Attachment 1 – Vicinity & Location Maps
San Anselmo Flood Risk Reduction Project
Vegetation Installation, Monitoring, and Adaptive Management
Sunnyside Nursery Flood Diversion and Storage Basin (FDS) and Off-Site Mitigation

Figure 1. Map of project area.
Attachment 2 – Sample Contract Agreement
THIS GENERAL SERVICES AGREEMENT (the “Agreement”) dated __________ is
BY AND BETWEEN:

The County of Marin – Specify Department
3501 Civic Center Drive #, San Rafael, CA 94901
(The “County”)
-- AND --
THIS BUSINESS ENTITY, COMPANY, PERSON.
Street Address, City, STATE Zip Code
(The “Contractor”)

County is of the opinion and Contractor represents that Contractor has the necessary
qualifications, experience and abilities to provide the below described services to County.
Contractor agrees to provide such services to County as set forth in this Agreement and in the
Terms and Conditions set forth in Exhibit B to this Agreement and incorporated herein by this
reference.

In consideration of the matters described above and of the mutual benefits and obligations set
forth in this Agreement, the receipt and sufficiency of which consideration is hereby
acknowledged, County and Contractor (individually the “Party” and collectively the “Parties”)
agree as follows:

Scope of Service(s): The services to be provided by Contractor are described in Exhibit A,
Scope of Work.

Term of Agreement: Agreement shall commence on _______ and shall terminate on
__________.

Fees and Payment Schedule: In no event will the cost to County for the services to be
provided herein exceed the maximum sum of ______________, including direct non-salary
expenses. Contractor shall provide County with its Federal Tax I.D. number prior to submitting
the first invoice. Exhibit D may provide greater detail of payment schedule.

The County of Marin is committed to developing and supporting diverse, equitable, and inclusive
values within all aspects of its operations. By signing this contract, you are representing your
commitment to rejecting inequities in employment, services, and practices by ensuring fair and
equitable treatment for all.

Your signature indicates your agreement to all terms and conditions set forth herein. The
individuals executing this Agreement represent and warrant that they have the legal capacity
and authority to do so on behalf of their representative legal entities.

_________________________________________     _______________________________
County of Marin

Printed Name & Title

COUNTY COUNSEL REVIEW AND APPROVAL (required if template content has been modified)

APPROVED AS TO FORM:
County Counsel: __________________________ Date: ________________

Printed Name:
1. **INSURANCE.** Contractor shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by Contractor, his agents, representatives, employees or subcontractors.

**Commercial General Liability:**
Contractor shall maintain a Commercial General Liability Insurance policy with limits not less than $1,000,000 per occurrence ($2,000,000 aggregate). County, its officers, officials, employees, and volunteers are to be covered as additional insureds on the Commercial General Liability policy.

**Commercial Automobile Liability:**
Where the services to be provided under this Agreement involve or require the use of any type of vehicle by Contractor, Contractor shall provide Comprehensive Business or Commercial Automobile Liability coverage, including non-owned and hired automobile liability, with limits of not less than $1,000,000 per accident for bodily injury property damage.

**Workers’ Compensation:**
Contractor acknowledges the State of California requires every employer to be insured against liability for workers’ compensation or to undertake self-insurance in accordance with the provisions of the Labor Code. If Contractor has employees, a copy of the certificate evidencing such insurance, a letter of self-insurance, or a copy of the Certificate of Consent to Self-Insure shall be provided to County prior to commencement of work. Contractor must also carry Employers Liability Insurance with limits of not less than $1,000,000 per accident for bodily injury or disease.

**Errors and Omissions, Professional Liability or Malpractice Insurance.**
Contractor may be required to carry errors and omissions, professional liability or malpractice insurance appropriate to Contractor’s profession.

If Contractor maintains broader coverage and/or higher limits than the minimums shown above, County requires and shall be entitled to the broader coverage and/or the higher limits maintained by Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to County.

Contractor’s insurance coverage shall be primary coverage as respects County, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by County, its officers, officials, employees, or volunteers shall be excess of Contractor’s insurance and shall not contribute with it.
Contractor hereby grant Entity a waiver of any right to subrogation which an insurer of said Contractor may acquire against the Entity by virtue of the payment of any loss under such insurance. Contractor agrees to obtain any endorsement that may be necessary to affect the waiver of subrogation, but this provision applies regardless of whether or not the Entity has received a waiver of subrogation endorsement from the insurer.

Contractor shall furnish County with original Certificates of Insurance including all required amendatory endorsements (or copies of the applicable policy language effecting coverage required by this clause) and a copy of the Declarations and Endorsement Page of the CGL policy listing all policy endorsements to County before work begins. However, failure to obtain the required documents prior to the work beginning shall not waive Contractor's obligation to provide them. County reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

County reserves the right to modify these requirements, including limits and type of coverage, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

If Contractor does not carry a required insurance coverage and/or does not meet the required limits, the coverage limits and deductibles shall be set forth on a waiver, Exhibit C, attached hereto.

