\SWHA_Occurrences_20150812_F138.mxd (ECK/IDS)-JSwager 8/31/2015

PROJECT PRESERVE/IMPACT

The entire 137±-acre Project site is considered potential SWHA foraging habitat (Figure 3. *Potential SWHA Foraging Habitat Impacts*). Based on the Project impacts, 120.72 acres of potential SWHA foraging habitat will be lost during Project implementation (see Figure 3). The 4.60 acres of on-site open space preserve will be dedicated under a conservation easement and managed under an approved Operations and Management Plan (O&M Plan) for the FPASP and would not be considered a loss of SWHA foraging habitat (see Figure 3). Additionally, within the Project site there will be large areas of passive open space preserve that will be graded and restored back to annual grassland. There is 11.72 acres of passive open space preserve that will provide potential SWHA foraging habitat and will not be considered a loss of SWHA foraging habitat (see Figure 3).

PROPOSED MITIGATION

According to the 1994 DFG Swainson's Hawk Guidelines included in the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawk in the Central Valley of California* (SWHA Guidelines), if foraging habitat loss is greater than one mile and less than five miles from the nearest known (active) nest, mitigation required shall be at a 0.75:1 ratio. However the SWHA Guidelines also state that if the land acquired for mitigation is manage for prey production then mitigation shall be at a 0.5:1 ratio. Since the Project applicant has reserved the appropriate credits for loss of SWHA foraging habitat mitigation at the Van Vleck Ranch Mitigation Bank (Bank) located in Eastern Sacramento County where the Bank is approved by CDFW and is actively managed to benefit foraging SWHA and its prey, the Project applicant will mitigate for the loss of SWHA foraging habitat at a 0.5:1 ratio (Attachment A – *Bank Service Area Map*). Based on this ratio and the Project impacts the Project applicant will purchase 60.36 acres of credit from the Bank (Table 1. *Proposed Mitigation Acreage*). The Project site is included in the Bank's service area (Attachment A). The Project applicant will provide proof of acquisition of the credits to the City of Folsom and CDFW before Project implementation.

Table 1. Proposed Mitigation Acreage

	Acres	Proposed Mitigation Ratio	Proposed Mitigation Acreage
Preserved Foraging Habitat (No Impact)	4.60	0	0
Passive Open Space (No Impact)	11.72	0	0
Impacted Foraging Habitat	120.72	0.5:1	60.36
TOTAL	137.04		60.36

Figure 3.
Potential SWHA Foraging Habitat Impacts

Map Features

Property Boundary - 137.04 ac.

FPASP Backbone Infrastructure

Open Space Preserve - 4.60 acres

Passive Open Space
Suitable for Foraging Habitat - 11.72 acres

Swainson Hawk Occurrences

Swainson's Hawk Nest (Estep 2007)[1]

Swainsons's Hawk Occurrrences (CNDDB 2014)[2]

CNDDB Nest Buffers

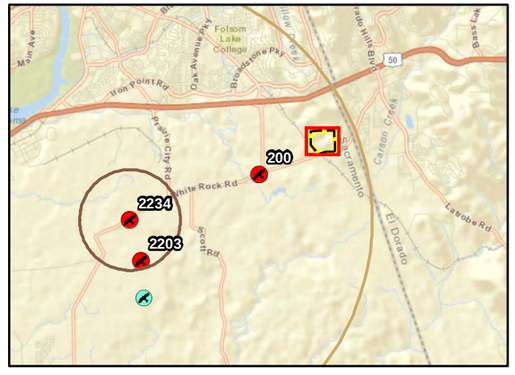
1 Mile Buffer

5 Mile Buffer

SWHA Foraging Habitat Impacts

SWHA Foraging Habitat Full Impact - 120.72 ac.

Service Layer Credits: Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013



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Location: J:\GIS_Maps\2005-429_Folsom_Area_South_Group\Draft_Maps_Data\2014-10-31_Folsom138_Revised_Impacts\F138_SWHAImpacts_20141031.mxd (JDS) JSwager 11/5/2014

2013-098 Folsom 138

Scale in Feet
0 300

Photo Source: USGS 2013
[1]Estep Environmental Consulting 2007. Digitized from PDF.
[2]CDFG California Natural Diversity Database (CNDDB), October 2014 GIS Update.

Map Date: 11/5/2014

REFERENCES

California Department of Fish and Game (CDFG). 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California. November 1, 1994.

California Department of Fish and Wildlife (CDFW). 2014. Rarefind Natural Diversity Data Base Program. Version 3.1.1, dated: November 1, 2014. California Natural Diversity Database. The Resources Agency, Sacramento.

Estep Environmental Consulting. 2007. Distribution, Abundance, and Habitat Associations of the Swainson's Hawk (Buteo swainsoni) in the City of Rancho Cordova Planning Area. Prepared for the City of Rancho Cordova.

U.S. Department of the Interior, Geological Survey (USGS). 1980. "Clarksville, California" 7.5-minute Quadrangle. Geological Survey. Denver, Colorado

LIST OF ATTACHMENTS

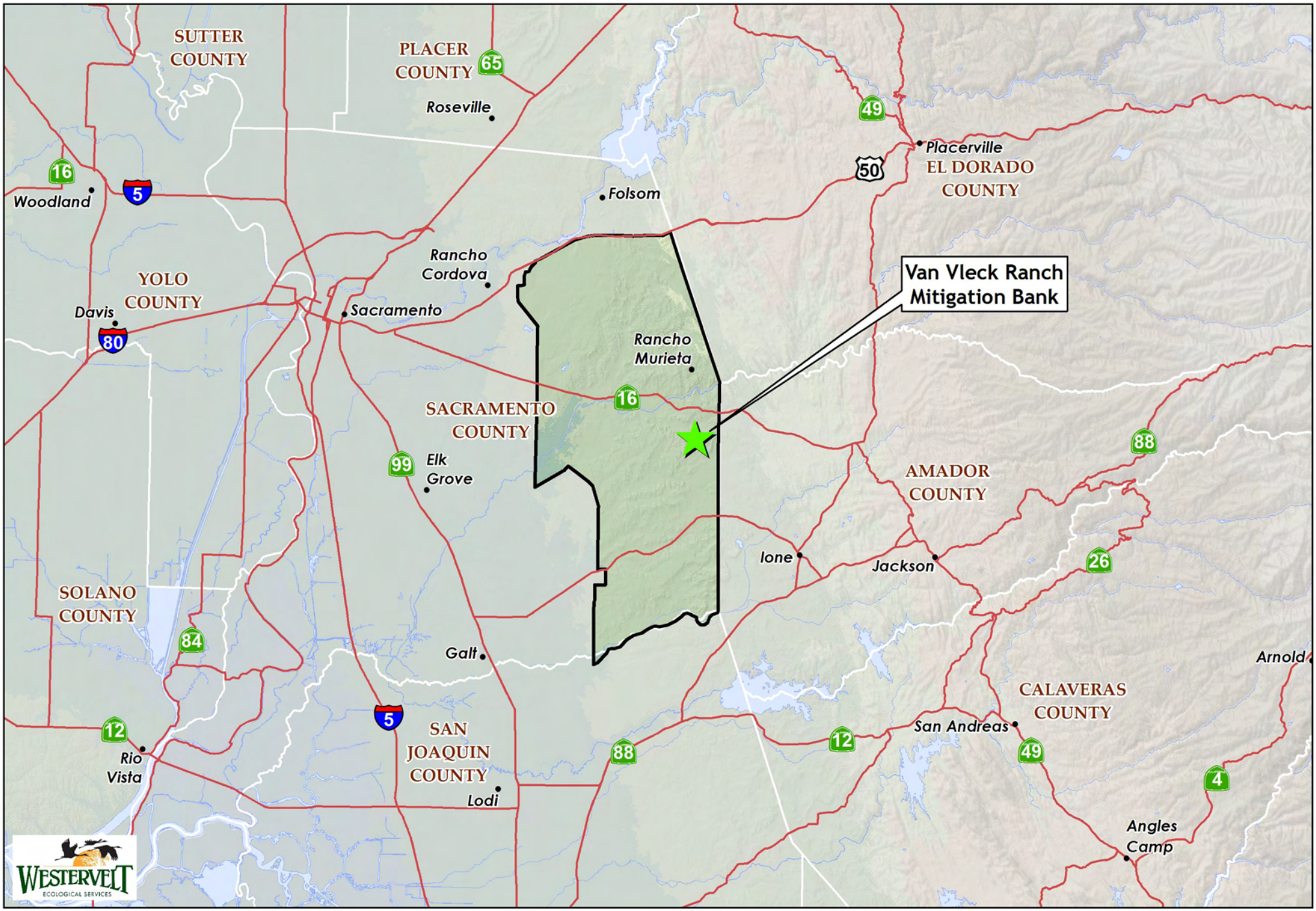
Attachment A –Bank Service Area Map

Van Vleck Mitigation Bank

BANK OVERVIEW

Location:	Sacramento County, California
Date established:	April 2009
Size of bank:	755 acres
Species:	Vernal pool fairy shrimp Swainson's hawk
Credits available:	Vernal pool preservation Vernal pool creation Swainson's hawk
Service area:	Sacramento County and portions of San Joaquin, El Dorado, Calaveras, Amador, and Placer Counties. Projects outside the approved service area may be considered on a case-by-case basis, and by approval of the regulatory agencies.
Signatory agencies:	U.S. Fish and Wildlife Service U.S. Army Corp of Engineers U.S. Environmental Protection Agency Cal. Department of Fish and Game
Contact:	Travis Hemmen themmen@westervelt.com 916.646.3644 x 204 wesmitigation.com

Westervelt Ecological Services
600 North Market Boulevard, Suite 3 • Sacramento, CA 95834
(916) 646-3644 Office
(916) 646-3675 Fax



Van Vleck Ranch Mitigation Bank
Swainson's Hawk Service Area

ATTACHMENT E

USFWS Biological Opinion (File Number 81420-2010-F-0620-1)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Suite W2605
Sacramento, California 95825

In Reply Refer to:
81420-2010-F-0620-1

APR 2 2014

Ms. Lisa M. Gibson
Senior Project Manager
Regulatory Division
U.S. Army Corps of Engineers
1325 J Street, Room 1350
Sacramento, California 95814-2922

Subject: Formal Consultation on the Proposed Folsom Plan Area Specific Plan Project (Corps # SPK-2007-02159), Sacramento County, California

Dear Ms. Gibson:

This letter is in response to the U.S. Army Corps of Engineers' (Corps) December 6, 2010, request for initiation of formal consultation with the U.S. Fish and Wildlife Service (Service) on the proposed Folsom Plan Area Specific Plan (FPA) Project (FPA/proposed project) in Sacramento County, California. Your request, which included the January 12, 2010, *U.S. Fish and Wildlife Service Biological Assessment to Support Section 7 Consultation for Folsom Plan Area Specific Plan* (Biological Assessment), was received by the Service on December 17, 2010. The Biological Assessment presents an evaluation of the proposed project's effects on species federally-listed under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) (Act).

The federal action we are consulting on is the issuance of permits under section 404 of the Clean Water Act of 1972, as amended (33 U.S.C. §1251 et seq.), to nine individual applicants representing each property for the filling of jurisdictional wetlands, including vernal pools, seasonal wetlands and seasonal wetland swales, during the construction of the 3,510-acre FPA. This response is provided under the authority of the Act, and in accordance with the implementing regulations pertaining to interagency cooperation (50 CFR 402).

Pursuant to 50 CFR 402.12(j), you submitted the Biological Assessment for our review and requested our concurrence with the findings presented therein, while also concurrently initiating formal consultation pursuant to 50 CFR 402.14(c). The findings presented in the Biological Assessment conclude that the FPA may affect, and is likely to adversely affect the federally-listed

as threatened vernal pool fairy shrimp (*Branchinecta lynchi*) and the federally-listed as endangered vernal pool tadpole shrimp (*Lepidurus packardi*) (collectively, vernal pool crustaceans), and the federally-listed as threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) (beetle). The findings also conclude that the proposed project may affect, but is not likely to adversely affect the federally-listed as threatened slender Orcutt grass (*Orcuttia tenuis*) and the federally-listed as endangered Sacramento Orcutt grass (*Orcuttia viscida*) (collectively, vernal pool grasses). Critical habitat has been designated for all of the above species; however, there is none located within the action area for the FPA.

In considering your request, we based our evaluation of the Biological Assessment's findings on the following: 1) the December 6, 2010 consultation request; 2) the December 4, 2012 and June 19, 2013 e-mails modifying the consultation request; and the 3) January 12, 2010, *U.S. Fish and Wildlife Service Biological Assessment to Support Section 7 Consultation for Folsom Plan Area Specific Plan*, prepared by ECORP Consulting, Inc., which included information from the following project specific documents (all documents were prepared by ECORP Consulting, Inc. unless otherwise noted):

Backbone Infrastructure

- The *2009-2010, Wet Season 90-Day Report of Findings Regarding Federally Listed Branchiopods For Backbone Infrastructure Area: Folsom Specific Plan Area.*
- The *2010-2011, Wet Season 90-Day Report of Findings Regarding Federally Listed Branchiopods For Backbone Infrastructure Area: Folsom Specific Plan Area.*

Prairie City Road Business Park

- The November 4, 2008, letter to David Hatch of Easton Development Company, LLC (formerly GenCorp Realty), *Prairie City Road Business Park, Sacramento County, California – Valley Elderberry Longhorn Beetle Survey.*
- The March 6, 2009, *Special-Status Plant Survey for Prairie City Road Business Park.*
- The *2008-2009, ECORP Wet Season 90-Day Report of Findings Regarding Federally Listed Branchiopods for Prairie City Road Business Park.*
- The *2009-2010, Wet Season 90-Day Report of Findings Regarding Federally Listed Branchiopods for Prairie City Business Park.*

Carpenter Ranch

- The 2007-2009, *Listed Vernal Pool Branchiopod Wet Season Survey, 90-Day Reports-Carpenter Ranch.*
- The 2009, *Special-Status Plant Survey – Carpenter Ranch.*

Hillsborough (Formerly Folsom 560)

- The November 4, 2008, letter to David Hatch of Easton Development Company, LLC *Hillsborough (Folsom 560), Sacramento County, California - Valley Elderberry Longhorn Beetle Survey.*
- The *2008, Special-Status Plant Survey for Hillsborough.*
- The *2008-2009* and 2009-2010, *Wet Season 90-Day Report of Findings Regarding Federally Listed Branchiopods for Hillsborough.*

Folsom South

- The 2006 and 2009, *Results of a Focused Plant Survey on the Folsom South Site.*
- The 2007, *90-Day Report 2006-2007 Wet-Season Survey for Listed Vernal Pool Branchiopods: Folsom South Property.*
- The 2007, *Results of Analyses of Soil Samples Collected from the Proposed Folsom South FPA* (prepared by Ecoanalysts for Foothill Associates).
- The 2009, *90-Day Report 2008-2009 Wet-Season Survey for the Listed Vernal Pool Branchiopods: Folsom South Property.*

Folsom Heights

- The 2008, *Delineation of Waters of the United States*, Folsom Heights Property, prepared by EDAW.

After reviewing all the available information, we concur with your determination that the proposed FPA project may affect, but is not likely to adversely affect the vernal pool grasses. The proposed project reached the 'may affect' level, and the subsequent requirement for a Biological Assessment, due to the fact that the proposed project occurs in suitable vernal pool habitat within the known range of the vernal pool grasses, and the vernal pool grasses may be present in the action area. The nearest California Natural Diversity database vernal pool grass occurrence is located 3.4 miles southwest, near the intersection of Douglas Road and Grant Line Road. Although the vernal pool grasses are adapted for wind driven seed dispersal, seeds likely do not disperse far under natural conditions as referenced in the *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* (Service, 2005), (Recovery Plan). Therefore, it is unlikely that the vernal pool grasses may have dispersed naturally into the action area.

There are few pools large enough to support vernal pool grasses in the action area. According to the Recovery Plan, the smallest pool observed to support vernal pool grasses is approximately 0.25 acre while the median size pool is 0.69 acre. The largest vernal pool observed to support the vernal pool grasses is greater than 2.0 acres. The largest vernal pool in the action area is 0.294 acre on the Carpenter Ranch property which was surveyed and no vernal pool grasses were detected.

The consultants for the applicants conducted protocol-level special status plant surveys in accordance with the Service's September 23, 1996, *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants*, (Plant Guidelines) throughout 3,263 acres of the 3,510-acre FPA between 2005 and 2009. No vernal pool grasses were detected in any of the surveys. However, the remaining 247 acres within the FPA that have not been surveyed for vernal pool grasses include the Javanifard and Zarghami, Sacramento Country Day School, and Folsom 138 properties. The Javanifard and Zarghami property had no vernal pools and the Sacramento Country Day School has a total of 0.580 acre of vernal pool features distributed over approximately 40 vernal pool features. The Folsom 138 property has two vernal pool wetland features for a total of 0.043 acre.

We accept the survey findings and acknowledge that the vernal pool wetland features within the action area did not contain vernal pool grasses at the time of the surveys. We acknowledge that 247 acres have not been surveyed, but due to the small size of the vernal pool wetland features on the three properties, they are not likely to support the vernal pool grasses. We also recognize that vernal pool grasses, in the form of seeds, may be moved throughout vernal pool ecosystems, from a variety of potential transportation mechanisms (e.g., overland surface water flow; carried on avian and grazing mammal vectors). So it is conceivable that vernal pool grasses may have been transported into, or already occur in, the action area since the time of the last surveys and in the three un-surveyed areas; and therefore, construction of the proposed project may adversely affect any vernal pool grasses present. However, since the grass surveys have been conducted in 93% of the FPA, we believe that these potential effects are extremely unlikely to occur, and are therefore discountable for the purposes of this consultation. This includes the Backbone Infrastructure which was surveyed concurrently with each individual property, i.e. the portions of the Backbone Infrastructure that occur on each individual property were included during surveys being conducted for a specific property.

Finally, we concur with your findings that the proposed project may affect, and is likely to adversely affect the vernal pool crustaceans and the beetle. We also find that your written request, and the accompanying Biological Assessment, fulfills the requirements for initiation of formal consultation. Therefore, this document provides our biological opinion on the effects of the proposed project on the vernal pool crustaceans and the beetle.

BIOLOGICAL OPINION

Consultation History

March 21, 2011	A meeting to discuss the status of the FPA project was held with representatives of the applicants, the Corps, and the Service. Discussed the need for shrimp surveys and exhibit showing survey status. Discussed the need for watershed analysis.
March 23, 2011	The Corps sent an email to the Service confirming that the five highway interchanges for Highway 50 are not part of the proposed action and would be handled with separate permit applications and section 7 consultations.

April 11, 2011	Site visit with a Service representative, ECORP Consulting, Inc. (ECORP), and Foothill Associates, also representing the applicants.
January 26, 2012	The Service attended a meeting at ECORP to review watershed exhibits primarily for the Country Day School, Prairie City Road Business Park, and Hillsborough and current status of shrimp surveys.
March 21, 2012	The Service attended a meeting at ECORP regarding format and structure of the biological opinion, review watershed information, Backbone Infrastructure survey results and assessment of indirect impacts.
December 4, 2012	The Service received an email from the Corps which clarifies and modifies their determination for the species in the FPA as stated in their December 6, 2010, consultation letter. The Corps' determinations are: 1) vernal pool grasses are a may affect, but not likely to adversely affect determination; 2) vernal pool crustaceans and the beetle are a may affect and likely to adversely affect determination; and 3) remove the Conservancy fairy shrimp from the consultation.
May 10, 2013	The Service attended a meeting at ECORP to review draft language for the biological opinion and structure.
May 24, 2013	Representatives of the Service and ECORP, the consultant for the FPA, conducted a site visit on the Folsom Heights property to assess habitat conditions.
June 19, 2013	The Corps sent an email to the Service clarifying that the consultation does not include the off-site water line or the interchanges along Highway 50.
July 30, 2013	The Service sent a letter to the Corps and Mr. Drew Lessard with the U.S. Bureau of Reclamation (BOR) requesting information on the water supply associated with the project. The issue was whether or not some or all of the water supply would be supplied from the Natomas Mutual Water Company.
August 23, 2013	The Service received a letter response from BOR in response to the Service's request for additional information regarding the water supply for the FPA. The letter stated that there will be no water transfer between the Natomas Mutual Water Company and the FPA.
November 26, 2013	The Service received a letter from ECORP justifying that the wetlands on the Folsom Heights property do not constitute vernal pool crustacean habitat.

December 23, 2013 The Corps submitted the 404 permit application, via email to the Service, for the Sacramento Country Day School property.

January 2014 Email correspondence between the Corps and the Service regarding clarifying the wetland acreages depicted in the land use plan for the 420 acre Russell Ranch Specific Plan which is part of the Folsom South property in the FPA. The Folsom South property was subdivided into four parcels in 2013. The Corps confirmed that the wetland acreage figure for the Folsom South remains unchanged.

March 2014 Email correspondence between the Corps, Service and ECORP with questions and responses confirming the site acreage of each applicant, the additional information necessary for the Service to concur with a not likely to adversely affect determination for vernal pool grasses, and confirmation of the vernal pool crustacean acreage affected by the proposed project.

Project Description

The FPA project is a proposed residential development project with associated retail and commercial properties just south of Highway 50 and north of White Rock Road between Prairie City Road and the Sacramento-El Dorado County line. The FPA is comprised primarily of annual grassland and oak woodland, and is mostly undisturbed and contains one small building and associated access road. The FPA project consists of nine individual developments, each with distinct property owners and separate Corps 404 permit applications. One of these projects, the Backbone Infrastructure [Backbone] will be implemented by the City of Folsom (City). The remaining eight projects will be implemented by a variety of private entities. Each of these eight projects relies on the Backbone project for site access and utility connections. All projects are located within a contiguous 3,510-acre area comprising the FPA. The eight development projects and the Backbone project are all part of the FPA; therefore, all nine projects will be addressed in this biological opinion. This biological opinion will analyze the effects of the greater FPA as a whole, and will serve as the Service's biological opinion on all nine projects. However, each project within the FPA has a different applicant, will complete regulatory and planning requirements at different rates, and compensatory mitigation will be the responsibility of each individual property owner.

The purpose of the FPA project is to establish a coordinated and comprehensive approach towards land use development, consisting of residential, commercial, recreational, public land uses, open space, and infrastructure. The Local Agency Formation Commission designated the FPA as part of the City Sphere of Influence (SOI) in 2001, and the City plans to annex the SOI area. The FPA project will include mixed-density residential housing; public, commercial, and industrial office space; and active parkland. In addition, the City will maintain 30% of the FPA as natural open space (not to include active parkland). At complete build-out, the FPA will consist of approximately 1,474.6 acres of residential housing, 520.7 acres of commercial development, 464.7 acres that include a shopping mall, police and fire stations, municipal services center, five elementary schools, a water treatment plant, associated roads, and parkland,

and 1,050 acres of open space. The build-out timeframe for the FPA has not yet been determined; however, the FPA will be phased such that portions of the Backbone Infrastructure components necessary for each portion of the FPA will be constructed concurrently with development on each property. Figure 1 depicts the location of all nine FPA components, each of which are discussed in more detail below. The individual applicants are as follows:

PROJECTS	APPLICANTS
Folsom Heights	Hospitality Consultants 8525 Oak Arbor Court Fair Oaks, California 95628 Contact: Bob Robinson
Folsom South	MJM Properties 1037 Suncast Lane, Suite 111 El Dorado Hills, California 95762 Contact: Mike McDougal
Folsom 138	Folsom White Rock Investors, LLC 111 Woodmere Drive, Suite 190 Folsom, California 95630 Contact: Brian Cutting
Carpenter Ranch	FPA Land Development 4665 MacArthur Court, Suite 200 Newport Beach, California 92660 Contact: Tim Kihm
Folsom 560 (Hillsborough)	Easton Development Corporation, LLC 1180 Iron Point Rd., Suite 350 Folsom, California 95630 Contact: Mike LaFortune
Prairie City Road Business Park	Easton Development Corporation, LLC 1180 Iron Point Rd., Suite 350 Folsom, California 95630 Contact: Mike LaFortune
Backbone Infrastructure	City of Folsom Community Development Department 50 Natoma Street, Folsom, California 95630 Contact: Gail Furness de Pardo
Javanifard and Zarghami	Javanifard and Zarghami 6236 Mahala Drive Carmichael, California 95608
Sacramento Country Day School	Easton Development Corporation, LLC 1180 Iron Point Rd., Suite 350 Folsom, California 95630 Contact: Mike LaFortune

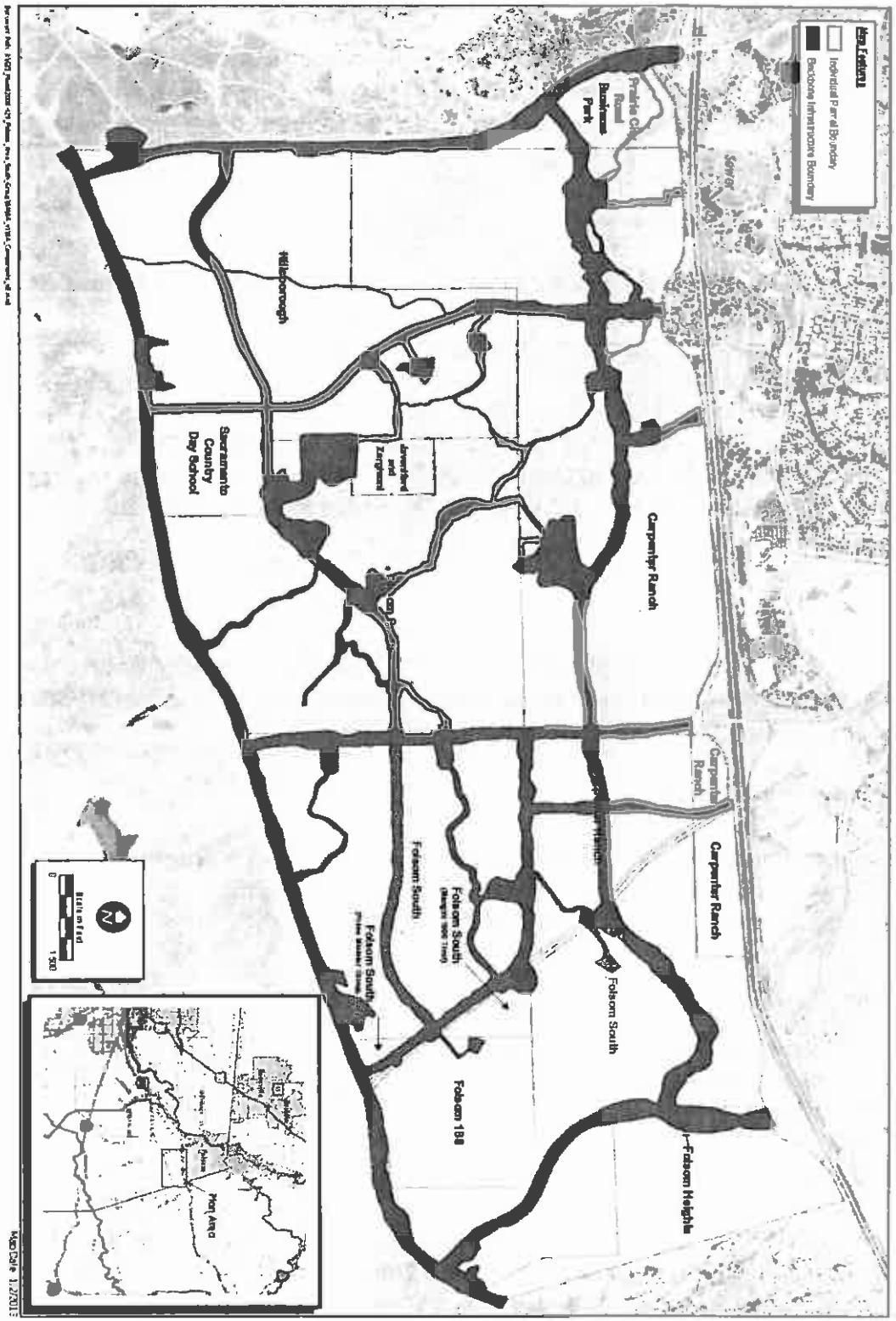


Figure 1. Folsom Plan Area Components

2005-429 Folsom Plan Area Specific Plan Project

Backbone

The purpose of the Backbone project is to allow for phased implementation of the FPA project. The Backbone encompasses a total of 627.40 acres throughout the FPA project which includes 156.6 acres of off-site Backbone work. A majority of the total acreage is included in each of the development acreages, and includes construction of major roads and trails, water and sewer infrastructure, and storm drain systems. Components of the overall Backbone are summarized below.

Roads

The proposed roadway network will include major circulation roads that will serve the entire FPA and region overall, and these roads are depicted in Figure 1.

Pedestrian/Bicycle Trails

The Backbone includes a network of Class I and II bicycle trails that will provide connectivity to trails in Sacramento and El Dorado Counties. A multi-use trail system will provide pedestrian and bicycle linkage throughout the FPA project. Typically, these are 8- to 12-foot wide paved trails.

Sanitary Sewer

The main sanitary sewer system planned for the FPA project is included within the Backbone. This includes sewers in major roadways as well as separate sewer lines and an off-site connection under State Highway 50.

Drainage and Flood Control

The Backbone includes detention and water quality basins that serve areas greater than the individual parcels on which they are located, including one basin that is located just west of the FPA project, on the west side of Prairie City Road.

Water Supply

A water treatment plant (WTP) is included in the Backbone. The WTP is located in the southwest portion of the FPA, north of the Country Day School property and south of the Javanifard and Zarghami property.

Off-Site Backbone Infrastructure

This portion of the Backbone infrastructure is 156.6 acres beyond the 3,510 FPA project area. The purpose of the off-site Backbone is to widen White Road and Prairie City Road, install a detention basin and connection of a sewer line to an existing sewer line that is north of State Highway 50.

Backbone Summary

There are 7.217 acres of vernal pools and seasonal wetlands within the Backbone footprint. All potential habitat for the vernal pool crustaceans was surveyed in accordance with the Service's 1996 *Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods* (Crustacean Guidelines). Portions of the Backbone were surveyed as each individual property was surveyed, and a remaining off-site portion within the right of way was surveyed during the 2009-2010 and 2010-2011 wet seasons. Vernal pool tadpole shrimp were identified within a vernal pool located just south of White Rock Road and within the Backbone Infrastructure right-of-way. This vernal pool is part of a larger wetland complex totaling 0.191 acre.

Vernal pool fairy shrimp were detected during surveys within Prairie City Road Business Park (discussed below). A portion of the Backbone is adjacent to these occupied pools and it is therefore assumed these features (totaling 0.104 acre), within the Backbone, are occupied by this species.

A total of six elderberry shrubs (*Sambucus* spp.), the sole host plant for the beetle, with 26 stems measuring one inch or larger in diameter at ground level were identified within the Backbone. A beetle exit hole was identified on one of these shrubs. All six elderberry shrubs will be removed during project construction, and will be transplanted in accordance with the Service's 1999 *Conservation Guidelines for the Valley Elderberry Longhorn Beetle* (Beetle Guidelines) to a Service-approved conservation bank with a service area encompassing the FPA or another location as approved by the Service.

Prairie City Road Business Park

The Prairie City Road Business Park (Business Park) project is approximately 71 acres in size, and is located south of State Highway 50, east of Prairie City Road, and south of the City of Folsom in northeastern Sacramento County. The Business Park consists of 1.3 acres of single family residences, 41.3 acres of industrial/office space, 25.3 acres of open space, and 3.1 acres of right-of-ways.

There are 1.205 acres of vernal pools and seasonal wetlands on-site. Wet season surveys for the vernal pool crustaceans, in accordance with the Crustacean Guidelines, were conducted for the Business Park during 2008-2009 and 2009-2010. Vernal pool fairy shrimp were detected in two vernal pools. Because these pools are hydrologically connected to a greater vernal pool complex within the Business Park, the applicant has assumed that both vernal pool crustaceans are present within all suitable vernal pool crustacean habitat within the Business Park site (1.205 acres). No elderberry shrubs (*Sambucus* spp.) were identified on-site.

Carpenter Ranch

The Carpenter Ranch project is approximately 1,024 acres in size, and is located south of State Highway 50 between Scott Road and Placerville Road. A small portion of the northeast corner of Carpenter Ranch extends east of Placerville Road. The Carpenter Ranch project consists of both single and multi-family housing, commercial and office development, parks, open space, and a school.

There are 7.723 acres of vernal pools and seasonal wetlands on-site. Wet season surveys for the vernal pool crustaceans, in accordance with the Crustacean Guidelines, were conducted for Carpenter Ranch during 2006-2007, 2007-2008 and 2008-2009. No vernal pool crustaceans were detected at the time of the surveys.

There is a single elderberry shrub (*Sambucus* spp.) with one stem greater than one inch in diameter at ground level located within the Carpenter Ranch. This shrub will be directly affected by project construction and will be transplanted in accordance with the Beetle Guidelines to a Service-approved bank with a service area encompassing the FPA or another location as approved by the Service.

Hillsborough (Formerly Folsom 560)

The Hillsborough project is approximately 560 acres in size, and is located northeast of the intersection of White Rock Road and Prairie City Road in northeastern Sacramento County. The Hillsborough site will consist of three residential villages, parks, open space, and an on-site preserve.

There are 5.436 acres of vernal pools and seasonal wetlands on-site. Wet season surveys for the vernal pool crustaceans were conducted, in accordance with the Crustacean Guidelines, for Hillsborough during 2008-2009 and 2009-2010. No vernal pool crustaceans were detected at the time of the surveys.

There is a single elderberry shrub (*Sambucus* spp.) with seven stems one inch or greater in diameter at ground level located within Hillsborough. This shrub will be directly affected by project construction, and will be transplanted in accordance with the Beetle Guidelines to a Service-approved bank with a service area encompassing the FPA or another location as approved by the Service.

Folsom South

The Folsom South project is located south of State Highway 50, north of White Rock Road, extending east of Placerville Road, and west of Scott Road. It consists of an approximately 1,400-acre mixed-use development including low, medium, and high density residential housing, schools, commercial space, open space, and associated roads and other infrastructure. Approximately 357 acres of open space will be preserved, including an approximately 101-acre on-site wetland preserve. The Folsom South site currently consists mainly of annual grasslands

and the majority of the site is currently utilized for livestock grazing. In the past, portions of the site have been mined for gold and other minerals, and it is bisected by an inactive Southern Pacific Railroad track. No elderberry shrubs (*Sambucus* spp.) were identified on the site. There are 8.762 acres of vernal pools and seasonal wetlands on-site.

Wet season surveys for the vernal pool crustaceans, in accordance with the Crustacean Guidelines, were conducted for Folsom South during 2006-2007 and 2008-2009, and a dry season survey was conducted in 2007. No vernal pool crustaceans or cysts were detected at the time of the surveys.

Folsom Heights

The 179-acre Folsom Heights project is located south of State Highway 50, west of the El Dorado County line. The Folsom Heights site consists mainly of annual grasslands, and the majority of the site is currently utilized for livestock grazing. Proposed land uses include single family homes, general commercial space, and open space.

There are 2.018 acres of vernal pools and seasonal wetlands on-site. However, the Folsom Heights property is characterized by an overall lack of suitable habitat for the vernal pool crustaceans. The wetland habitat either does not pond for any significant duration or it holds water for too long and is nearly perennial in nature. No elderberry shrubs (*Sambucus* spp.) are present within Folsom Heights.

Javanifard and Zarghami

The Javanifard and Zarghami project is located south of State Highway 50 and north of White Rock Road between Prairie City Road and Scott Road. The Javanifard and Zarghami site is approximately 30 acres in size, and is anticipated to consist of a mixed-use residential community. No elderberry shrubs (*Sambucus* spp.) are present within the site. There is a total of 0.117 acre of wetlands on-site which includes vernal pools, seasonal wetlands and seasonal wetland swales.

Surveys for the vernal pool crustaceans have not been conducted to date. The applicant will assume presence for the vernal pool crustaceans and provide habitat compensation as detailed in the Conservation Measures section below.

Sacramento Country Day School

The Sacramento Country Day School project is located north of White Rock Road between Prairie City Road and Scott Road, and is approximately 79 acres in size. No elderberry shrubs (*Sambucus* spp.) are present within the Sacramento Country Day School site. There is a total of 0.742 acre of wetlands on-site which includes vernal pools and seasonal wetland swales. A total of 0.185 acre of wetlands will be filled as part of the proposed project. The remaining 0.557 acre of wetlands will be avoided as part of the proposed project. The avoided wetlands may be

affected indirectly by project implementation due to inadequate buffers from surrounding development(s).

Surveys for the vernal pool crustaceans have not been conducted to date. The applicant will assume presence for the vernal pool crustaceans and provide habitat compensation as detailed in the Conservation Measures section below.

Folsom 138

The 138-acre Folsom 138 site is located south of State Highway 50, just north of the intersection of White Rock Road and Placerville Road. The project consists of residential and commercial development, associated infrastructure, as well as 25.3 acres of on-site open space. There are a total of 1.836 acres of vernal pools, seasonal wetlands, and other wetlands on-site. Wet season surveys for the vernal pool crustaceans, in accordance with the Crustacean Guidelines, were conducted for the Folsom 138 project during the 2008-2009 wet season. Dry season surveys were conducted in July 2013 and no vernal pool crustaceans or cysts were detected.

The Crustacean Guidelines specify that a complete survey constitutes either two wet season surveys or a wet season and dry season survey conducted consecutively (i.e. wet season followed by dry season or vice versa). Although surveys for Folsom 138 were not conducted as a consecutive wet-dry combination, there is no information to suggest that habitat conditions or the likelihood of the vernal pool crustaceans to be present has changed or has not been adequately assessed by the 2008-2009 wet season and 2013 dry season surveys conducted.

No elderberry shrubs (*Sambucus* spp.) are present within Folsom 138.

Figure 2 summarizes the status of vernal pool crustacean surveys for the FPA project and Figure 3 summarizes potential suitable vernal pool crustacean habitat within the FPA project.

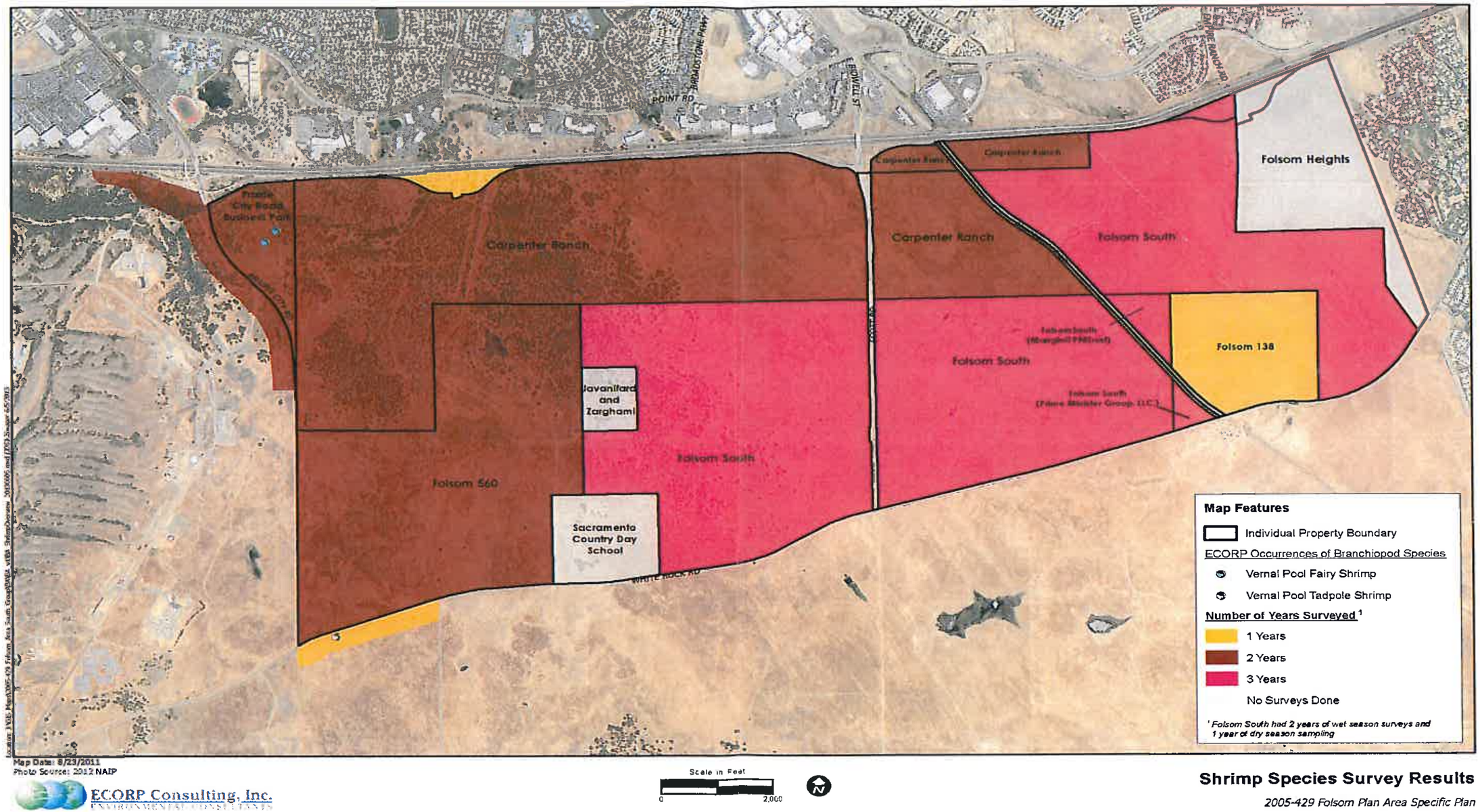


Figure 2. Vernal Pool Crustacean Surveys for the Folsom Plan Area. (Note: Folsom 138 was surveyed in the dry season 2013 with negative survey results and has been surveyed twice.)

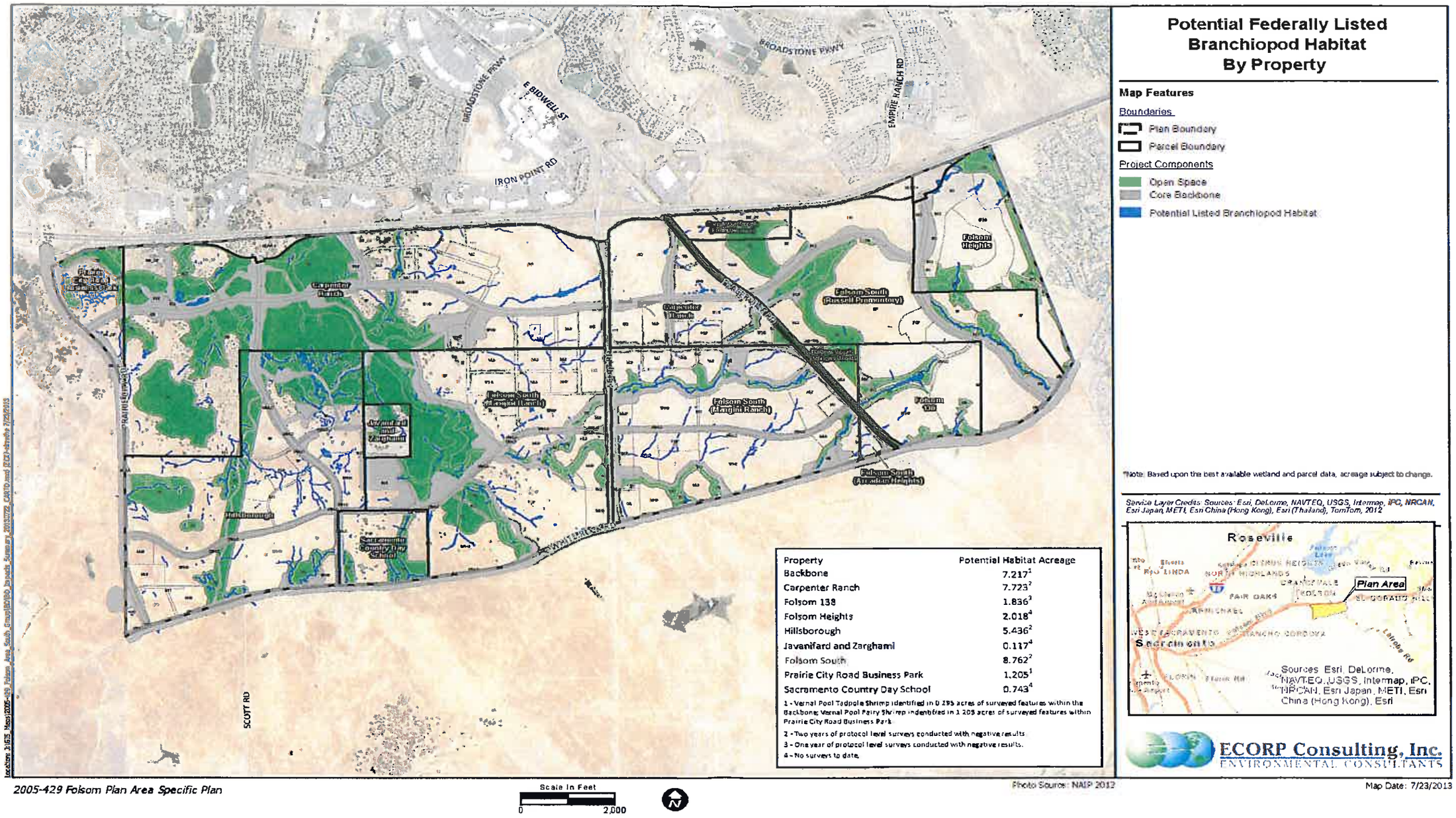


Figure 3. Summary of potential vernal pool crustacean habitat and surveys for FPA.