Failure to provide and maintain the insurance required by this Agreement will constitute a material breach of this Agreement. In addition to any other available remedies, County may suspend payment to Contractor for any services provided during any time that insurance was not in effect and until such time as Contractor provides adequate evidence that Contractor has obtained the required coverage.

2. INDEMNITY. To the fully extent permitted by law (including, without limitation, California Civil Code Section 2782), Contractor shall indemnify, defend (with legal counsel reasonably acceptable to County), and hold harmless County, its employees, officers, departments, officials, representatives, and agents, from and against any and all claims, loss, cost, damage, injury (including, without limitation, injury to or death of an employee of Contractor or its agent), expense and liability of every kind, nature and description (including, without limitation, incidental and consequential damages, court costs, attorneys' fees, litigation expenses and fees of expert consultants or expert witnesses incurred in connection therewith and costs of investigations) whether or not involving a third party claim, which arise out of or relate to any breach of any representation or warranty contained in this Agreement, as well as any negligence, recklessness, willful misconduct or omission in the performance of this Agreement.
3. **ANTI-DISCRIMINATION AND ANTI-HARASSMENT.** Contractor and/or any subcontractor shall not unlawfully discriminate against or harass any individual including, but not limited to, any employee or volunteer of the County of Marin based on race, color, religion, gender, national origin, ancestry, citizenship, age, marital status, physical disability, mental disability, medical condition, sexual orientation, gender identity, genetic information, or any other basis protected by law. Contractor and/or any subcontractor understands and agrees that Contractor and/or any subcontractor is bound by and will comply with the anti-discrimination and anti-harassment mandates of all Federal, State and local statutes, regulations and ordinances including, but not limited to, County of Marin Personnel Management Regulation (PMR) 21.

4. **LICENSING AND PERMITS.** Contractor shall maintain the appropriate licenses through the life of this Agreement. Contractor shall also obtain any and all permits which might be required by the services to performed herein.

5. **BOOKS OF RECORD AND AUDIT PROVISION.** Contractor shall maintain on a current basis complete books and records relating to this Agreement. Such records shall include, but not be limited to, documents supporting all bids, all income and all expenditures. The books and records shall be original entry books with a general ledger itemizing all debits and credits for the work on this Agreement. In addition, Contractor shall maintain detailed payroll records including all subsistence, travel and field expenses, and canceled checks, receipts and invoices for all items. These documents and records shall be retained for at least five years from the completion of this Agreement. Contractor will permit County to audit all books, accounts or records relating to this Agreement or all books, accounts or records of any business entities controlled by Contractor who participated in this Agreement in any way. Any audit may be conducted on Contractor's premises or, at County’s option, Contractor shall provide all books and records within a maximum of fifteen (15) days upon receipt of written notice from County. Contractor shall refund any monies erroneously charged.

6. **WORK PRODUCT/PRE-EXISTING WORK PRODUCT OF CONTRACTOR.** Any and all work product resulting from this Agreement is commissioned by the County of Marin as a work for hire. County shall be considered, for all purposes, the author of the work product and shall have all rights of authorship to the work, including, but not limited to, the exclusive right to use, publish, reproduce, copy and make derivative use of, the work product or otherwise grant others limited rights to use the work product. To the extent Contractor incorporates into the work product any pre-existing work product owned by Contractor, Contractor hereby acknowledges and agrees that ownership of such work product shall be transferred to the County of Marin.

7. **TERMINATION.**
a. If Contractor fails to provide in any manner the services required under this Agreement or otherwise fails to comply with the terms of this Agreement or violates any ordinance, regulation or other law which applies to its performance herein, County may terminate this Agreement by giving five (5) calendar days written notice to the party involved.

b. Force Majeure. Neither party shall hold the other responsible for damages or delay in performance caused by acts of God, lockouts, accidents, or other events beyond the control of the other or the other's employees and agents.

c. Either party hereto may terminate this Agreement for any reason by giving thirty (30) calendar days written notice to the other parties. Notice of termination shall be by written notice to the other parties and be sent by registered mail.

d. In the event of termination not the fault of Contractor, Contractor shall be paid for services performed to the date of termination in accordance with the terms of this Agreement so long as proof of required insurance is provided for the periods covered in the Agreement or Amendment(s).

8. **APPROPRIATIONS.** Where the funding source for this Agreement is contingent upon an annual appropriation or grant from the Marin County Board of Supervisors, the State of California or other third party, County's performance and obligation to pay under this Agreement is limited by the availability of those funds. Should the funding source for this Agreement be eliminated or reduced, upon written notice to Contractor, County may reduce the Maximum Cost to County identified in this Agreement to reflect that elimination or reduction.