Proposed Conservation Measures

In order to minimize project effects on the vernal pool crustaceans and the valley elderberry longhorn beetle, the following conservation measures have been proposed by the applicants. Following the summary below, conservation measures are detailed for each individual project and are the responsibility of each applicant.

Vernal Pool Crustaceans: Summary status of four projects in the FPA, impacts, and compensation*

Property	Survey	Species Status	Habitat (Acres)	Direct Impact	Indirect Impact	Habitat Preservation	Habitat Creation
Prairie City Rd Business Park	yes	present	1.205	1.205	0.0	2.41	1.205
Backbone Infrastructure	yes	present	0.295	0.295	0.0	0.59	0.295
Javanifard and Zarghami	no	assumed	0.117	0.117	0.0	0.234	0.117
Sacramento Country Day	no	assumed	0.742	0.185	0.557	1.484	0.185
					Total	**4.718**	**1.802**

***Note: all remaining properties in the FPA were either surveyed according to Service Guidelines with negative results or lack suitable habitat.**

As discussed in the individual project descriptions above, vernal pool crustacean surveys have been conducted for the Prairie City Road Business Park, Carpenter Ranch, Hillsborough, Folsom South, and the Backbone. Of these, vernal pool fairy shrimp were identified within two vernal pools on the Prairie City Road Business Park and vernal pool tadpole shrimp were identified in one vernal pool complex within the Backbone. Occupied habitat within these portions of the project total 1.205 and 0.295 acres, respectively. The applicant(s) for these two projects will compensate for this loss of habitat by purchasing 3.0 acres (a 2:1 ratio) of vernal pool preservation credits and 1.50 acres (a 1:1 ratio) of vernal pool creation credits at a Service-approved conservation bank with a service area encompassing the FPA.

Surveys have not been completed for Javanifard and Zarghami and Sacramento Country Day School. These two properties contain 0.859 acre of vernal pools and seasonal wetlands, which are potential habitat for the vernal pool crustaceans. It is reasonably likely that the species is present based on positive survey results for properties with similar features and are located on the western and southern fringe of the FPA project. The applicants will assume presence for the vernal pool crustaceans and provide habitat compensation through preservation for direct and indirect effects (at a ratio of 2:1) and habitat creation for direct effects (at a ratio of 1:1) at a Service-approved conservation bank with a service area encompassing the FPAs. The applicants for Javanifard and Zarghami and Sacramento Country Day School may, prior to construction, elect to survey their properties using Service-approved protocols, in an effort to demonstrate the species are not present on-site. Depending on the results of these surveys, the applicants may

request the Corps to reinitiate consultation to re-evaluate the effects of the action. Figure 3 summarizes the potential vernal pool crustacean habitat within the FPA and the status of the vernal pool crustacean based on surveys for the FPA.

Valley elderberry longhorn beetle: Description of elderberry stems directly affected and proposed compensation for all nine projects

Habitat Type	Stem Diameter	Number of Stems	Exit Holes (Y/N)	Seedling Ratio	Native Plant Ratio	Total Elderberry Seedlings	Total Native Plants
Non-Riparian	1"-3"	23	N	1:1	1:1	23	23
Non-Riparian	3"-5"	8	N	2:1	1:1	16	16
Non-Riparian	5"+	-	-	3:1	1:1	-	-
Riparian	1"-3"	1	N	2:1	1:1	2	2
Riparian	3"-5"	1	Y	6:1	2:1	6	12
Riparian	5"+	1	Y	8:1	2:1	8	16
					TOTAL	**55**	**69**
					Acreage	**0.52**	
					Credits	**13***	

Note: Habitat compensation is calculated below by property, and the discrepancy in the credit total shown above is due to rounding.

Project specific conservation measures

Backbone Infrastructure

- In order to minimize project effects to the beetle, the City of Folsom has proposed to comply with all applicable conservations measures as detailed in the Beetle Guidelines for transplantation of the six elderberry shrubs with 26 stems greater than one inch in diameter. In addition, the applicant has proposed to purchase beetle conservation credits at a Service-approved conservation bank with a service area encompassing the FPA. The proposed conservation credit component of the project is detailed below.

- The City of Folsom has proposed to offset effects to 0.295 acre of vernal pool crustacean habitat by purchasing 0.590 acre (a 2:1 ratio) of vernal pool crustacean preservation credits and 0.295 acre (a 1:1 ratio) of vernal pool crustacean creation credits at a Service-approved conservation bank with a service area covering the FPA.

Backbone Infrastructure: description of elderberry stems directly affected and proposed compensation

Habitat Type	Stem Diameter	Number of Stems	Exit Holes (Y/N)	Seedling Ratio	Native Plant Ratio	Total Elderberry Seedlings	Total Native Plants
Non-Riparian	1"-3"	18	N	1:1	1:1	18	18
Non-Riparian	3"-5"	6	N	2:1	1:1	12	12
Non-Riparian	5"+	-	-	3:1	1:1	-	-
Riparian	1"-3"	-	-	2:1	1:1	-	-
Riparian	3"-5"	1	Y	6:1	2:1	6	12
Riparian	5"+	1	Y	8:1	2:1	8	16
					TOTAL	**44**	**58**
					Min. Acreage	**0.45**	
					Credits	**11**	

Prairie City Road Business Park

- The GenCorp Realty Investments has proposed to offset effects to 1.205 acres of vernal pool crustacean habitat by purchasing 2.41 acres (a 2:1 ratio) of vernal pool fairy shrimp preservation credits and 1.205 acres (a 1:1 ratio) of vernal pool fairy shrimp credits at a Service-approved conservation bank with a service area covering the FPA.

Carpenter Ranch

- In order to minimize project effects to the beetle, FPA Land Development has proposed to comply with all applicable conservations measures as detailed in the Beetle Guidelines for transplantation of the one elderberry shrub. In addition, the applicant has proposed to purchase one beetle conservation credit at a Service-approved conservation bank with a service area encompassing the FPA. The proposed conservation credit component of the project is detailed below.

Carpenter Ranch: Description of elderberry shrubs directly affected and proposed compensation

Habitat Type	Stem Diameter	Number of Stems	Exit Holes (Y/N)	Seedling Ratio	Native Plant Ratio	Total Elderberry Seedlings	Total Native Plants
Non-Riparian	1"-3"	-	-	1:1	1:1	-	-
Non-Riparian	3"-5"	-	-	2:1	1:1	-	-
Non-Riparian	5"+	-	-	3:1	1:1	-	-
Riparian	1"-3"	1	N	2:1	1:1	2	2
Riparian	3"-5"	-	-	6:1	2:1	-	-
Riparian	5"+	-	-	8:1	2:1	-	-
					TOTAL	**2**	**2**
					Min. Acreage	**0.041**	
					Credits	**1**	

Hillsborough

- In order to reduce project effects to the beetle, Easton Development Company, LLC has proposed to comply with all applicable conservations measures as detailed in the Beetle Guidelines for transplantation of the one elderberry shrub. In addition, the applicant has proposed to purchase two beetle conservation credits at a Service-approved conservation bank with a service area encompassing the FPA. The proposed conservation credit component of the project is detailed below.

Hillsborough: Description of elderberry shrubs directly affected and proposed compensation

Habitat Type	Stem Diameter	Number of Stems	Exit Holes (Y/N)	Seedling Ratio	Native Plant Ratio	Total Elderberry Seedlings	Total Native Plants
Non-Riparian	1"-3"	5	N	1:1	1:1	5	5
Non-Riparian	3"-5"	2	N	2:1	1:1	4	4
Non-Riparian	5"+	-	-	3:1	1:1	-	-
Riparian	1"-3"	-	-	2:1	1:1	-	-
Riparian	3"-5"	-	-	6:1	2:1	-	-
Riparian	5"+	-	-	8:1	2:1	-	-
					TOTAL	**9**	**9**
					Min. Acreage	**0.082**	
					Credits	**2**	

Javanifard and Zarghami

- The applicant is assuming presence of the vernal pool crustaceans, habitat conservation credits will be purchased from a Service-approved vernal pool crustacean conservation bank with a service area covering the FPA at a ratio of 2:1 for habitat preservation (0.234 acre) and 1:1 for habitat creation (0.117 acre).

Sacramento Country Day School

- The applicant is assuming presence of the vernal pool crustaceans for areas directly and indirectly affected, habitat conservation credits will be purchased from a Service-approved vernal pool crustacean conservation bank with a service area covering the FPA at a ratio of 2:1 for habitat preservation (0.185 direct + 0.557 indirect) x 2 = 1.484 acres) and 1:1 for habitat creation (0.185 acre).

Action Area

The action area is defined in 50 CFR §402.02, as "all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. For the proposed action, the Service considers the action area to be the entire 3,510-acre FPA and the 156.6 acres for the off-site Backbone Infrastructure that may be directly impacted by construction related activities. The action area also includes all areas within 250 feet of the FPA that may be subject to indirect effects. Indirect effects are likely to include changes in hydrology, human intrusion, increased potential for non-native invasive species of plants and animals to colonize the area, and dust and noise from earthmoving equipment.

Analytical Framework for the Jeopardy Analysis

In accordance with policy and regulation, the jeopardy analysis in this biological opinion relies on four components: (1) the *Status of the Species*, which evaluates the species' range-wide condition, the factors responsible for their condition, and their survival and recovery needs; (2) the *Environmental Baseline*, which evaluates the condition of the species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of the species; (3) the *Effects of the Action*, which determines the direct and indirect impacts of the proposed federal action and the effects of any interrelated or interdependent activities on the species; and (4) the *Cumulative Effects*, which evaluates the effects of future, non-federal activities in the action area on the species.

In accordance with policy and regulation, the jeopardy determination is made by evaluating the effects of the proposed federal action in the context of the species' current status, taking into account any cumulative effects, to determine if implementation of the proposed action is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of the species in the wild.

The jeopardy analysis in this biological opinion places an emphasis on consideration of the range-wide survival and recovery needs of the species and the role of the action area in the survival and recovery of the species as the context for evaluating the significance of the effects of the proposed federal action, taken together with cumulative effects, for purposes of making the jeopardy determination.

Status of the Species

Vernal Pool Fairy Shrimp

For the most recent comprehensive assessment of the species' range-wide status, please refer to the *Vernal Pool Fairy Shrimp (Branchinecta lynchii) 5-Year Review: Summary and Evaluation* (Service, 2007). No change in the species' listing status was recommended in this 5-year review. Threats evaluated during that review and discussed in the final document have continued to act on the species since the 2007 5-year review was finalized, with loss of vernal pool habitat being the most significant effect. While there have been continued losses of vernal pool habitat throughout the various vernal pool regions identified in the Recovery Plan, including the Southeastern Sacramento Valley Vernal Pool Region where the proposed project is located, to date no project has proposed a level of effect for which the Service has issued a biological opinion of jeopardy for the species. The Service is in the process of finalizing its most current 5-year review for the species.

Vernal Pool Tadpole Shrimp

For the most recent comprehensive assessment of the species' range-wide status, please refer to the *Vernal Pool Tadpole Shrimp (Lepidurus packardi) 5-Year Review: Summary and Evaluation* (Service, 2007). No change in the species' listing status was recommended in this 5-year review. Threats evaluated during that review and discussed in the final document have continued to act on the species since the 2007 5-year review was finalized, with loss of vernal pool habitat being the most significant effect. While there have been continued losses of vernal pool habitat throughout the various vernal pool regions identified in the *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* (Service, 2005), including the Southeastern Sacramento Valley Vernal Pool Region where the proposed project is located, to date no project has proposed a level of effect for which the Service has issued a biological opinion of jeopardy for the species. The Service is in the process of finalizing its most current 5-year review for the species.

Valley Elderberry Longhorn Beetle

Please refer to the *Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus) 5-year Review: Summary and Evaluation* (Service 2006). Since this review was published, the species has been proposed for delisting through the publication of the *Removal of the Valley Elderberry Longhorn Beetle From the Federal List of Endangered and Threatened Wildlife; Proposed Rule* (Service 2012). In the Proposed Rule, the Service proposes to remove the species from the Federal List of Endangered and Threatened Wildlife. This proposal is based on 1) the belief that the species persists in more locations and over a larger range than was known at the time of listing; 2) the belief that sufficient habitat will remain within its range into the foreseeable future; 3) past and ongoing riparian vegetation restoration; and 4) the persistence of elderberry shrubs on restored and/or public lands managed as open space. The Service is currently accepting public comments on the Proposed Rule prior to making a final determination on the listing of the species.

Environmental Baseline

Status of the vernal pool crustaceans in the Action Area -- While high density, high quality, and highly occupied habitat for the vernal pool crustaceans is present within central and southeastern Sacramento County, the FPA is located at slightly higher elevations in the northeastern portion of the County. The FPA increases in elevation from west to east, from roughly 300 to 700 feet in elevation. The FPA consists of largely undisturbed annual grasslands interspersed with oak woodlands, and habitat for the vernal pool crustaceans consists of low density vernal pools and seasonal wetlands, generally increasing in gradient and decreasing in suitability from west to east. The FPA is situated on the fringe of the range of the vernal pool crustaceans, and they have been detected during surveys on mainly the western portions of the action area on the Prairie City Road Business Park (vernal pool fairy shrimp), and a portion of the Backbone south of White Rock Road between Prairie City Road and Scott Road (vernal pool tadpole shrimp). These occurrences are located on the far western and southern edges of the FPA, respectively. The Javanifard and Zarghami and the Sacramento Country Day School properties are located in close proximity to these two properties and their wetland features are similar.

Therefore, with the exception of the sites where the species have been documented within the FPA which includes the Javanifard and Zarghami and Sacramento Country Day School properties, the remaining potential vernal pool crustacean habitat on-site is likely not occupied due to a general lack of habitat suitability on the northern and eastern edges of the FPA project. Changes in surface topography with the transition to the Sierra Nevada Foothills results in a lack of suitable habitat as the wetlands either do not support sufficient hydrology to support the species or wetlands maintain water for longer periods and are characterized by a more perennial nature. Insufficient hydrology in conjunction with being located at the eastern extent of the local species range makes the remaining wetland features unsuitable and unoccupied by the remaining suitable vernal pool crustacean habitat throughout the FPA project.

Factors affecting the vernal pool crustaceans in the Action Area--The FPA is largely undisturbed, other than three existing north-south roads, one homestead, and various utilities. The FPA has

been largely used for cattle grazing and some historic mining activities. The Service is not aware of any past, present, or future federal actions within the action area.

Status of the beetle in the Action Area-- Suitable habitat for the beetle exists within the FPA in the form of eight elderberry shrubs with 34 stems one inch or greater in diameter at ground level. These shrubs are widely dispersed, and a potential beetle exit hole was identified on one shrub. Based on the presence of suitable habitat, and the evidence of an exit hole, and because the FPA contains habitat components suitable for the breeding, resting, and dispersal of this species, the Service considers these eight elderberry shrubs throughout the FPA as likely to be occupied by the beetle.

Factors affecting the beetle in the Action Area-- As most of the FPA has not been disturbed, actions that may have affected the beetle include mainly the construction of roads and a rural residential site, historic and ongoing cattle grazing, and some historic mining activities. The Service is not aware of any past, present, or future federal actions within the action area.

Effects of the Action

Vernal Pool Crustaceans

The construction of the proposed project will result in direct effects to 1.802 acres of vernal pool crustacean habitat. This includes 1.500 acres of known occupied habitat, and 0.302 acre of habitat that has not been surveyed to date, but for which the Service believes there is reasonable likelihood of species presence. The project related activities, such as grading, placement of fill, paving, and the use of earth moving equipment, will result in the loss of vernal pool crustacean habitat and the death of an unknown number of cysts. The earthmoving equipment will be moving dirt and filling fairy shrimp habitat during construction activities and will likely crush or destroy the vernal pool crustacean cysts, or otherwise prevent the cysts from hatching.

Indirect effects are caused by or result from the proposed action, are later in time, and are reasonably certain to occur. The 0.557-acre of vernal pool crustacean habitat that will be avoided is outside the footprint of construction activities, but will be indirectly affected by the proposed project. The grading and ground disturbance from this road construction, in combination with the impervious nature of roads and associated infrastructure, is reasonably likely to impede the surface and subsurface hydrology of the vernal pool landscape outside the project footprint, leading to the eventual loss of that vernal pool habitat. It is reasonably likely that this indirect effect may extend up to 250-feet from the edge of project disturbance. All vernal pool crustacean individuals and their cysts inhabiting 0.557-acre of vernal pool crustacean habitat that will be affected as part of the project will be harmed, injured, or killed as a result of the indirect effects from the proposed project.

The applicants have proposed to offset the effects on the listed vernal pool crustaceans inhabiting 2.359 acres of suitable habitat that will be directly and indirectly affected by the FPA by purchasing vernal pool crustacean preservation credits for direct and indirect impacts and creation credits only for direct impacts at a Service-approved conservation bank(s) as outlined in

the Conservation Measures above. Contributing to the long-term preservation and management of vernal pool habitat is critical for the species' survival and recovery.

Valley Elderberry Longhorn Beetle

The FPA will result in direct effects to eight elderberry shrubs within the FPA with a total of 34 stems greater than one inch in diameter at ground level. Transplantation of affected elderberry shrubs is expected to adversely affect the beetle. Beetle larvae may be killed or the beetles' life cycle interrupted during or after the transplanting process. The transplanted elderberry shrub may experience stress or become unhealthy due to changes in soil, hydrology, or microclimate. This may reduce the shrubs suitability as habitat for the beetle, or impair the production of stems in the future. Branches containing larvae may be cut, broken, or crushed as a result of the transplantation process, or the shrub may die as a result of transplantation.

Temporal loss of habitat will occur. Although compensation for impacts to the beetle involves the creation of habitat, it may take several years for elderberry shrubs to grow to a size suitable for occupation by the beetle. Temporal loss of habitat will temporarily reduce the amount of habitat available to beetles and will contribute to habitat fragmentation. Transplanting the shrubs and planting additional elderberry seedlings and other associated natives will add habitat value to the bank in which they are planted.

Cumulative Effects

Cumulative effects include the effects of future State, Tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future federal actions that are unrelated to the FPA are not considered in this section, because they require separate consultation pursuant to section 7 of the Act. The Service is not aware of any reasonably certain future actions in the action area that would result in cumulative effects.

Conclusion

After reviewing the current status of the vernal pool crustaceans and beetle, the environmental baseline for the action area covered in this biological opinion, the effects of the proposed project, the cumulative effects, and the proposed conservation measures, it is the Service's biological opinion that the Folsom Plan Area Specific Plan Project, as proposed, is not likely to jeopardize the continued existence of these species. The Service reached this conclusion because the project-related effects to the species, when added to the environmental baseline and analyzed in consideration of the lack of cumulative effects, will not rise to the level of precluding recovery of the species or reducing the likelihood of survival of the species. The effects to the vernal pool crustaceans and beetle are small and discrete, relative to the range of the species, and although the loss of habitat will contribute to the overall reduction of habitat within the range of these species, the conservation measures will contribute to the long-term preservation and management of vernal pool crustacean and beetle habitat. The project will contribute to the conservation of the vernal pool crustaceans and beetle by preserving habitat at conservation banks that will manage large contiguous sections of habitat for the benefit of these species.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by Service regulations at 50 CFR 17.3 as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the same regulations as an act which actually kills or injures wildlife. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below are non-discretionary, and must be undertaken by the Corps so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. The Corps has a continuing duty to regulate the activity covered by this incidental take statement. If the Corps (1) fails to assume and implement terms and conditions, or (2) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the Corps must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement. [50 CFR §402.14(i)(3)]

Amount or Extent of Take

Vernal Pool Crustaceans

The incidental take of vernal pool crustaceans anticipated for this project will result from the grading and destruction of 1.802 acres of vernal pool crustacean habitat on-site. Additionally, 0.557 acre of vernal pool crustacean habitat will be indirectly impacted by changes in hydrology from the proposed project. The life stage affected by this action will be the vernal pool crustacean cysts, which occur or are embedded in the soil of the vernal pool crustacean habitat, as well as adult crustaceans that will be using the indirectly affected pools until such time as the pools no longer allow for cyst hatching. Due to the fact that it is not possible to know how many adults and/or cysts are in any wetland feature, the Service cannot quantify the total number of vernal pool crustaceans that we anticipate will be taken as a result of the proposed action. In instances in which the total number of cysts and/or individuals anticipated to be taken cannot be determined, the Service may use the acreage of habitat impacted as a surrogate; since the take of

cysts and individuals anticipated will result from the destruction of the vernal pool crustacean habitat, the quantification of habitat acreage serves as a direct surrogate for the vernal pool crustaceans that will be lost. Therefore, the Service anticipates take incidental to this project as a total of 2.359 acres that will be lost as a result of project implementation.

Valley Elderberry Longhorn Beetle

The Service cannot quantify the total number of individuals that will be taken as a result of the proposed project because it is impossible to know how many beetles may inhabit the elderberry stems. The life cycle of the beetle takes one or two years to complete, during which it spends most of its life in the larval stage, living within the stems of elderberry shrubs. In instances in which the number of individuals that may be taken cannot be determined, the Service quantifies take in the number of stems one inch or greater in diameter at ground level. Since take is expected to result from these impacts to the beetles' habitat, the quantification of stems becomes a direct surrogate for the species that will be taken. Therefore, the Service anticipates take incidental to this project as the eight affected elderberry shrubs with 34 stems one inch or greater in diameter at ground level that will be transplanted.

Effect of the Take

The Service has determined that this level of anticipated take is not likely to result in jeopardy to the vernal pool crustaceans and the beetle.

Reasonable and Prudent Measure

The Service has determined that the following reasonable and prudent measure is necessary and appropriate to minimize the effects of the FPA on the vernal pool crustaceans and beetle:

1. All conservation measures as proposed in the biological assessment and outlined here in the Description of the Proposed Action will be fully implemented. Further, these conservation measures shall be supplemented by the Terms and Conditions below.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, the Corps must ensure compliance with the following terms and conditions, which implement the reasonable and prudent measure described above. These terms and conditions are nondiscretionary.

1. The Corps shall include full implementation and adherence to conservation measures as proposed in the biological assessment and restated in this biological opinion as a condition of any permit issued for the project.

2. In order to monitor whether the amount or extent of incidental take anticipated from implementation of the FPA is approached or exceeded, the Corps shall adhere to the following reporting requirement.

    a. For those components of the action that will result in direct habitat degradation or modification whereby incidental take in the form of harm is anticipated, the Corps will provide weekly updates to the Service with a precise accounting of the total acreage of habitat impacted. Updates shall also include any information about changes in project implementation that result in habitat disturbance not described in the Project Description and not analyzed in this biological opinion.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities that can be implemented to further the purposes of the Act, such as preservation of endangered species habitat, implementation of recovery actions, or development of information or data bases. The Service is providing the following conservation recommendation:

1. The Corps should work with the Service to assist us in meeting the goals of the Recovery Plan for the vernal pool crustaceans as outlined in the *December 2005, Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* (Service 2005).

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendation.

REINITIATION—CLOSING STATEMENT

This concludes formal consultation on the proposed Folsom Plan Area Specific Plan project. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of the incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.

The Folsom Plan Area Specific Plan project consists of nine individual project applicants that have been aggregated as part of this consultation. It is important to note that should any reinitiation criteria be met for any individual project applicant(s) this will require reinitiation of the entire biological opinion.

Please contact Kellie Berry, Chief, Sacramento Valley Division at (916) 414-6645 if you have questions regarding the proposed Folsom Plan Area Specific Plan Project.

Sincerely,

Jennifer M. Norris
Field Supervisor

cc:
Paul Jones, U.S. Environmental Protection Agency, San Francisco, CA
Todd Gardner, California Department of Fish and Wildlife, Rancho Cordova, CA
Bjorn Gregersen, ECORP Consulting, Inc., Rocklin, CA

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_____. 2007a. Vernal Pool Fairy Shrimp (*Branchinecta lynchi*) 5-year Review: Summary and Evaluation. September 2007.

_____. 2007b. Vernal Pool Tadpole Shrimp (*Lepidurus packardi*) 5-year Review: Summary and Evaluation. September 2007.

ATTACHMENT F

Special-Status Plant Survey

Special-Status Plant Survey

Folsom 138 Project

Sacramento County, California

Prepared For:

Raintree Investment Corporation

July 28, 2014

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

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1.0 INTRODUCTION

At the request of Raintree Investment Corporation, ECORP Consulting, Inc. (ECORP) conducted a special-status plant survey for the approximately 138±-acre Folsom 138 Project in eastern Sacramento County, California. The purpose of this survey was to identify and map the locations of special-status plant species observed within the site.

1.1 Project Location

The Project is located south of Highway 50 at the northeast corner of the intersection of Placerville Road and White Rock Road in eastern Sacramento County, California (Figure 1. Project Location and Vicinity). The Project site corresponds to a portion of Section 15, Township 9 North, and Range 8 East (MDBM) of the "Clarksville, California" 7.5-minute quadrangle (U.S. Department of the Interior, Geological Survey 1980). The approximate center of the Project site is located at 38° 37' 52" North and 121° 05' 27" West within the Lower American Watershed and Upper Cosumnes Watershed (#18020111 and #18040013, respectively, U.S. Department of the Interior, Geological Survey 1978).

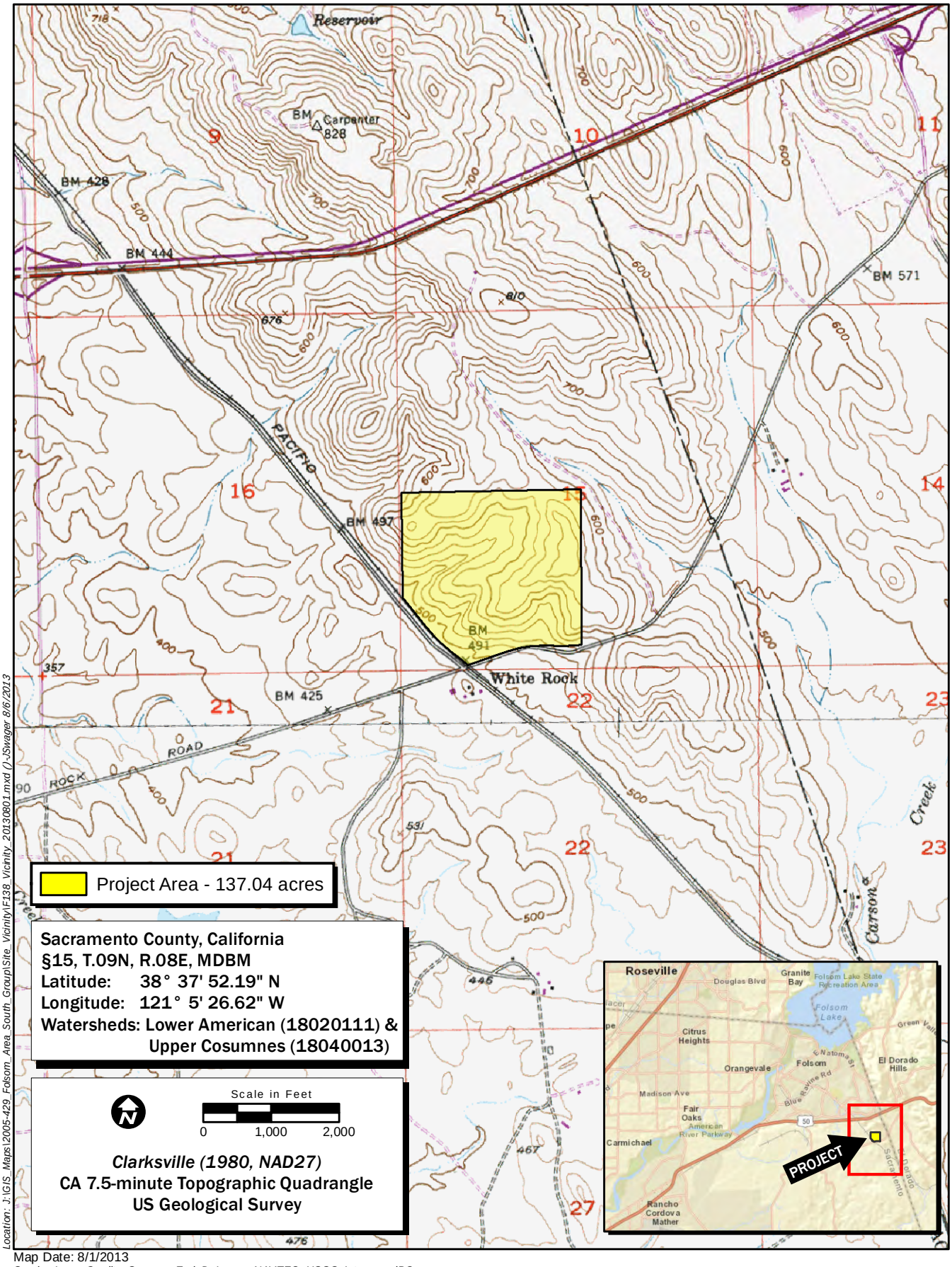
1.2 Definition of Special-Status Plant Species

For the purposes of this report, "special-status plants" are defined as plants which meet one or more of the following:

- Plants listed, proposed for listing, or candidates for future listing as threatened or endangered under the federal Endangered Species Act (FESA).
- Plants listed, proposed for listing, or candidates for future listing as threatened or endangered under the California Endangered Species Act (CESA).
- Plants that meet the definitions of endangered or rare under Section 15380 of the State California Environmental Quality Act (CEQA) Guidelines.
- Plants listed as rare under the California Native Plant Protection Act (California Department of Fish and Game [CDFG] Code of California, Section 1900 et seq.).
- Plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered in California" [California Rare Plant Rank (CRPR) 1B and 2] (see Section 1.3).
- Plants listed by CNPS as species about which more information is needed to determine their status (CRPR 3), and plants of limited distribution (CRPR 4). CRPR 3 and 4 species are only included as "target species" if they have been identified by local jurisdictions as having local significance or regional importance.

1.3 California Rare Plant Ranks

CNPS maintains the Inventory of Rare and Endangered Plants of California (CNPS 2014), which provides a list of plant species native to California that are threatened with extinction, have limited distributions, and/or low populations. Plant species meeting one of these criteria are assigned to one of six ranks (i.e. CRPR). The rank system was developed in collaboration with government, academia, non-governmental organizations, and private sector botanists, and is jointly managed by the California Department of Fish



Location: J:\GIS_Maps\2005-429_Folsom_Area_South_Group\Site_Vicinity\F138_Vicinity_20130801.mxd (JSwager 8/6/2013

Map Date: 8/1/2013

Service Layer Credits: Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 1. Project Location and Vicinity

2013-098 Folsom 138-Raintree

and Wildlife (CDFW) and the CNPS. The ranks are currently recognized in the California Natural Diversity Database (CNDDB). The following are definitions of the CNPS CRPR:

- CRPR 1A – presumed extirpated in California and either rare or extinct elsewhere;
- CRPR 1B – rare, threatened, or endangered in California and elsewhere;
- CRPR 2A – presumed extirpated in California, but more common elsewhere;
- CRPR 2B – rare, threatened, or endangered in California but more common elsewhere;
- CRPR 3 – a review list of plants about which more information is needed; and
- CRPR 4 – a watch list of plants of limited distribution.

Additionally, the CNPS has defined Threat Ranks that are a component of the rank for plant species listed in the Inventory of Rare and Endangered Plants of California (CNPS 2014). Threat Ranks designate the level of threat on a scale of 0.1 through 0.3, with 0.1 being the most threatened and 0.3 being the least threatened. Threat Ranks are generally assigned for all plants ranked 1B, 2B, or 4, and for the majority of plants ranked 3. Plant species ranked 1A and 2A (presumed extirpated in California), and some species ranked 3, which lack threat information, do not typically have a Threat Rank extension. The following are definitions of the CNPS Threat Ranks:

- Threat Rank 0.1 – Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat);
- Threat Rank 0.2 – Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat) ; and
- Threat Rank 0.3 – Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in assigning the Threat Rank, and differences in Threat Ranks do not constitute additional or different protection (CNPS 2014). Depending on the policy of the lead agency, substantial impacts to plants listed as CRPR 1A, 1B, or 2 (regardless of threat rank) are typically considered significant under CEQA Guidelines Section 15380. For CRPR 3 and 4 species (regardless of threat rank), significance under CEQA is typically evaluated if the lead agency has determined those plants to be of local significance or regional importance. Such plants may be identified in local Habitat Conservation Plans (HCPs) or City or County General Plans.

2.0 METHODS

2.1 Literature Review

Prior to conducting field surveys, background information was collected on the potential presence of special-status plants within or near the site from a variety of sources. This included a review of resource agency species lists, literature review, on-line database query, voucher specimen review, and reference population review. The following resources were used as part of the literature review:

- CDFW's CNDDB record search for the "Clarksville, California" 7.5-minute quadrangle including a 5-mile radius around the site (CDFW 2014)(Figure 2. *California Natural Diversity Database Occurrences for Special-Status Plant Species*).
- CNPS's Inventory of Rare and Endangered Plants record search for the "Clarksville, California" 7.5-minute quadrangle (CNPS 2014).
- Species List for the "Clarksville, California" 7.5-minute quadrangle created by the U.S. Fish and Wildlife Service (USFWS) (USFWS 2014).
- Soil Survey of Sacramento County, California (U.S. Department of Agriculture [USDA], Natural Resources Conservation Service [NRCS] 1993).
- Jurisdictional Delineation of Waters of the U.S. for Folsom 138 Project (ECORP 2008).

2.2 Target Species

Based on the information listed above, knowledge of vegetation communities and conditions present within the site, and data on known species' distribution, a list of potentially occurring special-status plants (i.e., the "target" list) was developed. The target species list for this survey including the listing status, a brief habitat description and bloom period for each species is shown on Table 1 (Target List for Folsom 138 Property).

Table 1. Target List for Folsom 138 Property

Common Name	Scientific Name	FESA Status	CESA Status	CRPR	Habitat Description	Bloom Period
Dwarf downingia	*Downingia pusilla*	-	-	2B.2	Mesic valley and foothill grassland, and vernal pools (3'-1,460') (CNPS 2014).	March - May
Boggs Lake hedge-hyssop	*Gratiola heterosepala*	-	CE	1B.2	Marshes and swamps (lake margins), and vernal pools (33'-7,790) (CNPS 2014).	April - August
Ahart's dwarf rush	*Juncus leiospermus var. ahartii*	-	-	1B.2	Mesic valley and foothill grassland (100'-750') (CNPS 2014).	March - May
Legenere	*Legenere limosa*	-	-	1B.1	Seasonally inundated areas including wetlands, wetland swales, marshes, vernal pools, artificial ponds, and floodplains of intermittent drainages (3'-2,900') (CNPS 2014, USFWS 2005).	April - June
Pincushion navarretia	*Navarretia myersii ssp. myersii*	-	-	1B.1	Vernal pools, often acidic (65'-1,100') (CNPS 2014).	April - May
Slender Orcutt grass	*Orcuttia tenuis*	FT	CE	1B.1	Vernal pools, often gravelly (115'-5,770') (CNPS 2014).	May - October
Sacramento Orcutt grass	*Orcuttia viscida*	FE	CE	1B.1	Vernal pools (100' - 330') (CNPS 2014)	April - July
Sanford's arrowhead	*Sagittaria sanfordii*	-	-	1B.2	Shallow freshwater marshes and swamps (0'-2,130') (CNPS 2014)	May - October

Common Name	Scientific Name	FESA Status	CESA Status	CRPR	Habitat Description	Bloom Period
Status Codes:						
FE	- FESA listed, Endangered.					
FT	- FESA listed, Threatened.					
CE	- CESA or Native Plant Protection Act listed, Endangered.					
1B	- CRPR/Rare or Endangered in California and elsewhere.					
2B	- CRPR/Rare or Endangered in California but more common elsewhere.					
0.1	- Threat Rank/Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)					
0.2	- Threat Rank/Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)					

2.3 Reference Site Visits

Reference populations for the target species were visited to assess bloom phenology and to observe species morphology. When reference populations were not available, mounted herbarium specimens were observed at the U.C. Davis Herbarium. Attachment A identifies the reference source for each of the target species including the location of the population, dates of visits, and phenological stage of the species at the time of the field visits.

2.4 Field Survey

Determinate-level field surveys were conducted in accordance with guidelines promulgated by USFWS (USFWS 2000), CDFW (CDFG 1983), and CNPS (CNPS 2014). The field surveys were conducted on 29 April and 17 June 2014, which coincided with the optimum identifiable period for each of the target species. ECORP biologists Todd Wood and Clay DeLong walked meandering transects throughout the site to ensure complete coverage of all suitable habitat for all target species. Field personnel qualifications are included as Attachment B.

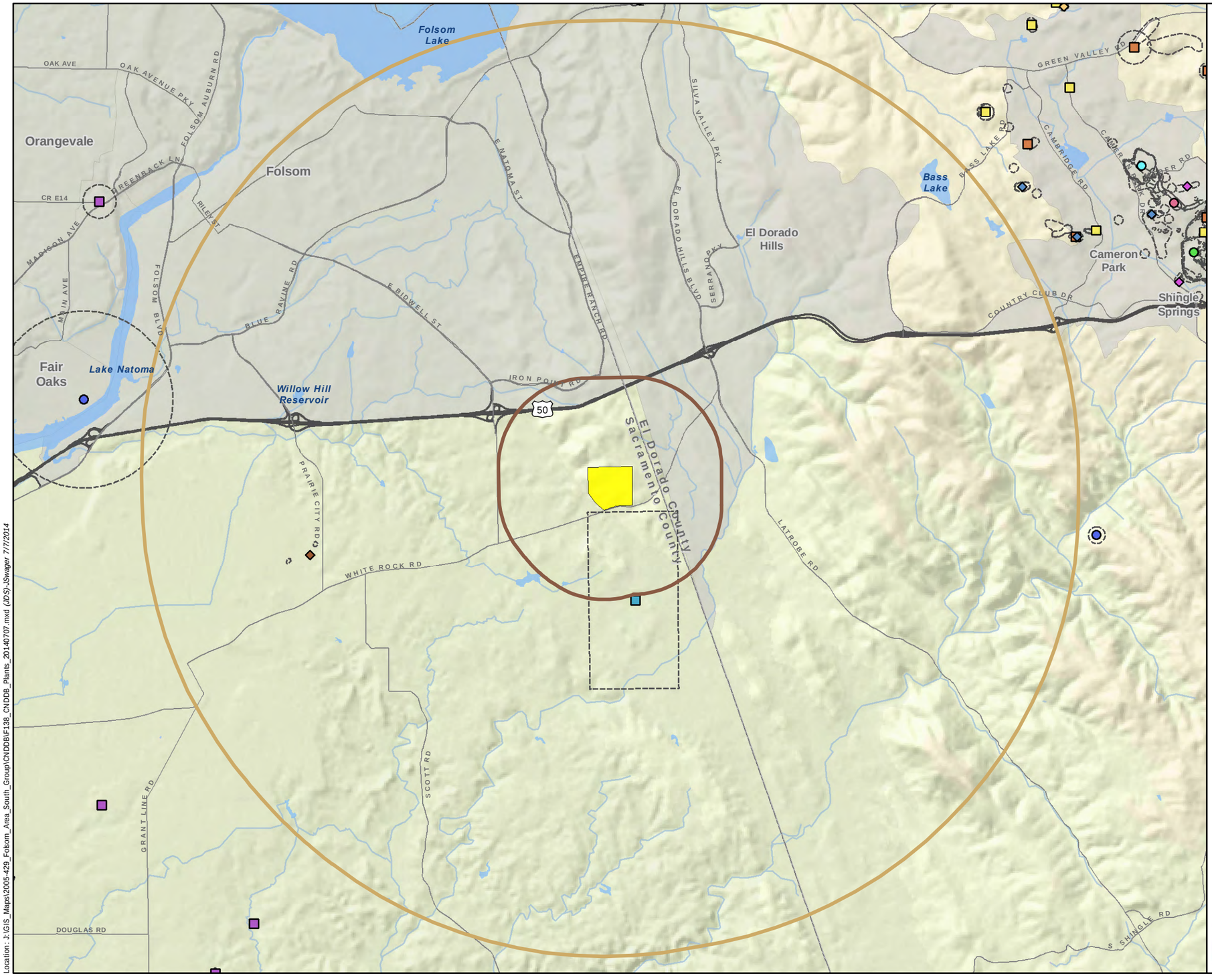
Throughout the survey, a complete plant list of all plants observed within the Project site was generated. All species were identified to the lowest possible taxonomic level which allows rarity to be determined. Plant species identification, nomenclature, and taxonomy followed *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin *et al.* 2012). Vegetation community classification was based on the classification systems presented in *A Manual of California Vegetation, Second Edition* (Sawyer *et al.* 2009), *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986), and *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer Jr. 1988).

3.0 RESULTS AND DISCUSSION

3.1 Existing Site Conditions

The Project site is comprised of rolling hills at an elevational range of approximately 500 feet to 660 feet above mean sea level. The Project site is dominated by annual grassland. Dominant plant species observed in the annual grassland community include non-native annual grasses such as medusahead grass (*Elymus caput-medusae*), soft brome (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), false brome (*Brachypodium distachyon*), Italian ryegrass (*Festuca perennis*), and forbs including filaree (*Erodium botrys*), sticky tarweed (*Holocarpha virgata*), and rose clover (*Trifolium hirtum*). An old home site located in the southeastern corner of the Project site is surrounded by a variety of trees and shrubs, including Fremont cottonwood (*Populus fremontii*), Valley oak (*Quercus lobata*), olive (*Olea europaea*), red willow (*Salix laevigata*), sandbar willow (*Salix exigua*), and pomegranate (*Punica granatum*).

Figure 2.
CNDDB Occurrences of Special-Status Plant Species



Distance From Project
- 1 mile
- 5 miles

Boundaries
- Project Boundary [1]

CNDDB Occurrences [2]
- CNDDB Polygon Extent

Plants
- Stebbins' Morning-glory
- Pine Hill Ceanothus
- Red Hills Soaproot
- Brandegee's Clarkia
- Pine Hill Flannelbush
- El Dorado Bedstraw
- Boggs Lake Hedge-hyssop
- Bisbee Peak Rush-rose
- Sacramento Orcutt Grass
- Layne's Ragwort
- Sanford's Arrowhead
- El Dorado County Mule Ears

This map may include multiple species' occurrences at each location, some of which may not be visible on this graphic. The CNDDB occurrences shown may not reflect the actual location of the occurrence.

[1] Project Boundary: MSCE
[2] CDFW California Natural Diversity Database (CNDDB), June 2014 Update (GIS Shapefile)
CNDDB Occurrences Located on USGS 7.5' Quadrangles: Buffalo Creek, Clarksville, Folsom, Folsom SE, Latrobe, Shingle Springs

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Location: J:\GIS_Maps\2005-429_Folsom_Area_South_Group\CNDDB\F138_CNDDB_Plants_20140707.mxd (JDS) JSwager 7/7/2014

2013-098 Folsom 138- Raintree

Miles
0 1 2

Map Date: 7/7/2014

3.1.1 Waters of the U.S.

A jurisdictional delineation of Waters of the U.S. was conducted at the site in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (U.S. Army Corps of Engineers [USACE] 2008), and verified on 6 February 2009. Waters of the U.S. mapped on-site include wetlands and other waters (Figure 3. *Waters of the U.S.*) (ECORP 2008). Wetlands consist of vernal pools, seasonal wetlands, seasonal wetland swales, seeps, and marshes. Other waters include an intermittent drainage.

3.1.1.1 Wetlands

Vernal Pool

Two vernal pools were identified on-site along the western boundary. Dominant plants observed within the on-site vernal pools include Carter's buttercup (*Ranunculus bonariensis*), needle spikerush (*Eleocharis acicularis*), creeping spikerush (*Eleocharis macrostachya*), and mannagrass (*Glyceria declinata*).

Seasonal Wetland

Several seasonal wetlands were identified in the north-central and southwestern portions of the site. Dominant plants observed within the on-site seasonal wetlands include toad rush (*Juncus bufonius*), Baltic rush (*Juncus balticus*), needle spikerush, creeping spikerush, and shamrock clover (*Trifolium dubium*).

Seasonal Wetland Swale

Several seasonal wetland swales were identified throughout the site. Some swales on-site are semi-perennial features dominated by marsh vegetation, while others are ephemeral features dominated by vegetation characteristic of seasonal wetlands. Dominant plant species observed in the seasonal wetland swales on-site include needle spikerush, watercress (*Nasturtium officinale*), common rush (*Juncus effusus*), hedge nettle (*Stachys stricta*), and mannagrass.

Marsh

One marsh was identified along the southern boundary of the site. Dominant plant species observed within the marsh on-site include needle spikerush, watercress, common rush, strawberry clover (*Trifolium fragiferum*), and mannagrass.

Seep

Several seeps were identified throughout the watershed of the northern-most drainage on-site. Dominant plant species observed within seeps on-site include Mediterranean barley (*Hordeum marinum*), hairy hawkbit (*Leontodon saxatilis*), filaree, and creeping spikerush.

3.1.1.2 Other Waters

Intermittent Drainage

One intermittent drainage was mapped in the southwestern portion of the site. The channel of this feature was unvegetated due to the scouring effects of flowing water.

Figure 3.
Waters of the U.S.

Map Features

Project Boundary

Wetlands/Waters

- Vernal Pool - 0.043 acres
- Seasonal Wetland - 0.720 acres
- Seasonal Wetland Swale - 1.146 acres
- Seep - 0.517 acres
- Marsh - 0.040 acres
- Intermittent Drainage - 0.012 acres

PLACERVILLE RD

WHITE ROCK RD

PAYEN RD

Location: J:\GIS_Maps\2005-429_Folsom_Area_South_Group\SSS_Survey_and_Mapping\Rare_Plant\2014\F138_RarePlant_WD_20140717.mxd (JDS)-JSwager 7/17/2014

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2013-098 Folsom 138-Raintree

Scale in Feet
0 300

Photo Source: USGS 2011

Map Date: 7/17/2014

3.1.2 Soils

According to the Soil Survey of Sacramento County, California (USDA, NRCS 1993), two soil units, or types, have been mapped within the site (Figure 4. *Natural Resources Conservation Service Soil Types*): (107) Argonaut-Auburn complex, 3 to 8% slopes and (110) Auburn-Argonaut-Rock outcrop complex, 8 to 30% slopes. Neither of these soils units consists of listed hydric components, or contains hydric inclusions (USDA, NRCS 1992).

3.2 Previously Documented Special-Status Plant Occurrences

There are no previously documented occurrences of special-status plants within the site according to the CNDDB (CDFW 2014). However, several occurrences of special-status plant species have been documented within an approximate 5-mile radius of the site (see Figure 2). All of these species were considered target species.

3.3 Target Species

3.3.1 Dwarf Downingia *(Downingia pusilla)*

Dwarf downingia is not listed pursuant to either the federal or California Endangered Species Acts; however, it is designated as a CRPR 2B.2 species. This species is a small herbaceous annual that occurs in vernal pools and mesic areas in valley and foothill grasslands (CNPS 2014). This species also appears to have an affinity for slight disturbance since it has been found in man-made features such as tire ruts, scraped depressions, stock ponds, and roadside ditches (USFWS 2005). This species blooms from March through May, and is known to occur at elevations ranging from 3 feet to 1,460 feet above mean sea level (CNPS 2014). The current range of this species in California includes Amador, Fresno, Merced, Napa, Placer, Sacramento, San Joaquin, Solano, Sonoma, Stanislaus, Tehama, and Yuba counties (CNPS 2014).

While no documented occurrences of dwarf downingia have been reported within 5 miles of the site (CDFW 2014), this species was still considered a target species due to the presence of suitable habitat within the site. The vernal pools, seasonal wetlands, seasonal wetland swales, marsh, and seeps throughout the site support suitable habitat for this species. During the surveys in 2014, dwarf downingia was not observed on-site.

3.3.2 Boggs Lake Hedge-Hyssop *(Gratiola heterosepala)*

Boggs Lake hedge-hyssop is not listed pursuant to the federal Endangered Species Act; however, it is listed as endangered pursuant to the California Endangered Species Act and is designated as a CRPR 1B.2 species. This species is an herbaceous annual that occurs in marshes, swamps, lake margins, and vernal pools (CNPS 2014). Boggs Lake hedge-hyssop blooms from April through August, and is known to occur at elevations ranging from 33 to 7,790 feet above mean sea level (CNPS 2014). The current range of this species in California includes Fresno, Lake, Lassen, Madera, Merced, Modoc, Placer, Sacramento, Shasta, Siskiyou, San Joaquin, Solano, Sonoma, and Tehama counties (CNPS 2014).

One occurrence of Boggs Lake hedge-hyssop has been reported within 5 miles of the site (CDFW 2014). The vernal pools, seasonal wetlands, seasonal wetland swales, and marsh throughout the site represent suitable habitat for this species. During the surveys in 2014, Boggs Lake hedge-hyssop was not observed on-site.

Figure 4.
Natural Resources Conservation Service Soil Types

Map Features

Project Boundary

Series Number - Series Name

107 - Argonaut-Auburn complex, 3 to 8 percent slopes

110 - Auburn-Argonaut-Rock outcrop complex, 8 to 30 percent slopes

Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database for Sacramento, CA

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Location: J:\GIS_Maps\2005-429_Folsom_Area_South_Group\Soils\F138_Soils_20130801.mxd (JDS) JSwager 7/7/2014

2013-098 Folsom 138-Raintree

Scale in Feet
0 300

Photo Source: USGS 2011

Map Date: 8/6/2013

3.3.3 Ahart's Dwarf Rush *(Juncus leiospermus* var. *ahartii)*

Ahart's dwarf rush is not listed pursuant to either the federal or California Endangered Species Acts; however, it is designated as a CRPR 1B.2 species. This species is an herbaceous annual that occurs in mesic areas in valley and foothill grasslands (CNPS 2014). This species also appears to have an affinity for slight disturbance since it has been found on farmed fields and gopher turnings (USFWS 2005). Ahart's dwarf rush blooms from March through May, and it is known to occur at elevations ranging from 100 to 750 feet above mean sea level (CNPS 2014, USFWS 2005). Ahart's dwarf rush is endemic to California, and the current range of this species includes Butte, Calaveras, Placer, Sacramento, Tehama, and Yuba counties (CNPS 2014).

While no documented occurrences of Ahart's dwarf rush have been reported within 5 miles of the site (CDFW 2014), this species was still considered a target species due to the presence of suitable habitat within the site. The vernal pools, seasonal wetlands, seasonal wetland swales, and seeps throughout the site represent suitable habitat for this species. During the surveys in 2014, Ahart's dwarf rush was not observed on-site.

3.3.4 Legenere *(Legenere limosa)*

Legenere is not listed pursuant to either the federal or California Endangered Species Acts; however, it is designated as a CRPR 1B.1 species. This species is an herbaceous annual that occurs in a variety of seasonally inundated environments including wetlands, wetland swales, marshes, vernal pools, artificial ponds, and floodplains of intermittent drainages (USFWS 2005). Legenere blooms from April through June, and it is known to occur at elevations ranging from 3 feet to 2,900 feet above mean sea level (CNPS 2014). Legenere is endemic to California, and the current range of this species includes Alameda, Lake, Monterey, Napa, Placer, Sacramento, Santa Clara, San Joaquin, Shasta, San Mateo, Solano, Sonoma, Stanislaus, Tehama and Yuba counties (CNPS 2014). However, the species is believed to be extirpated from Stanislaus County (CNPS 2014).

While no documented occurrences of legenere have been reported within 5 miles of the site (CDFW 2014), this species was still considered a target species due to the presence of suitable habitat within the site. The vernal pools, seasonal wetlands, seasonal wetland swales, marsh, and seeps throughout the site support suitable habitat for this species. During the surveys in 2014, legenere was not observed on-site.

3.3.5 Pincushion Navarretia *(Navarretia myersii* ssp. *myersii)*

Pincushion navarretia is not listed pursuant to either the federal or California Endangered Species Acts; however, it is designated as a CRPR 1B.1 species. This species is an herbaceous annual that occurs in vernal pools that are often acidic (CNPS 2014). Pincushion navarretia blooms in April to May, and it is known to occur at elevations ranging from 65 to 1,100 feet above mean sea level (CNPS 2014). Pincushion navarretia is endemic to California, and the current range of this species includes Amador, Calaveras, Merced, Placer, and Sacramento counties (CNPS 2014).

While no documented occurrences of pincushion navarretia have been reported within 5 miles of the site (CDFW 2014), this species was still considered a target species due to the presence of suitable habitat within the site. The vernal pools throughout the site support suitable habitat for this species. During the surveys in 2014, pincushion navarretia was not observed on-site.

3.3.6 Slender Orcutt Grass *(Orcuttia tenuis)*

Slender Orcutt grass is listed as threatened and endangered pursuant to the federal and California Endangered Species Acts, respectively, and it is designated as a CRPR 1B.1 species. This species is an herbaceous annual that occurs in vernal pools (CNPS 2014), primarily on substrates of volcanic origin (Crampton 1959, Corbin and Schoolcraft 1989; as cited in USFWS 2003). This species is known to occur in the same type of vernal pool complexes as Sacramento Orcutt grass in Sacramento County; however, these species have not been observed co-existing in the same vernal pool (USFWS 2003). The median area of pools occupied by populations studied by Stone et al. (1988, as cited in USFWS 2003) was 1.6 acres and ranged from 0.2 acre to 111.0 acres (USFWS 2003). Slender Orcutt grass blooms from May through October, and it is known to occur at elevations ranging from 115 to 5,770 feet above mean sea level (CNPS 2014). Slender Orcutt grass is endemic to California, and the current range for this species includes Butte, Lake, Lassen, Modoc, Plumas, Sacramento, Shasta, Siskiyou, and Tehama counties (CNPS 2014).

While no documented occurrences of slender Orcutt grass have been reported within 5 miles of the site (CDFW 2014), this species was still considered a target species due to the presence of suitable habitat within the site. The vernal pools throughout the site support suitable habitat for this species. During the surveys in 2014, slender Orcutt grass was not observed on-site.

3.3.7 Sacramento Orcutt Grass *(Orcuttia viscida)*

Sacramento Orcutt grass is listed as endangered pursuant to both the federal and California Endangered Species Acts, and it is designated as a CRPR 1B.1 species. This species is an herbaceous annual that occurs in vernal pools (CNPS 2014). The median area of occupied pools discovered prior to 1988 was 0.69 acre and ranged from 0.25 acre to 2.03 acres (USFWS 2003). Sacramento Orcutt grass blooms from April through July, and it is known to occur at elevations ranging from 100 to 330 feet above mean sea level (CNPS 2014). Sacramento Orcutt grass is endemic to California and to the southeastern Sacramento Valley (Keeler-Wolf et al. 1998, as cited in USFWS 2003), with all known occurrences restricted to Sacramento County. Known occurrences of this species within the general region are limited to a small area east of Mather Field, Phoenix Field Ecological Reserve, Phoenix Park (introduced population), and an area near Rancho Seco Lake (USFWS 2003).

While no documented occurrences of Sacramento Orcutt grass have been reported within 5 miles of the site (CDFW 2014), this species was still considered a target species due to the presence of suitable habitat within the site. The vernal pools throughout the site support suitable habitat for this species. During the surveys in 2014, Sacramento Orcutt grass was not observed on-site.

3.3.8 Sanford's Arrowhead *(Sagittaria sanfordii)*

Sanford's arrowhead is not listed pursuant to either the federal or California Endangered Species Acts; however, it is designated as a CRPR 1B.2 species. This species is a rhizomatous, herbaceous perennial that occurs in shallow marshes and freshwater swamps (CNPS 2014). Sanford's arrowhead blooms from May through October, and it is known to occur at elevations ranging from sea level to 2,130 feet above mean sea level (CNPS 2014). Sanford's arrowhead is endemic to California, and the current range of this species includes Butte, Del Norte, El Dorado, Fresno, Merced, Mariposa, Orange, Placer, Sacramento, San Bernardino, San Joaquin, Shasta, Solano, Tehama, and Ventura counties (CNPS 2014). However, this species is believed to be extirpated from Orange and Ventura counties (CNPS 2014).

One occurrence of Sanford's arrowhead has been reported within 5 miles of the site (CDFW 2014). The marsh and seasonal wetland swales throughout the site support suitable habitat for this species. During the surveys in 2014, Sanford's arrowhead was not observed on-site.

3.4 Field Survey Results

No special-status plants were observed within the site during the determinate-level field surveys conducted on 29 April and 17 June 2014. A complete list of plant species encountered during this survey is included as Attachment C.

4.0 CONCLUSION

ECORP conducted a determinate-level special-status plant survey for the Folsom 138 Project site in Sacramento County, California on 29 April and 17 June 2014. The target special-status plant species for this survey were dwarf downingia, Boggs Lake hedge-hyssop, Ahart's dwarf rush, legenere, pincushion navarretia, slender Orcutt grass, Sacramento Orcutt grass, and Sanford's arrowhead. No special-status plants were observed on-site during the 2014 field surveys.

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LIST OF ATTACHMENTS

Attachment A – Target Species Reference Source

Attachment B – Statement of Qualifications

Attachment C – Plant Species Observed On-Site (29 April and 17 June 2014)

ATTACHMENT A

Target Species Reference Source

Target Species Reference Source

Name	Location of Observation	Dates of Observation	Phenology	Remarks
Dwarf downingia *Downingia pusilla*	Western Placer County	18 April 2014	Population in bloom.	Small corolla and short, untwisted ovary (as compared to other *Downingia* species).
Boggs Lake hedge-hyssop *Gratiola heterosepala*	Montelena Wetland Preserve, Sacramento County	5 May 2014	Population in bloom and/or in fruit.	Small size of this species and unequal calyx lobes (as compared to *Gratiola ebracteata*).
Ahart's dwarf rush *Juncus leiospermus* var. *ahartii*	Calflora website	15 April 2014	Photographs	Reference population not available.
Legenere *Legenere limosa*	Montelena Wetland Preserve, Sacramento County	5 May 2014	A few individuals observed. None were in flower.	Distinctive calyx tubes and "zig-zag" axes.
Pincushion navarretia *Navarretia myersii* ssp. *myersii*	Calflora Website	15 April 2014	Photographs.	Reference population not available.
Slender Orcutt grass *Orcuttia tenuis*	Montelena Wetland Preserve, Sacramento County	13 June 2014	Population in bloom.	Distinctive equal lemma lobes with narrow stems and leaves (as compared to other *Orcuttia* species).
Sacramento Orcutt grass *Orcuttia viscida*	Phoenix Field Park, Fair Oaks, Sacramento County	13 June 2014	Population in bloom.	Distinctive unequal lemma lobes with the central lobe being the longest (as compared to other *Orcuttia* species).
Sanford's arrowhead *Sagittaria sanfordii*	Antelope Station Park, Sacramento County	13 June 2014	Several flowering plants were observed.	Distinctive triangular stems were noted. Specimens also observed at UC Davis Herbarium.

ATTACHMENT B

Statement of Qualifications

Clay DeLong B.S.

Assistant Biologist, ECORP Consulting, Inc.

Clay DeLong is a botanist/biologist and trained wetland delineator specializing in special-status species surveys, general floristic surveys, and biological monitoring. Mr. DeLong has six years of professional experience conducting floristic surveys, including surveys for special-status plants throughout Northern and Central California. His botanical expertise extends throughout the Central Valley, Coast Ranges, and the Sierra Nevada, with an emphasis on vernal pool, annual grassland, oak woodland, and coniferous forest communities.

Todd Wood B.S.

Biologist, ECORP Consulting, Inc.

Mr. Wood is a biologist with over eight years of experience as an environmental consultant with expertise in wetland ecology and special-status plant and wildlife surveys. Mr. Wood regularly determines the presence of common and special-status plant and animal species on various sites throughout California and writes accompanying technical reports (e.g., biological resource assessments). Mr. Wood is proficient in wetland delineation studies under the jurisdiction of the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA) and has experience in the establishment of wetlands (i.e., creation, enhancement, and restoration). Mr. Wood's botanical experience includes general vegetation surveys, aerial and field vegetation mapping, rare plant surveys, floristic monitoring, and invasive species identification and mapping. Mr. Wood's botanical experience has been within a wide variety of habitat types including wetlands (e.g., vernal pool, marsh, and seasonal wetland), annual grassland, oak woodland, and chaparral. Mr. Wood frequently conducts monitoring (i.e., hydrology, floristic, aquatic invertebrates) on numerous mitigation banks throughout California.

ATTACHMENT C

Plant Species Observed On-Site (29 April and 17 June 2014)

Folsom 138-Raintree: Plant Species Observed On-Site (29 April and 17 June 2014)

An Asterisk (*) indicates a non-native species.

SCIENTIFIC NAME	COMMON NAME
APOCYNACEAE	**DOGBANE FAMILY**
Asclepias fascicularis	Narrow-leaf milkweed
ASTERACEAE	**SUNFLOWER FAMILY**
*Carduus pycnocephalus**	Italian thistle
*Centaurea solstitialis**	Yellow star-thistle
Centromadia fitchii	Fitch's spikeweed
*Chondrilla juncea**	Skeleton weed
*Cirsium vulgare**	Bull thistle
*Cotula coronopifolia**	Brassbuttons
Holocarpha virgata	Sticky tarweed
*Lactuca serriola**	Prickly lettuce
*Leontodon saxatilis**	Hairy hawkbit
*Logfia gallica**	Herba impia
*Matricaria discoidea**	Pineapple weed
*Pseudognaphalium luteoalbum**	Weedy cudweed
*Silybum marianum**	Milk thistle
*Soliva sessilis**	Field burrweed
*Sonchus asper**	Prickly sowthistle
BORAGINACEAE	**BORAGE FAMILY**
Amsinckia menziesii	Rancher's fireweed
Plagiobothrys nothofulvus	Rusty popcorn-flower
Plagiobothrys stipitatus	Slender popcorn-flower
BRASSICACEAE	**MUSTARD FAMILY**
*Brassica nigra**	Black mustard
Lepidium nitidum	Pepper grass
Nasturtium officinale	Water cress
*Raphanus sativus**	Purple wild radish
CARYOPHYLLACEAE	**PINK FAMILY**
*Spergularia rubra**	Purple sandspurry
*Stellaria media**	Common chickweed

Folsom 138-Raintree: Plant Species Observed On-Site (29 April and 17 June 2014)

An Asterisk (*) indicates a non-native species.

SCIENTIFIC NAME	COMMON NAME
CONVOLVULACEAE	**MORNING-GLORY FAMILY**
*Convolvulus arvensis**	Morning glory
CYPERACEAE	**SEDGE FAMILY**
Carex sp.	Sedge
Cyperus eragrostis	Tall flatsedge
Eleocharis acicularis var. *acicularis*	Least spikerush
Eleocharis macrostachya	Creeping spikerush
Schoenoplectus sp.	Bulrush
EUPHORBIACEAE	**SPURGE FAMILY**
Croton setigerus	Turkey mullein
FABACEAE	**LEGUME FAMILY**
Acmispon americanus	Spanish clover
*Medicago polymorpha**	Bur clover
Trifolium depauperatum	Dwarf sack clover
*Trifolium dubium**	Shamrock clover
*Trifolium fragiferum**	Strawberry clover
*Trifolium glomeratum**	Clover
*Trifolium hirtum**	Rose clover
*Trifolium subterraneum**	Subterranean clover
Trifolium variegatum	White-tip clover
FAGACEAE	**OAK FAMILY**
Quercus lobata	Valley oak
GENTIANACEAE	**GENTIAN FAMILY**
Centaurium tenuiflorum	Monterey centaury
Cicendia quadrangularis	Gentian
GERANIACEAE	**GERANIUM FAMILY**
*Erodium botrys**	Filaree
*Erodium moschatum**	Filaree
*Geranium dissectum**	Cut-leaved geranium

Folsom 138-Raintree: Plant Species Observed On-Site (29 April and 17 June 2014)

An Asterisk (*) indicates a non-native species.

SCIENTIFIC NAME	COMMON NAME
JUNCACEAE	**RUSH FAMILY**
Juncus balticus ssp. *ater*	Baltic rush
Juncus bufonius	Toad rush
Juncus effusus	Soft rush
JUNCAGINACEAE	**ARROW-GRASS FAMILY**
Triglochin scilloides	Flowering quillwort
LAMIACEAE	**MINT FAMILY**
*Marrubium vulgare**	Common horehound
*Mentha pulegium**	Pennyroyal
Stachys stricta	Hedge-nettle
Trichostema lanceolatum	Vinegar weed
LINACEAE	**FLAX FAMILY**
*Linum bienne**	Narrow-leaved flax
LYTHRACEAE	**LOOSESTRIFE FAMILY**
*Lythrum hyssopifolia**	Hyssop loosestrife
*Punica granatum**	Pomegranate (cultivated)
MONTIACEAE	**MINER'S LETTUCE FAMILY**
Calandrinia ciliata	Red maids
MYRSINACEAE	**MYRSINE FAMILY**
*Anagallis arvensis**	Scarlet pimpernel
Anagallis minima	Chaffweed
OLEACEAE	**OLIVE FAMILY**
*Olea europaea**	Olive
ONAGRACEAE	**EVENING PRIMROSE FAMIL**
Epilobium ciliatum	Hairy willow-herb
Ludwigia peploides ssp. *peploides*	Water primrose
OROBANCHACEAE	**BROOMRAPE FAMILY**
Castilleja attenuata	Valley tassels

Folsom 138-Raintree: Plant Species Observed On-Site (29 April and 17 June 2014)

An Asterisk (*) indicates a non-native species.

SCIENTIFIC NAME	COMMON NAME
OROBANCHACEAE	**BROOMRAPE FAMILY**
*Parentucellia viscosa**	Yellow parentucellia
Triphysaria eriantha	Butter and eggs
OXALIDACEAE	**OXALIS FAMILY**
*Oxalis corniculata**	Creeping woodsorrel
PHRYMACEAE	**LOPSEED FAMILY**
Mimulus guttatus	Common large monkey-flower
PLANTAGINACEAE	**PLANTAIN FAMILY**
Callitriche heterophylla	Larger water-starwort
*Plantago lanceolata**	English plantain
*Veronica anagallis-aquatica**	Water speedwell
POACEAE	**GRASS FAMILY**
*Aegilops triuncialis**	Barbed goatgrass
*Avena barbata**	Wild oat
*Brachypodium distachyon**	False brome
*Briza minor**	Little quaking grass
*Bromus diandrus**	Ripgut brome
*Bromus hordeaceus**	Soft brome
*Cynodon dactylon**	Bermuda grass
*Cynosurus echinatus**	Hedgehog dog-tail grass
*Elymus caput-medusae**	Medusahead grass
*Festuca bromoides**	Brome fescue
*Festuca perennis**	Perennial ryegrass
*Glyceria declinata**	Mannagrass
*Hordeum marinum*ssp. *gussoneanum**	Mediterranean barley
*Hordeum murinum**	Barley
*Poa annua**	Annual bluegrass
*Poa pratensis**	Kentucky bluegrass
Polypogon maritimus	Mediterranean rabbitsfoot grass
*Polypogon monspeliensis**	Annual rabbit-foot grass

Folsom 138-Raintree: Plant Species Observed On-Site (29 April and 17 June 2014)

An Asterisk (*) indicates a non-native species.

SCIENTIFIC NAME	COMMON NAME
POLEMONIACEAE	**PHLOX FAMILY**
Navarretia tagetina	Marigold navarretia
POLYGONACEAE	**BUCKWHEAT FAMILY**
Persicaria hydropiperoides	Swamp smartweed
*Rumex acetosella**	Sheep sorrel
*Rumex pulcher**	Fiddle dock
RANUNCULACEAE	**BUTTERCUP FAMILY**
Delphinium variegatum ssp. *variegatum*	Royal larkspur
Ranunculus bonariensis var. *trisepalus*	Carter's buttercup
*Ranunculus muricatus**	Spiny-fruit buttercup
Ranunculus occidentalis	Buttercup
SALICACEAE	**WILLOW FAMILY**
Populus fremontii	Fremont's cottonwood
Salix exigua	Sandbar willow
Salix gooddingii	Goodding's black willow
Salix laevigata	Red willow
THEMIDACEAE	**BRODIAEA FAMILY**
Brodiaea elegans	Harvest brodiaea
Dichelostemma multiflorum	Wild hyacinth
Triteleia hyacinthina	Hyacinth brodiaea
TYPHACEAE	**CATTAIL FAMILY**
Typha sp.	Cattail
ZYGOPHYLLACEAE	**CALTROP FAMILY**
*Tribulus terrestris**	Puncture vine

ATTACHMENT G

Final Lake or Streambed Alternation Agreement (Notification No. 1600-2012-0198-R2) Folsom Plan Area Specific Plan, Master Agreement

State of California – The Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670-4599
916-358-2900
www.wildlife.ca.gov

EDMUND G. BROWN, Jr. Governor
Charlton H. Bonham, Director

FEB 11 2014
Date

Folsom South Area Group
Jim Ray, Project Manager
1552 Eureka Rd, Suite 100
Roseville, CA 95661-2851
jray@msce.com

Subject: Final Lake or Streambed Alteration Agreement
Notification No. 1600-2012-0198-R2
Folsom Plan Area Specific Plan
Master Agreement

Dear Mr. Ray:

Enclosed is the final Streambed Alteration Agreement (Agreement) for the Folsom Plan Area Specific Plan (Project). Before the California Department of Fish and Wildlife (Department) may issue an Agreement, it must comply with the California Environmental Quality Act (CEQA). In this case, the Department, acting as a responsible agency, filed a notice of determination (NOD) on the same date it signed the Agreement. The NOD was based on information contained in the Environmental Impact Report for the Folsom South of U.S. Highway 50 Specific Plan the City of Folsom prepared for the Project.

Under CEQA, filing a NOD starts a 30-day period within which a party may challenge the filing agency's approval of the project. You may begin your project before the 30-day period expires if you have obtained all necessary local, state, and federal permits or other authorizations. However, if you elect to do so, it will be at your own risk.

If you have any questions regarding this matter, please contact Amy Kennedy, Environmental Scientist at 916-358-2842 or amy.kennedy@wildlife.ca.gov.

Sincerely,

Tina Bartlett

Tina Bartlett
Regional Manager

ec: Amy Kennedy
Amy.Kennedy@wildlife.ca.gov

cc: Bjorn Gregersen
bgregersen@ecorpconsulting.com

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
NORTH CENTRAL REGION
1701 NIMBUS ROAD, SUITE A
RANCHO CORDOVA, CA 95670

MASTER STREAMBED ALTERATION AGREEMENT
NOTIFICATION NO. 1600-2012-0198-R2
SACRAMENTO COUNTY

FOLSOM SOUTH AREA GROUP
FOLSOM PLAN AREA SPECIFIC PLAN PROJECT (PROJECT)

This Master Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (Department) and Folsom South Area Group (Permittee) as represented by Jim Ray, Project Manager for the purposes of permitting the Folsom Plan Specific Area (SPA). This Agreement defines, delineates, and conditions a simplified regulatory review process to encourage watershed scale protection to aquatic resources as described.

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified the Department on October 31st, 2012 that they intend to substantially divert or obstruct the natural flow of, or change the bed, bank or channel of, or use the material from the streambed(s) of, existing improved and unimproved waters within the Folsom Plan Specific Area.

WHEREAS, the Department, as trustee for the State's fish and wildlife resources, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species.

WHEREAS, pursuant to FGC section 1603, the Department has determined that the Project could substantially adversely affect existing fish or wildlife resources and has included measures in the Master Agreement necessary to protect those resources.

WHEREAS, it is mutually beneficial to the Permittee to establish procedures to conduct the authorized activities covered by this Master Agreement and to incorporate conditions into those activities to protect fish and wildlife resources that may be substantially adversely affected by them.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, the Department and Permittee agree to complete the project in accordance with the Agreement.

1. PURPOSE

The purpose of this Master Agreement is to allow the Folsom South Area Group and its employees, agents, or contractors and their subcontractors to conduct the authorized activities associated with the Folsom Specific Plan Area Project identified in Section 4 below, in accordance with the terms and conditions of this Agreement without the need to obtain an additional Agreement from the Department while this Master Agreement is in effect. The Project includes development of a large-scale, mixed use community within with associated infrastructure including major roads and trails, water and sewer infrastructure, and storm drain infrastructures within the SPA.

This Agreement does not relieve the Permittee of any responsibility for compliance with this or any other section of the Code. Activities not specifically agreed to and resolved by this Agreement shall be subject to separate notification pursuant to Fish and Game Code Sections 1600 *et seq*.

2. PROJECT LOCATION

This Agreement covers the activities described below within the City of Folsom, located south of Highway 50, north of White Rock Road, east of Prairie City Road, and west of the El Dorado County line, in Sacramento County, California. Portions of the project sites correspond to the following sections on the Folsom, Buffalo Creek, Clarksville, and Folsom SE 7.5-minute quadrangle, respectively: Sections 13 and 24 of Township 9N, Range 7E; sections 16, 17, 19, and 20 of Township 9N, Range 8E; section 24 of Township 9N, Range 7E; sections 19 and 20 of Township 9N, Range 8E; sections 8, 9, 10, 15, 16, 17, 20 and 22 or Township 9N, Range 8E; and sections 20 and 21 of Township 9N, Range 8E. A map of this area is attached as Exhibit A.

3. DEFINITIONS

Aquatic Resources. Aquatic resources include (1) the stream system, and (2) the bed and bank, of lakes, ponds, and reservoirs. The limit of aquatic resources is the edge of wetlands in palustrine systems and the top-of-bank or outer-limit of riparian vegetation, whichever is broader, in lacustrine or riverine systems.

Day. A calendar day, unless otherwise specified.

Dewatering Structures. Pumps, pipes, dams, coffer dams, and other structures designed to remove water from work area. All dewatering structures must be described in the Subnotification Form.

Diameter at breast height (DBH). The diameter of the trunk of a tree or shrub at a distance measured 4.5 feet above ground.

Emergency. Emergency means a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. "Emergency" includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage (Public Resources Code, § 21060.3).

Ephemeral Stream. An ephemeral stream flows only during or shortly after rainfall. Ephemeral streams do not have a groundwater component and are above the water table at all times. Ephemeral streams generally lack riparian vegetation.

Erosion Control Measures. Methods implemented during and after construction to ensure water quality in the aquatic resources. These are sometimes referred to as Best Management Practices (BMP's).

Fish and Wildlife Resources. Fish and wildlife as defined in FGC section 45 and 711.2 subdivision (a), respectively. "Fish" means wild fish, mollusks, crustaceans, invertebrates, or amphibians, including any part, spawn, or ova thereof. " Wildlife" means and includes all wild animals, birds, plants, fish, amphibians, reptiles, and related ecological communities, including the habitat upon which the wildlife depends for its continued viability.

Ground Disturbing Activity. Any activity causing a direct physical change to on-site soils.

Intermittent Stream. Intermittent streams have a groundwater component so that they flow during the rainy season, and often for some time after the rainy season ends. Intermittent streams are above the water table for portions of the year, but are always dry for some portion of the year. Intermittent streams may or may not support riparian vegetation.

Lake. Natural lakes and man-made reservoirs.

Perennial Stream. Perennial streams flow all year and are below the water table for that time. They usually have associated riparian vegetation, and they may support fish and other aquatic species.

Protective Measures. The best management practices, avoidance, minimization, compensatory mitigation measures, and any other measure identified in this Agreement under the heading Measures to Protect Fish and Wildlife Resources, and in any approved Subnotification (defined herein), the purpose of which is to

protect fish and wildlife resources that could be substantially adversely affected by an authorized activity.

Qualified biologist. A biologist approved by the Department, as determined by a combination of academic training and professional experience in biological sciences and related resource management activities.

Riparian vegetation. Terrestrial vegetation that grows in areas adjacent to streams and lakes, and that depends on these water sources for soil moisture.

Stream or River. A body of water that has flows or has signs of previous flows occurring at least periodically or intermittently, typically through a bed or channel. This definition includes watercourses having either a surface or subsurface flow.

Special Status Species. Any species defined in CEQA Guidelines Section 15380 (Cal. Code Regs., tit. 14 § 15380); species that are fully protected under the Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.); and/or species identified by the Department or other State and federal resource agencies as species of special concern.

Stream Zone. That portion of the stream channel through which water and sediment flow, have flowed, or are capable of flowing. The stream zone is delineated by the top of the bank or the outside edge of any riparian vegetation, whichever is more landward. Where riparian habitat is lacking, the stream zone is the top of the bank. The stream zone is embedded within the stream system.

Subnotification Form (SNF). The information, plans, and documents submitted by the Permittee to the Department to request project approval for each project the Permittee is proposing.

Substantial Change in Conditions. Substantial change in conditions means one or more of the following: 1) the work described in this Agreement is substantially changed; 2) conditions affecting fish and wildlife resources substantially change and those resources are or will be significantly adversely affected by the work that is or will be conducted under this Agreement; or 3) the measures specified in this Agreement do not reflect advances in design and techniques that would significantly increase protection of fish and wildlife resources.

Work Site. The limits of the required access routes and encroachment into any Department jurisdictional areas.

4. AUTHORIZED ACTIVITIES

This Agreement and Fish and Game Code § 1602 only apply to activities that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake, or use any materials from the streambeds, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This Agreement does not apply to immediate emergency work necessary to protect life or property. The Permittee may complete emergency work in accordance with Fish and Game Code § 1610. For the purpose of this Agreement, the Permittee may conduct the activities identified in this Section by submitting a Subnotification. The Authorized Activities are as follows:

4.1. **Retaining Wall Construction:** Retaining wall construction will take place adjacent to and generally parallel to a watercourse to facilitate roadway, bike trail, and equestrian trail, walking trail or slope embankment construction. The retaining walls proximity to the watercourse, the time of year, stream flow volume and the location of the stream flow at the time of construction will determine if the watercourse needs to be temporally diverted during the construction operation.

4.2. **Drainage Culvert Placement:** Drainage culverts will be placed at various locations to pass stream flows under a roadway, equestrian trail, bike trail or walking trail. Drainage culverts will be placed as close as practicable to the existing watercourse gradient and alignment. Temporary watercourse diversion and dewatering may be required to place the drainage culvert.

4.3. **Drainage Culvert Outfall Construction:** At various locations along the stream, drainage culvert outfalls will be constructed. The drainage culvert outfalls will connect a developed upstream watershed's water quality basin, hydro-modification basin, detention basin or some combination thereof to the stream or watercourse. The drainage culvert outfalls will be constructed of non-erodible materials and will have adequate measures placed to minimize erosion and sediment transport. Temporary water diversions and dewatering may be required.

4.4. **Temporary Construction Equipment Crossing:** During the construction of various improvements, such as bridges, earth moving operations, culverts, utility crossings, equestrian trails, bike trails and walking trails, construction equipment will need to cross a stream or watercourse. Temporary construction equipment crossings will be built with soil or rock fill material and will include a culvert or culvert's and shall be installed in such a way as to minimize soil entering the channel and will utilize the appropriate measure to minimize erosion and sediment transport.

4.5. **Bike Trail Construction:** Bike trail construction will take place, adjacent to and generally parallel to a watercourse and at specific locations will cross over the watercourse with the placement of a bridge. The bike trail proximity to the watercourse, the time of year, stream flow volume and the location of the stream flow at the time of construction will determine if the watercourse needs to be temporally diverted during the construction operation.

4.6. **Equestrian Trail Construction:** Equestrian trail construction will take place, adjacent to and generally parallel to a watercourse and at specific locations will cross over the watercourse with the placement of a bridge. The equestrian trail proximity to the watercourse, the time of year, stream flow volume and the location of the stream flow at the time of construction will determine if the watercourse needs to be temporarily diverted during the construction operation.

4.7. **Walking Trail Construction:** Walking trail construction will take place, adjacent to and generally parallel to a watercourse and at specific locations will cross over the watercourse with the placement of a bridge. The walking trail proximity to the watercourse, the time of year, stream flow volume and the location of the stream flow at the time of construction will determine if the watercourse needs to be temporally diverted during the construction operation.

4.8. **Roadway Construction:** Roadways will cross or run parallel to a stream or watercourse in several locations. A bridge or culvert will be placed at the roadway crossings and a retaining wall will be constructed at locations where it is necessary to prevent the roadway embankment from encroaching into the stream or watercourse. Roadway construction may require a temporary construction equipment crossing and possibly temporary water diversion and dewatering.

4.9. **Bridge Construction:** Bridges may be constructed where a roadway or bike trail crosses a stream or watercourse. The bridges will be built high enough to pass the entire 200-year peak flow and all reasonably anticipated floating debris. Bridge construction may require the placement of a temporary construction equipment crossing and require temporary water diversion and dewatering.

4.10. **Underground Utility Crossing:** Underground utilities crossings consisting mainly of pipelines or utilities installed within the pipeline will be placed underneath a stream or watercourse. The underground utility crossing shall be designed and constructed such that there are no significant effects on the watercourse. The underground utility shall be placed to a depth that is significantly below the anticipated scour of the watercourse and shall be partially encased with concrete to protect the stream, watercourse and utility.

Underground utility crossing construction may require the placement of a temporary construction equipment crossing and require temporary water diversion and dewatering.

4.11. **Overhead Utility Crossing:** Overhead utility crossings consisting mainly of communication, broadband and electrical systems will be strung over a stream or watercourse. The overhead utility crossing shall be designed and constructed such that there are no significant effects on the watercourse. The overhead utility crossing shall be placed to completely span the stream or watercourse. Overhead utility crossing construction may require the placement of a temporary construction equipment crossing.

4.12. **Stream Embankment Stabilization:** At roadway crossings, bridges, culvert crossings underground utility crossings, equestrian trials, bike trails, walking trails and retaining walls where the adjacent stream or watercourse channel embankment has begun eroding, slope stabilization techniques will be employed to curtail the erosion process. The least evasive embankment stabilization techniques will be utilized to stabilize the channel embankment.

4.13. **Channel Clearing (necessary to hold current channel "n" value):** To ensure the channel continues to pass its current flow and maintains its current capacity, the stream corridor will be cleared of accumulated trash, debris, logs, trees, shrubbery, beaver dams and other such flow restriction that prevent the ability of the stream, creek or water course from safely passing its flows.

4.14. **Utility Maintenance:** The stream channel or watercourse may be accessed to maintain a utility crossing. Utility maintenance may include complete removal and replacement of the utility and may require the placement of a temporary construction equipment crossing and require temporary water diversion and dewatering.

4.15. **Roadway Maintenance:** The stream channel or watercourse may be accessed to maintain a roadway that runs adjacent to a stream or watercourse. Roadway maintenance may include complete removal and reconstruction of the roadway. Roadway maintenance may require the placement of a temporary construction equipment crossing and require temporary water diversion and dewatering.

4.16. **Bridge Maintenance:** The stream channel or watercourse may be accessed to maintain a bridge. Bridge maintenance may include complete removal and reconstruction of the bridge. Bridge maintenance may require the placement of a temporary construction equipment crossing and require temporary water diversion and dewatering.

4.17. **Trail Maintenance:** The stream channel or watercourse may be accessed to maintain a trail that runs adjacent to a stream or watercourse. Trail maintenance may include complete removal and reconstruction of the trail. Trail maintenance may require the placement of a temporary construction equipment crossing and require temporary water diversion and dewatering.

4.18. **Open Space Maintenance:** The stream channel or watercourse may be accessed in order to facilitate open space maintenance operations. Open Space maintenance operations may require the placement of a temporary construction equipment crossing and require temporary water diversion and dewatering.

4.19. **Temporary Watercourse Diversion and Dewatering:** For construction projects that require in-stream access while surface flow is present and prolonged turbidity may be transported downstream, the stream flow shall be diverted around the work area by temporary pipe, diversion channel, or pumping. Stream flows shall be bypassed for the entire time that the in-stream work is conducted. Construction of the diversion shall normally begin in the downstream area and continue in an upstream direction, and the flow shall be diverted only when construction of the diversion is completed. Types of temporary diversions could be a dam or berm built from materials such as sandbags, gabions, clean gravel, plastic impervious barrier, natural channel gravels or other materials or means that cause minimal turbidity or siltation. Channel bank or barrier construction shall be adequate to prevent seepage into or from the work area. Channel banks or barriers shall not be made of earth or other erodible supportive materials unless first enclosed by sheet piling, rock rip-rap, geo-textile fabric or other protective materials. Water routed around the work area shall re-enter the channel below the annual high-water mark. The channel barrier and supportive material shall be removed when the work is completed and removal shall normally proceed from the downstream in an upstream direction.

4.20. **Detention Basin Construction**: Detention basin construction will take place at specific locations where a roadway or trail is crossing the watercourse and will generally consist of the placement of a drainage culvert that is sized to meter the storm runoff through it at a prescribed rate. On a temporary basis water will be impounded upstream of the roadway or trail crossing for a duration no longer than 48 hours at which time the watercourse has returned to its lower natural flow rate which will pass through the culvert unimpeded. Detention basin construction may require the placement of a Temporary Construction Equipment Crossing and require Temporary Watercourse Diversion and Dewatering.

4.21. **Detention Basin Maintenance**:
To insure the detention basin continues to impound the proper amount of storm runoff and maintain its designated capacity of water impoundment the area of water impoundment will need to be cleared of accumulated sediment, trash, debris, logs, trees, shrubbery, beaver dams and other such items that limit or reduce the capacity of the detention basin and that prevent the ability of the stream, creek or water course from safely passing its flows. Detention basin maintenance may require temporary watercourse diversion and dewatering.

4.22. **Water Quality/Hydro-Modification Basin Construction:** Water quality/hydro-modification basin construction will take place at specific locations adjacent to and generally parallel to a watercourse. The water quality/hydro-modification basin will be located away from and out of the main watercourse and placed above the normal ordinary high water elevation. The construction will generally consist of the placement of an embankment slope built up the match the adjacent development, roadway, trail or existing ground elevation. The embankment slope will have a 20-ft. wide top and wrap around to the water quality/hydro-modification basin and tie into the adjacent development. The water quality/hydro-modification basin will discharge the treated storm water into the watercourse through a drainage culvert. The water quality/hydro-modification basin will have a spillway incorporated into its design which will allow storm drainage runoff to discharge to the watercourse should the drainage culvert become plugged or malfunctions. Water quality/hydro-modification basin construction may require temporary watercourse diversion and dewatering.

4.23. **Water Quality/Hydro-Modification Basin Maintenance:** To insure the water quality/hydro-modification basin impounds the proper amount of storm runoff and maintains its designated capacity the basin will need to be cleared of accumulated sediment, trash, debris, trees, shrubbery, beaver dams and other such items that limit or reduce the capacity of the detention basin, block, plug or clog the outfall structure and spillway from operations within its design parameter. Water quality/hydro-modification basin maintenance may require temporary watercourse diversion and dewatering.

4.24. **Mass Grading:** In order to construct the improvements necessary and develop the area set aside for new development, stream channels and watercourses may be permanently filled or excavated to the required elevations necessary to facilitate that development with a mass grading operation. Watercourses or streams that are filled in may require drainage re-routing, piping or mitigation.

5. UNAUTHORIZED ACTIVITIES

This Agreement does not authorize any activity that results in the take (as defined in Fish and Game Code § 86 as hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture, or kill) of any species listed under the California Endangered Species Act (CESA). If take cannot be avoided, the Applicant shall obtain take authorization from the Department before commencing the activity.

6. NOTIFICATION REQUIREMENTS

6.1. Subnotification

For each proposed project (Authorized Activity), a Subnotification Form (SNF) (Exhibit B), including the Subnotification Completeness Checklist and any associated documents requested therein, shall be submitted to the Department by the Permittee at least 60 days prior to work commencing. This notification procedure allows for review of individual projects and the incorporation of additional conditions by the Department on a project-by-project basis to ensure full resource protection. Only when SNF's are fully executed (signed by the Department), will work be allowed to proceed.

6.1.1. Department Review.

(a) Completeness Determination. Department shall determine whether the Subnotification is complete by comparing it to the Subnotification Completeness Checklist contained within Exhibit B. In accordance with the Permit Streamlining Act (Gov. Code Section 65920 et seq.), if the Department does not respond within 30 days of receiving the SNF, then the SNF shall be deemed complete. If additional information is required, the Department will notify Permittee and describe the additional information that is required to make the SNF complete. In the event that the Department deems the SNF to be incomplete, the receipt of subsequently submitted information by Permittee shall start an additional 30-day period during which the Department shall determine the completeness of the Subnotification.

(b) Time Period. After the Department determines that the SNF is complete, or the SNF is deemed complete in compliance with the Permit Streamlining Act, the Department shall begin reviewing the SNF for consistency with this Agreement and for potential adverse impacts to fish and wildlife resources. No more than 30 days from the date that the SNF is deemed complete, the Department shall approve or disapprove the SNF.

(c) Criteria for Approval. Department shall approve the SNF by signing it if: 1) The activity described therein is an Authorized Activity; 2) the Protective Measures identified in the SNF protect those fish and wildlife resources that the Authorized Activity could adversely affect, as previously determined prior to the approval of the SNF; 3) the fee submitted with the SNF is correct; and 4) any potential impacts resulting from the implementation of the Authorized Activity has been analyzed pursuant to CEQA.

(d) Disapproval. If the SNF is not consistent with this Agreement or if potential impacts to fish and wildlife resources are not adequately addressed, the Department shall notify Permittee in writing of the disapproval and explain the actions necessary to address any deficiency, including the need for additional protective measures to protect fish and wildlife resources. In response, Permittee may: 1) revise the SNF to address the reasons for disapproval; 2) submit a revision request with the previously submitted SNF or 3) dispute the Department's disapproval in accordance with the dispute resolution procedures (see Dispute Resolution, Section 12).

(e) Time Frame for Review. If the Department does not approve or disapprove the SNF within 30 days of the SNF being deemed complete, the Permittee may begin the Authorized Activity as described in the SNF without the Department's express approval, provided that at least five days prior to beginning the work Permittee provides Department notice of the intent to proceed without Department's express approval.

(f) Concurrence Determination. If the Department approves the SNF, it shall sign the SNF and provide Permittee a copy. Upon receipt of the copy, Permittee may begin the Authorized Activity as described in the SNF, provided Permittee has obtained all other necessary authorizations for the work.

7. REPORTING

Permittee shall meet each reporting requirement described below.

7.1. Annual Report. No later than February 1st each year, the Permittee shall provide the Department with an Annual Report, which lists all of the projects approved the previous year, and any Monitoring Reports required pursuant to this Agreement that may be due.

7.2. Four Year Status Report. Permittee shall provide a status report to the Department every four (4) years from the effective date of this Agreement, as required in FGC section 1605(g)(2). Permittee shall include the following:

7.2.1. A copy of the original Master Agreement.

7.2.2. The status of the activities covered by the Agreement, including the percentage of the overall project already completed.

7.2.3. An evaluation of the success or failure of the measures in the Agreement to protect the fish and wildlife resources that the activity may substantially adversely affect.

7.2.4. A discussion of any factors that could increase the predicted adverse impacts on fish and wildlife resources, and a description of the resources that may be adversely affected.

7.3. The Department shall review the four-year status report, and may conduct an onsite inspection to confirm that the Permittee is in compliance with the Agreement and that the measures in the Agreement continue to protect the fish and wildlife resources. If the Department determines that the measures in the Agreement no longer protect the fish and wildlife resources, the Department, in consultation with the Permittee, and within 60 days of receipt of the report, shall impose one or more new measures to protect the fish and wildlife resources affected by the activity. If requested to do so by the Permittee, the Department shall make available the information upon which it determined the Agreement no longer protects the affected fish and wildlife resources.

7.4. If the Permittee disagrees with one or more of the new measures, within thirty days of receiving the new measures, it shall notify the Department, in writing, of the disagreement. The Permittee and the Department shall consult regarding the disagreement. The consultation shall be completed within thirty days after the Department receives the entity's notice of disagreement. If the Department and entity fail to reach agreement, the Permittee may request, in writing, the appointment of a panel of arbitrators to resolve the disagreement. The panel of arbitrators shall be appointed within 14 days of the completed consultation. The panel of arbitrators shall issue a decision within 14 days of the date it is established. The provisions of subdivisions (b) of Section 1603 shall apply to any arbitration panel established in accordance with this subdivision.

7.5. If the Permittee fails to provide timely status reports as required by this subdivision, the Department may suspend or revoke the Agreement.

8. CONTACT INFORMATION

Any communication that Permittee or Department submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or the Department specifies by written notice to the other.

To the Department

Department of Fish and Wildlife
North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670
Attn: Lake and Streambed Alteration Program
Notification #: 1600-2012-0198-R2
Phone: 916-358-2885
Fax: 916-358-2912
Email: R2LSA@wildlife.ca.gov

To the Permittee

Folsom South Area Group
Jim Ray, Project Manager
1552 Eureka Road, Suite 100
Roseville, CA 95661
916-773-1189
Fax: 916-773-2595
Email: jray@msce.com

9. CONDITIONS

All projects covered by this Agreement must meet the following conditions. Depending on the type of project, the Permittee may append other conditions to the permit issued under the Agreement.

9.1. ADMINISTRATIVE MEASURES

9.1.1. Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, including the approved Subnotification, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to Department personnel, or personnel from another State, federal, or local agency upon request.

9.1.2. Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.

9.1.3. Notification of Conflicting Provisions. Permittee shall notify the Department if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, State, or federal agency. In that event, the Department shall contact Permittee to resolve any conflict.

9.1.4. Project Site Entry. Permittee agrees that the Department personnel may enter the project site at any time to verify compliance with the Agreement.

9.1.5. Legal Obligations. This Agreement does not exempt Permittee from complying with all other applicable local, State, and federal laws, or other legal obligations.

9.1.6. Training. Prior to starting any Authorized Activity, Permittee shall provide all workers with training from a qualified individual on the contents of this Agreement, the corresponding SNF, the resources at stake, and the legal consequences of non-compliance.

9.1.7. Contact. For each SNF, the Contact shall be the Designated Representative responsible for communications with the Department and overseeing compliance with the SNF.

9.1.8. Designated Biologist. For each approved SNF, the Permittee shall submit to the Department in writing (at least thirty days prior to initiating project activities) the name, qualifications, business address, and contact information for a biological monitor (Designated Biologist). Permittee shall obtain the Department's written approval of the Designated Biologist prior to the commencement of project activities. The Designated Biologist shall be knowledgeable and experienced in the biology and natural history of local fish and wildlife resources present at the project site. The Designated Biologist shall be responsible for monitoring project activities, if specified in the Agreement, including construction and any ground- or vegetation-disturbing activities in areas subject to this Agreement.

9.1.9. Work According to Plans. All work within the SPA shall be done according to the plans and documents included in Subnotification package. All changes to those plans shall be reported to the

Department. Minor changes may require an amendment to the SNF. Substantial changes may render the SNF void and the Permittee may need to submit a new SNF.

9.2. Avoidance and Minimization Measures

9.2.1. Work Windows. All work in the stream zone shall be restricted to periods of low stream flow and dry weather between April 1st and October 15th, unless otherwise described and addressed pursuant to CEQA. Weather forecasts should be monitored, and erosion control established before all storm events.

9.2.2. Work Window Modification. If Permittee needs more time to complete the project activity, the work may be permitted outside of the work window by the Department representative who reviewed the project, or if unavailable, through contact with the Regional office. Permittee shall submit a written request for a work window variance to the Department. The work window variance request shall: 1) describe the extent of work already completed; 2) detail the activities that remain to be completed; 3) detail the time required to complete each of the remaining activities; and 4) provide photographs of both the current work completed and the proposed site for continued work. The work window variance request should consider the effects of increased stream flows, rain delays, increased erosion control measures, limited access due to saturated soil conditions, and limited growth of erosion control grasses due to cool weather. Work window variances are issued at the discretion of the Department. The Department will review the written request to work outside of the established work window. The Department reserves the right to require additional measures to protect fish and wildlife resources as a condition for granting the variance. The Department will have ten (10) calendar days to review the proposed work window variance.

9.2.3. Dewatering Plan. Except for site preparation for construction of dewatering structures, no excavation is allowed in flowing streams. Detailed plans for dewatering must be submitted with the SNF or to the Department for approval at least 14 working days prior to dewatering activities.

9.2.4. Temporary Stream Diversion. Any stream diversions shall be included within the SNF. Structures may include the use of clean removable materials, such as, sand bags, Port-a-dams, water bladder dams, K-rails, driven sheet metal coffer dams and trestles. When any dam or other artificial obstruction is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass

downstream to maintain aquatic life below the dam. When work in the stream is completed, flow shall be returned to its natural channel slowly, and the water allowed to clear before barriers are removed. Upon project completion, all diversion materials shall be removed from the stream.

9.2.5. Fill in Streams and Drainages. Proposed fill within streams and drainages (including ephemeral drainages) will be subject to Department review, and may require stream/drainage re-routing, piping, and/or mitigation. Fill within natural drainage systems should be avoided and minimized whenever possible.

9.2.6. Channel inspection for aquatic species. During periods when fish, or other aquatic vertebrates may be present; the wetted channel shall be inspected by qualified biologist. If redds or special status species are present at the project site or downstream, the Permittee shall postpone work in the wetted channel until a later date or conditions specified by the Department.

9.2.7. Spoil sites. Spoil sites shall not be located within the stream zone, where spoils may be washed back into jurisdictional waters, or where it may cover aquatic or riparian vegetation.

9.2.8. Hazardous Materials. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the State. Any of these materials placed within or where they may enter the stream by Permittee or any party working under contract, or with the permission of Permittee, shall be removed immediately. All discharges unintentional or otherwise shall be reported immediately to the Department and other appropriate local, State or federal agencies.

9.2.9. Herbicide Use. Only herbicides registered with the California Department of Pesticide Regulation shall be used in the stream zone and shall be applied in accordance with label instructions.

9.3. **Best Management Practices**

9.3.1. Protective Fencing. The construction area within the stream zone shall be delineated in a way to avoid and minimize impacts to vegetation outside the project area and work site. All preserved waters, wetlands, trees, vegetation, and sensitive habitats shall be protected with

temporary construction fencing. Temporary fencing shall be removed upon completion of the project.

9.3.2. Erosion Control Plan. Erosion control measures shall be specified in an Erosion Control Plan as part of the Subnotification package. The SNF is incomplete without these measures. All erosion control specified in the Erosion Control Plan shall be in place and functional before the beginning of the rainy season, and shall remain in place until the end of the work season, if deemed necessary. Erosion control features shall be inspected by the Permittee or Designated Representative/Contact after each rainfall period. Maintenance includes, but is not limited to, removal of accumulated silt and sediment and the replacement of damaged barriers and other temporary control measures.

9.3.3. Minimize Turbidity and Siltation. Permittee shall take precautions to minimize turbidity/siltation during construction and post-construction periods. Precautions shall include, but are not limited to: pre-construction planning to identify site specific turbidity and siltation minimization measures and best management erosion control practices; best management erosion control practices during project activity; and settling, filtering, or otherwise treating silty and turbid water prior to discharge into a stream or storm drain.

9.3.4. Bank Stabilization. Permittee shall construct bank stabilization with suitable non-erodible materials that will withstand wash out. The bank stabilization material shall extend above the normal high-water mark. Only clean material such as, rock riprap that is free of trash, debris and deleterious material shall be used as bank stabilization. Asphalt shall not be considered an acceptable material.

9.3.5. Rock Slope Protection. Un-grouted rock slope protection (RSP) and energy dissipater materials shall consist of clean rock, competent for the application, sized and properly installed to resist washout. RSP slopes shall be supported with competent boulders keyed into a footing trench with a depth sufficient to properly seat the footing course boulders and prevent instability (typically at least 1/3 diameter of footing course boulders). Voids between rocks shall be planted with riparian species native to the area whenever possible.

9.3.6. Stabilize Exposed Areas. Permittee shall stabilize all exposed/disturbed areas within the project site to the greatest extent possible. Techniques used for stabilization shall be pre-approved by the Department or by seeding as described below.

9.3.7. Seeding Requirement. Permittee shall restore all exposed/disturbed areas and access points within the work area, by seeding with a sterile or locally native grass mix, unless otherwise agreed upon with the Department. Revegetation shall be completed as soon as possible after construction activities in those areas cease. Seeding placed after October 15 shall be covered with broadcast straw, jute netting, coconut fiber blanket or similar erosion control blanket. Products with plastic monofilament or cross joints in the netting that are bound/stitched (such as found in straw wattles/fiber rolls and some erosion control blankets) which may cause entrapment of wildlife, shall not be allowed.

9.3.8. Vehicles in Stream Zone. No vehicles other than necessary earth-moving and construction equipment shall be allowed within the stream zone. The equipment and vehicles used in the stream zone shall be described in the SNF.

9.3.9. Vehicle Refueling. If maintenance or refueling of vehicles or equipment must occur on-site, the following measures apply: use of a designated area and/or a secondary containment, located away from drainage courses to prevent the runoff of storm water and the runoff of spills; ensure that all vehicles and equipment are in good working order (no leaks); place drip pans or absorbent materials under vehicles and equipment when not in use; ensure that all construction areas are covered by a site-wide spill response plan and have proper spill clean-up materials (e.g., absorbent pads, sealed containers, booms, etc.) to contain the movement of any spilled substances; any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the State; any of these materials, placed within or where they may enter a stream by the Permittee, or any party working under contract or with the permission of the Permittee, shall be removed immediately; all discharges unintentional or otherwise shall be reported immediately to the Department and other appropriate State and federal agencies.

9.3.10. Minimize Vehicle Parking. Vehicles may enter and exit the work area as necessary for project activities, but may not be parked overnight within ten (10) feet of the drip line of any trees; nor shall vehicles be parked where mechanical fluid leaks may potentially enter the waters of the State.

9.3.11. Temporary Crossings. Temporary crossings as described in the SNF shall be installed no earlier than April 1st and shall be removed no later than October 31st. This work window could be modified at the discretion of the Permittee and the Department.

9.4. Fish and Wildlife Protections

9.4.1. Designated Biologist Authority. The Designated Biologist shall have authority to immediately stop any activity that is not in compliance with this Agreement, and/or to order any reasonable measure to avoid or minimize impacts to fish and wildlife resources. Neither the Designated Biologist nor the Department shall be liable for any costs incurred as a result of compliance with this measure. This includes cease-work orders issued by the Department.

9.4.2. Special Status Species Sightings. If any special status species are discovered prior to and/or during the implementation of the Authorized Activities, the Permittee, Designated Representative, Contact or Designated Biologist shall suspend work and notify the Department for guidance immediately. Permittee shall allow any species designated as State species of special concern to move out of a work site of its own volition. Alternately, a qualified biologist (as determined by a combination of academic training and professional experience in biological sciences and related resource management activities) who holds a Scientific Collecting Permit for the species shall move the individual(s) out of harm's way to the nearest area of suitable habitat at least 100 feet from the work site.

9.4.3. Special Status Plant Species. If any special status plant species are discovered prior to and/or during the implementation of Authorized Activities, the Designated Representative, Contact, or Designated Biologist shall notify the Department immediately for further guidance.

9.4.4. Bird Survey before Commencement. If construction, grading, or other project-related improvements are scheduled during the nesting season of protected raptors and migratory birds (March 1st to September 1st) a focused survey for active nests of such birds shall be conducted by a qualified biologist at least 14 days and not greater than 30 days prior to the beginning to project-related activities. The results of the survey shall be emailed to R2LSA@wildlife.ca.gov. Refer to Notification Number 1600-2012-0198-R2 and specific project name when submitting the survey to the Department. If an active nest(s) is found, Permittee shall consult with the Department and/or the United States Fish & Wildlife Service (USFWS) regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and the Fish & Game Code of California. If a lapse in project-related work of 15 days or longer occurs, another focused survey and if required, consultation with the Department and USFWS, shall be required before project work can be reinitiated.

9.4.5. Bird Nests. It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird except as otherwise provided by the Fish and Game Code 3503. No trees that contain active nests of birds shall be disturbed until all eggs have hatched and young birds have fledged without prior consultation and approval of a Department representative.

9.4.6. Notification to the California Natural Diversity Database. If any special status species are observed on the work site, Permittee or Designated Representative shall submit California Natural Diversity Data Base (CNDDB) forms to the CNDDB within five (5) working days of the sightings, and provide to the Department's Regional office one copy of the CNDDB form and a map indicating where the sighting occurred.

9.4.7. Wildlife Entrapment. The netting used to encase coir logs/rolls or straw wattles, and plastic jute netting poses an entrapment risk to native snakes and raptor species that may be present in the area. Whenever possible, biodegradable and environmentally friendly BMP's be used to avoid serious injury or death to wildlife. Jute netting shall be made of natural fibers woven together and not fixed in knots, to allow for expansion of mesh and easy escape from entrapment. If coir logs/rolls or wattles are to be left in place to decompose, the Permittee will remove the mesh or netting used to encase these devices once the disturbed area has been stabilized.

9.4.8. Beavers. Beaver dams and other obstructions blocking flow in the stream near the work site shall be cleared with the use of hand tools only. Beavers can be discouraged from building a new dam at the same location by placing a length of 12 inch diameter plastic culvert which has been perforated with several holes at the dam site. The perforated pipe is placed at stream grade at the dam site and in line with the stream flow. The beaver will try to plug the opening of the pipe but cannot plug all the small holes along the length of the pipe. Water will continue to pass downstream and will not cause ponding as before. The beaver will eventually get discouraged and will seek a new location for its dam.

9.5. **Vegetation**

9.5.1. Plant Survey. A pre-construction plant survey shall be performed during the appropriate blooming period for all State listed plants with potential to occur within the work site. The results of the survey findings shall be submitted to the Department at least 15 days prior to beginning project-related activities and emailed to R2LSA@wildlife.ca.gov. Refer to Notification Number 1600-2012-

0198-R2 and the specific project name when submitting the survey to the Department. If the survey results are negative, no further action by the Permittee is needed. If the survey finds that any State listed plants are present, the Permittee will consult with the Department on the appropriate action.

9.5.2. Vegetation Removal. Disturbance or removal of vegetation shall be kept to the minimum necessary to complete project related activities. Except for trees marked for removal on plans submitted to and approved by the Department, no trees or shrubs with a trunk diameter at breast height (DBH) in excess of four (4) inches shall be removed or damaged without prior consultation and approval of a Department representative. Vegetation marked for protection may only be trimmed with hand tools to the extent necessary to gain access to the work sites.

9.5.3. Tree's for Removal. Prior to initiation of any Authorized Activities, Permittee shall identify and clearly mark all trees to be cut, chemically treated, or otherwise removed, to avoid accidentally removing trees that should not otherwise be affected. Vegetation removal shall not exceed the minimum necessary to complete Authorized Activities and shall only occur within the work site. Permittee shall restore the temporarily-disturbed portions of Department jurisdictional areas to as near their original condition as possible.

9.5.4. Vegetation Disposal. Permittee shall dispose of vegetation or other material removed from a work site at an appropriate and legal off-site location where the material cannot enter the stream channel. No such material shall be stockpiled in the streambed, banks, or channel, except that native vegetation removed from the channel may be chipped and the chips used as mulch for disturbed soil sites in or near work sites.

9.6. **Post Construction**

9.6.1. Litter Removal. No litter or construction debris shall be dumped into water bodies or other aquatic resources, nor shall it be place in a location where it might be moved by wind or water into aquatic resources. All construction debris shall be removed from the site upon completion of the project.

9.6.2. Pre-Project Conditions. Following all work within the stream zone, Permittee shall return the channel and banks, as nearly as possible, to pre- project conditions without creating a future bank erosion problem. Permittee shall return the gradient of the streambed to pre-project

grade unless such operation is part of a restoration project, in which case, the change in grade shall be approved by the Department prior to project commencement.

9.6.3. Remove Temporary Flagging, Fencing, and Barriers. Permittee shall remove all temporary flagging, fencing, and/or barriers from the work site and vicinity of the stream zone upon completion of project activities.

9.7. **Mitigation**

9.7.1. Mitigation Monitoring and Reporting Plan (MMRP) or Purchase of Mitigation Credits. Permittee shall prepare and submit with the SNF an MMRP for impacts to riparian vegetation over 4" DBH at suitable areas near the project site and/or acquire mitigation credits at an approved mitigation bank. The MMRP should discuss success criteria, a monitoring & reporting program, and corrective actions recommended or to be taken when mitigation measures do not meet the proposed success criteria. To participate in mitigation banking, the Permittee shall calculate the acreage of impact (including construction easements) that occurs within the stream zones for this project. The Permittee shall acquire mitigation credits at an approved mitigation bank equal to the impacted acreage. All impacted acreage shall be categorized as "riparian". Mitigation credits shall be purchased at a 3:1 ratio. Work within the stream zone shall not begin until the MMRP has been approved by the Department or the "bill of sale" from the purchase of mitigation credits has been received by the Department.

9.7.2. Mitigation Timing. Whenever possible, mitigation should be implemented prior to, or concurrent with the start of construction. Where this is infeasible, other implementation schedules may be acceptable. Post-project implementation must be approved by the Department and will be a condition of the Agreement. Monitoring requirements including the establishment of performance objectives will be required for all onsite and offsite mitigation activities.

10. FEES

The fees referenced below are based on the current fee schedule, identified in the Department's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). These fees are subject to change. The Permittee shall pay the appropriate fee from the existing fee schedule at the time the specific fee is paid.

Initial Notification Fee: $33,620.25

10.1. Annual Fee: $2,801.50. The Permittee shall pay the Annual Fee to the Department at the end of the calendar year (due by February 1st) when it submits its annual report.

10.2. Subnotification Fee: $280.25. The Permittee shall submit the Subnotification fee at the time of submittal of the SNF.

10.3. Amendments:

10.3.1. Minor Amendment: $168.00. A minor amendment is one that would not significantly modify the scope or nature of any part of the Master Agreement, any project approved by SNF to the Agreement or any measure included in the Agreement to protect fish and wildlife resources.

10.3.2. Major Amendments: $560.25. A major amendment is one that would significantly modify the scope or nature of any part of the Master Agreement, any project approved by SNF to the Agreement or any measure included in the Agreement to protect fish and wildlife resources, or require additional environmental review pursuant to section 21000 *et seq.* of the Public Resources Code or section 15000 *et seq.* of title 14 of the California Code of Regulations.

11. AMENDMENTS

This Master Agreement or any SNF approved pursuant to this Agreement may be amended at any time, provided that: the Department and the Permittee mutually agree on the amendment; the amendment is duly executed by the Department and the Permittee; the amendment is made part of the Agreement; and Permittee includes any applicable amendment fee(s).

To request an amendment, Permittee shall submit to the Department a completed "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in the Department's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

The Department shall not execute any amendment until it has complied with all applicable CEQA requirements.

12. DISPUTE RESOLUTION

In the event of a dispute between Permittee and the Department arising from either the Department's disapproval of a Subnotification, Amendment, or a determination by the Department after reviewing Permittee's four-year report that Permittee must implement additional Protective Measures to protect fish and wildlife resources, Permittee and the

Department shall attempt to resolve the dispute in accordance with the procedure below.

Dispute resolution does not apply when the Department disapproves a SNF when an amendment request is warranted.

The Department contact and Permittee shall attempt to resolve the dispute within 14 days of Permittee's receipt of the Department's disapproval notice. If the Department contact cannot resolve the dispute within 14 days, the dispute shall be elevated to the Department's Regional Manager and Permittee's Vice President or General Manager, who shall attempt to resolve the dispute within 21 days. If the Regional Manager and Permittee's Vice President or General Manager cannot resolve the dispute within 21 days, the dispute shall be elevated to the Department's Director and General Counsel and Permittee's General Manager, who shall attempt to resolve the dispute within 21 days. If the dispute is not resolved by the Department's Director and General Counsel and Permittee's General Manager within 21 days, Permittee may request a panel of arbitrators to resolve the dispute in accordance with the procedures set forth in FGC section 1603(b) (if the dispute arises from the Department's disapproval of a Subnotification or Amendment request) or 1605(g)(3) (if the dispute arises from a determination by the Department that Permittee must implement additional Protective Measures to protect fish and wildlife resources).

13. LIABILITY

Permittee shall be solely liable for any violation of this Agreement, whether committed by Permittee , its employees, agents, contractors or their subcontractors, or any party authorized by Permittee to complete one or more of the activities this Agreement covers on behalf of Permittee.

This Agreement does not constitute the Department's endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

14. SUSPENSION AND REVOCATION

The Department may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before the Department suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before the Department suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including

but not limited to a directive to immediately cease the specific activity or activities that caused the Department to issue the notice.

15. ENFORCEMENT

Nothing in the Agreement precludes the Department from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects the Department's enforcement authority or that of its enforcement personnel.

16. OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, State, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

The Permittee shall notify the Department where conflicts exist between the provisions of this Agreement and those imposed by other regulatory agencies. Unless otherwise notified, the Permittee shall comply with the provision that offers the greatest protection to water quality, species of special concern and/or critical habitat.

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

17. TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter the Department approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to the Department a completed "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in the Department's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

18. EFFECTIVE DATE

The Agreement becomes effective on the date of the Department's signature, which shall be: 1) after Permittee's signature; 2) after the Department complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at http://www.dfg.ca.gov/habcon/ceqa/ceqa_changes.html.

19. TERM

This Agreement shall expire 12 years from the date of the Department's signature, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

20. AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

21. AUTHORIZATION

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify the Department in accordance with FGC section 1602.

22. CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

FOR THE FOLSOM SOUTH AREA GROUP

James C Ray Jr.

Jim Ray Project Manager

Jan 17, 2014

Date

Project Manager

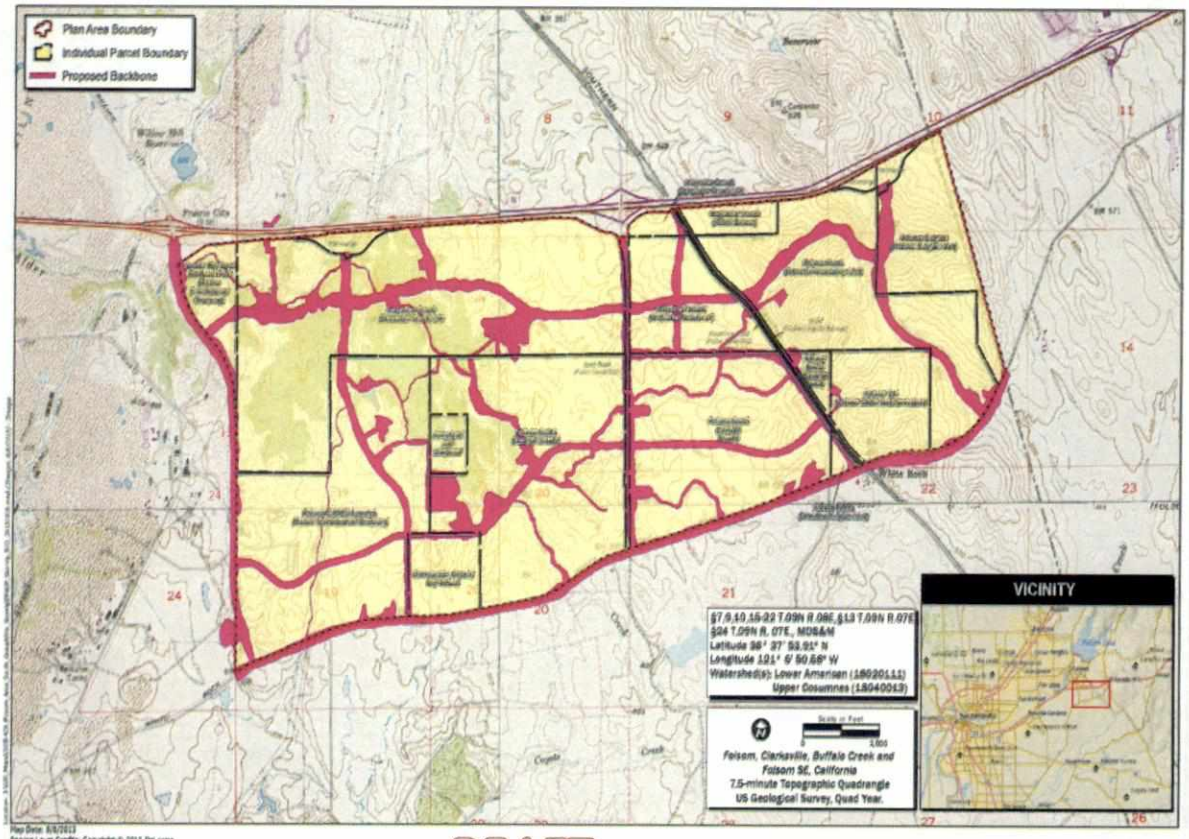
FOR THE DEPARTMENT OF FISH AND WILDLIFE

Tina Bartlett — 2/11/14

Tina Bartlett
Regional Manager

Date

Exhibit A
Map of Project Area



ECORP Consulting, Inc.

DRAFT

Project Location and Vicinity

2035-429 Folsom Plan Area Specific Plan

Exhibit B
Subnotification Form and Checklist

SUBNOTIFICATION COMPLETENESS CHECKLIST
Folsom Plan Area Specific Plan Project
Master Lake and Streambed Alteration Agreement

This checklist is to be completed by Permittee and submitted with the Subnotification form to facilitate the determination of completeness under the Master Lake and Streambed Alteration Agreement. For any item checked as "Not Included", please provide written justification. This information will aid in determining Subnotification completeness in accordance with Master Lake and Streambed Alteration Agreement section Notification and Approval Procedure 6.1.1 Completeness Determination.

Project Name: _____

Subnotification Form Item	Included	Not Included
1. Contact Person	☐	☐
2. Project Term	☐	☐
3. Project Location		
Description of Project Location	☐	☐
Water Body (River, Stream, Lake)	☐	☐
Tributary to which Water Body	☐	☐
USGS 7.5 Minute Quad Map	☐	☐
Assessor's Parcel Number	☐	☐
Coordinates	☐	☐
4. Project Category and Work Type	☐	☐
5. Project Description		
Description of Project	☐	☐
Final Site Plans	☐	☐
Equipment Used	☐	☐
Diversion or Dewatering Plan	☐	☐
6. Project Impacts		
Description (including linear feet and acreage)	☐	☐
Vegetation Impacts	☐	☐
Habitat Impacts (Type and Acreage)	☐	☐
Special Status Species	☐	☐
Mitigation Monitoring Reporting Plan	☐	☐
Additional Protective Measures	☐	☐
Biological Study	☐	☐
Seed Mixture	☐	☐
Hydrological Study	☐	☐

Emergency Response Plan	☐	☐
7. Permits (Local, State, Federal)	☐	☐
8. Permittee Signature	☐	☐
9. Subnotification Fees	☐	☐

ATTACHMENT H

Valley Needlegrass Grassland Survey “PENDING”

22 June 2015

Matt Villalobos
RainTree Investment Corporation
1925 Palomar Oaks Way, Suite 204
Carlsbad, CA 92008

RE: Folsom 138 Needlegrass Grassland Survey

Dear Mr. Villalobos:

At the request of RainTree Investment Corporation, ECORP Consulting, Inc. (ECORP) conducted a survey for Valley needlegrass grassland vegetation communities at the Folsom 138 Project (Project) per the requirement of Mitigation Measure 3A.3-4b of the Mitigation Monitoring and Reporting Plan for the Folsom South of U.S. Highway 50 Specific Plan Project. The Project is part of the Folsom Plan Area Specific Plan (FPASP). The FPASP is an approximately 3,500 acre area in eastern Sacramento County. The ±138-acre Project site is located south of Highway 50 at the northeast corner of the intersection of Placerville Road and White Rock Road in eastern Sacramento County, California (Figure 1. *Project Location and Vicinity*).

Introduction

For the purposes of this survey, Valley needlegrass grassland is defined as areas supporting a minimum 10% cover of purple needlegrass (*Stipa pulchra*), nodding needlegrass (*S. cernua*), or foothill needlegrass (*S. lepida*). This definition was developed based on the description of purple needlegrass grassland vegetation association in the *Manual of California Vegetation, Second Edition* (Sawyer, et al., 2009). The minimum mapping unit used for this survey was 0.05 acre. This minimum mapping unit was chosen in the field based on the biologists' best professional opinion of the community size that would be large enough to sustain the population of the component species over time.

Methods

The Valley needlegrass grassland survey was conducted on April 29 and 30, 2015 by ECORP biologists Eric Stitt, Marin Meza, Theresa Johnson, Emily Mecke, and Daniel Wong. The survey was conducted by walking transects approximately 5 meters apart throughout the entire Project site. Valley needlegrass grassland areas were mapped in the field using a GPS unit capable of sub-meter accuracy (Trimble GeoXT).

Results and Impact Analysis

A total of 2.099 acres of Valley needlegrass grassland was mapped within the Project area (Figure 2 – *Valley Needlegrass Grassland Preserve/Impact Plan*). Based on the current land plan, approximately 0.596 acre of Valley needlegrass grassland will be impacted by Project

● 2525 Warren Drive ● Rocklin, California 95677 ● Phone: (916) 782-9100 ● Fax: (916) 782-9134 ● Web: www.ecorpconsulting.com

implementation including 0.001 acre of impacts within the Backbone Infrastructure component of the Project. The current land use plan also includes 25.4 acres of on-site Open Space. A total of 1.503 acres of Valley needlegrass grassland will be preserved within the on-site Open Space areas. Table 1 outlines the preserve and impact analysis for the Project and Backbone Infrastructure areas.

Table 1 – Valley Needlegrass Grassland Preserve and Impacts

Type	Existing Acreage	Impacted Acreage	Preserved Acreage in Conservation Area	Preserved Acreage in Passive Recreation Open Space
Project Area	2.098	0.595	1.164	0.339
Backbone Infrastructure	0.001	0.001	0.000	0.000
Total:	**2.099**	**0.596**	**1.164**	**0.339**

Note: All area values are calculated in square feet. Values reported in acres have been rounded to the thousandth of an acre which may cause minor reporting errors in the total values.

Mitigation

According to Mitigation Measure 3A.3-4b the Project applicant shall implement mitigation measures that "include one or more of the following components sufficient to achieve no net loss of Valley needlegrass grassland acreage: establishment of Valley needlegrass grassland within the project's Open Space areas currently characterized by annual grassland, establishment of Valley needlegrass grassland off-site, or preservation and enhancement of existing Valley needle grass grassland either on or off of FPASP".

The Project will preserve a total of 1.503 acres of Valley needlegrass grassland within the on-site Open Space areas. This includes 1.164 acres of Valley needlegrass grassland permanently protected in the Conservation Area and 0.339 acre protected in the Passive Recreation Open Space. Both of these types of Open Space will ultimately be managed by the City of Folsom under an approved Operations and Management Plan (O&M Plan) for the FPASP.

Grading within the Passive Recreation Open Space to support adjacent construction is expected to occur. Prior to grading disturbances within the Passive Recreation Open Space, the existing Valley needlegrass grassland populations will be protected by highly visible construction fencing for avoidance during grading. Once construction is complete, graded areas within the Passive Recreation Open Space will be restored to natural grassland conditions. These areas will be seeded with a native seed mix which includes a majority of needlegrass species to ensure the establishment of additional areas of Valley needle grassland on-site. A sample seed mix is included in Attachment A – *Native Seed Mixes*.

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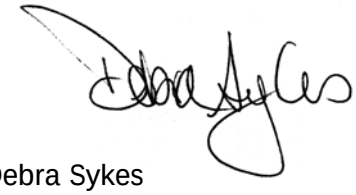
Conclusion

The Project, as currently designed, will impact 0.596 acre of Valley needlegrass grassland. Several mitigation measures pursuant to Mitigation Measure 3A.3-4b will be implemented to offset these impacts. These mitigation measures include the permanent protection of 1.503 acres of Valley needlegrass grassland within the on-site Open Space areas and the seeding of areas temporarily disturbed by grading within the Passive Recreation Open Space to establish Valley needlegrass grasslands. Through the preservation and establishment of Valley needlegrass grassland within the on-site Open Space areas, the Project is complying with the mitigation measures for impacts to Valley needlegrass grassland, and no further mitigation measures are required.

Please feel free to call me at (916) 782-9100 if you have any questions regarding this issue.

Sincerely,



Debra Sykes
Senior Botanist

Attachment(s)

References

Sawyer, J.O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, California.

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Specific Plan Area Boundary

Folsom 138 Property Boundary

SPECIFIC PLAN AREA

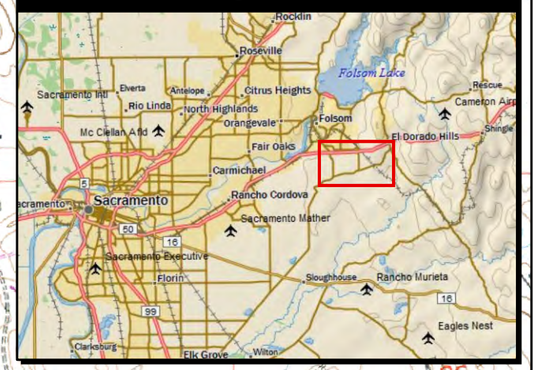
Folsom 138

Sacramento County, California
§15, T.09N, R.08E, MDBM
Latitude: 38° 37' 52.19" N
Longitude: 121° 5' 26.62" W
Watersheds: Lower American (18020111) & Upper Cosumnes (18040013)

Scale in Feet
0 1,000 2,000

Clarksville (1980, NAD27)
CA 7.5-minute Topographic Quadrangle
US Geological Survey

VICINITY



Location: J:\GIS_Maps\2005-429_Folsom_Area_South_GroupSite_Vicinity\FPASP_Vicinity_F138_20140808.mxd (JSwager, 8/8/2014) - JSwager

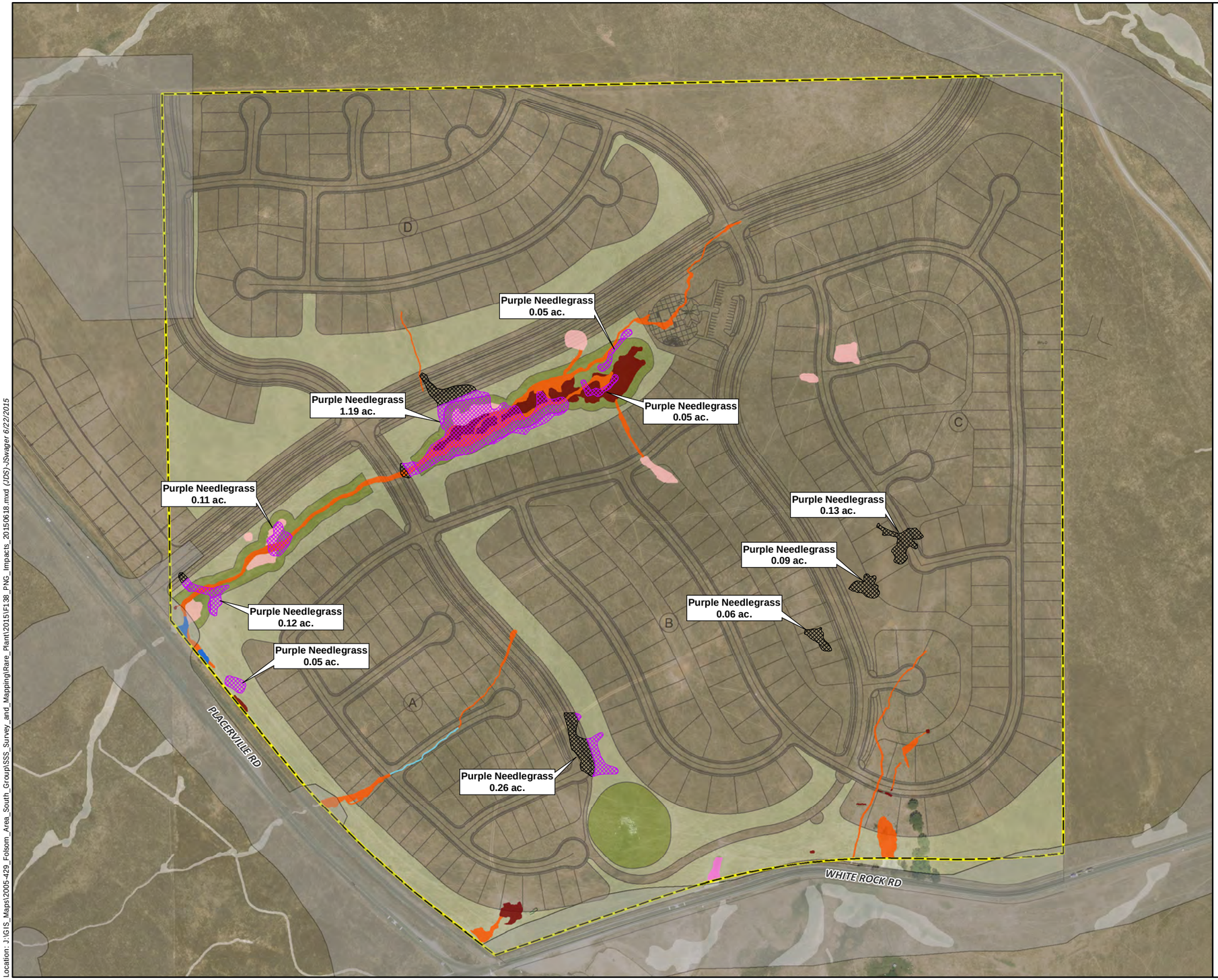
Map Date: 8/8/2014
Service Layer Credits: Copyright:© 2012 DeLorme

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 1. Project Location and Vicinity

2005-429 Folsom Plan Area Specific Plan

Figure 2.
Folsom 138
Valley Needlegrass Grassland
Preserve/Impact Plan



Map Features

- Property Boundary - 137.04 ac.
- FPASP Backbone Infrastructure [1]

Project Components [1]

- Conservation Area (4.6 acres)
- Passive Recreation Open Space (20.8 acres)

Waters

- Vernal Pool
- Seasonal Wetland
- Seasonal Wetland Swale
- Seep
- Marsh
- Intermittent Drainage

Valley Needlegrass Grassland

- Impacted
- Preserved

Valley Needlegrass Grassland Impacts

Project	Acres
Impacted	0.595
Preserved in Conservation Area	1.164
Preserved in Passive Recreation Open Space	0.339
Total	*2.098*
Backbone	**Acres**
Impacted	0.001
Grand Total	**2.099**

- Impact calculations are approximate and are based on the best available information to date.
- The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total acreage reported.

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Location: J:\GIS_Maps\2005-429_Folsom_Area_South_Group\SSS_Survey_and_Mapping\Rare_Plant\2015\F138_PNG_Impacts_20150618.mxd (JDS)-JSwager 6/22/2015

2013-098 Folsom 138

DRAFT

Scale in Feet
0 300

Photo Source: USGS 2013
[1] Mackay and Somps
MS_ETA-GG-TM_CS Base-092214.dwg
ETA_FPA_404(b)_Backbone_Infrastructure_Impact_Limit.dwg

Map Date: 6/22/2015

ATTACHMENT A

Native Seed Mixes

NATIVE SPECIES SEED MIXES

SEED QUANTITIES ARE FOR HYDROSEEDING. NOTIFY ECORP CONSULTING FOR REVISED QUANTITIES IF DRILL SEEEDING.

SEED MIX - UPLAND AREAS

SPECIES	PLS LBS./ACRE
STIPA PULCHRA (PURPLE NEEDLEGRASS*)	16.0
STIPA CERNUA (NODDING NEEDLEGRASS**)	4.0
ELYMUS GLAUCUS (BLUE WILDRYE)	8.0
POA SECUNDA (NATIVE PINE BLUEGRASS)	2.0
BROMUS CARINATUS (CALIFORNIA BROME)	1.5
FESTUCA MICROSTACHYS (SMALL FESCUE)	1.5
TOTAL GRASS COMPONENT	33.0
LUPINUS BICOLOR (MINIATURE LUPINE) OR L. NANUS (SKY LUPINE)	3.0
ESCHSCHOLZIA CALIFORNICA (CALIFORNIA POPPY)	0.5
GRINDELIA CAMPORUM (COMMON GUMPLANT)	1.5
TOTAL FORB COMPONENT	5.0
TOTAL GRASS & FORB SEED	38.0 LBS. PER ACRE (PLS)

* STIPA PULCHRA (PURPLE NEEDLEGRASS) FORMERLY KNOWN AS NASSELLA PULCHRA
** STIPA CERNUA (NODDING NEEDLEGRASS) FORMERLY KNOWN AS NASSELLA CERNUA

SEED MIX - WETTER AREAS

FOR RIPARIAN AND CHANNEL AREAS, WETLAND EDGES, AND SWALES

SPECIES	PLS LBS./ACRE
ELYMUS GLAUCUS (BLUE WILDRYE)	10.0
ELYMUS TRITICOIDES 'YOLO' (BEARDLESS WILD RYE***)	10.0
HORDEUM BRACHYANTHERUM (MEADOW BARLEY)	8.0
FESTUCA IDAHOENSIS (IDAHO FESCUE)	2.5
FESTUCA MICROSTACHYS (SMALL FESCUE)	1.5
TOTAL	32 PLS LBS./ACRE

*** ELYMUS TRITICOIDES 'YOLO' (BEARDLESS WILD RYE) FORMERLY KNOWN AS LEYMUS TRITICOIDES (CREEPING WILD RYE)

FERTILIZER COMPONENT	INGREDIENT %	
NITROGEN	7	OR APPROVED EQUIVALENT
PHOSPHORUS	2	
POTASSIUM	3	

FERTILIZER SHALL BE NATURAL-BASED, SLOW RELEASE, & BALANCED IN N, P, & K.