9. **RELATIONSHIP BETWEEN THE PARTIES.** It is expressly understood that in the performance of the services herein, Contractor, and its agents and employees, shall act in an independent capacity and as an independent contractor and not as officers, employees or agents of County. Contractor shall be solely responsible to pay all required taxes, including but not limited to, all withholding social security, and workers’ compensation.

10. **ADDITIONAL SERVICES.** County shall not be responsible for services rendered that are not set forth in the Scope of Work. When this Agreement covers a continuing service rendered over a stated period of time, a new Agreement must be obtained upon expiration of the term to authorize the continuation of service.

11. **TIME IS OF THE ESSENCE.** Time is of the essence on this Agreement. If services are not completed at the time agreed, County reserves the right to cancel this Agreement and hold Contractor accountable. If service dates cannot be met, Contractor agrees to advise County, in writing of the earliest possible date for delivery of services.
12. MISCELLANEOUS PROVISIONS.
   a. Integration; Incorporation. This Agreement, including all exhibits attached hereto, and all specifications, drawings, and data submitted to Contractor with the order are hereby incorporated and made a part hereof.
   b. Amendments. This Agreement may only be amended by written agreement signed by all the parties to this Agreement.
   c. Severability. If any provision of this Agreement shall be determined by a court of competent jurisdiction to be invalid, void or unenforceable, or if any provision of this Agreement is rendered invalid or unenforceable by federal or state statute or regulation, but the remaining portions of this Agreement can be enforced without failure of material consideration to any party, then the remaining provisions shall continue in full force and effect. If, however, the provision to be severed is a material part of this Agreement, the foregoing shall not apply, and the parties shall in good faith renegotiate such provision.
   d. Applicable Law and Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of California and the parties hereto agree that venue shall be in Marin County, California.
   e. Attorneys' Fees. If a party to this Agreement brings any action, including an action for declaratory relief, to enforce or interpret the provisions of this Agreement, each party shall cover their own attorneys' fees and cost.
   f. Waiver. A failure by a party to this Agreement to require full compliance with any requirement or condition of this Agreement shall not be deemed to be a waiver of that requirement or condition or of any subsequent breach of the same or any other requirement or condition. Acceptance by County of performance or fulfillment of a requirement or a condition by Contractor, including payment to Contractor by County, shall not be deemed to be a waiver of any preceding breach by Contractor, regardless of County's knowledge or such preceding breach at the time of acceptance.
   g. Conflict of Interest. Contractor shall avoid all conflict of interest or appearance of conflict of interest in performance of this Agreement. Contractor hereby covenants that during the term of this Agreement it will not employ any person to administer any portion of this Agreement that has an interest, direct or indirect, which would conflict in any manner or degree with the performance of services required under this Agreement.
   h. Headings. The headings of this Agreement are for convenience of reference only, are not part of this Agreement and do not affects its interpretation.
   i. Authority of Signatories. Any individual executing this Agreement on behalf of Contractor represents and warrants that he or she is duly authorized to execute and deliver this Agreement on behalf of
Contractor, and that this Agreement is binding upon said Contractor in accordance with its terms.

j. Assignment/Subcontracting. Neither party may delegate its rights or obligations under this Agreement and shall not assign, subcontract or otherwise transfer its rights or obligations or any interest therein without the express prior written consent of the other party. Any attempted assignment, transfer, delegation, hypothecation or subletting without the other party’s prior written consent shall be null and void.

13. COMPLIANCE WITH LOCAL AND FEDERAL LAWS. Contractor certifies that in performing this Agreement it will comply with all applicable provisions of the federal, state and local laws, regulations, rules and orders (including, but not limited to Marin County Code Chapters 23.13-Nuclear Free Zone and 2.50-Living Wage) affecting the goods or services covered by this Agreement. If applicable, it shall be the responsibility of Contractor to monitor the prevailing wage rates as established by the California Department of Labor for any increase in rates during the project and adjust wage rates accordingly. Prevailing wage rates are available at the State of California Division of Labor Statistics and Research website [http://www.dir.ca.gov/oprl/pwd/](http://www.dir.ca.gov/oprl/pwd/).

The California Franchise Tax Board through California Revenue and Taxation Code (R&TC) 18662 and the related regulations require the withholding of California income and franchise taxes from payments made to non-resident California vendors performing services in this state. A withholding of 7% (the 2011 rate, which is applicable to change) of all service related invoices will be withheld and remitted to the state; there is no required withholding on goods provided. In addition, there are higher applicable rates that will be withheld from non-resident foreign non-corporate partners, corporate partners and foreign banks (including financial institution partners).

14. DEBARMENT CERTIFICATION. The bidder under Title 49, Code of Federal Regulation, Part 29, under penalty of perjury, certifies that upon acceptance of this Agreement, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, and manager; is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency; has not been suspended debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years; does not have a proposed debarment pending; and has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any manner involving fraud or official misconduct in the past 3 years.

15. STATE REGISTRATION. No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to
Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code 1771.1(a)].
No Contractor or subcontractor can be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code Section 1725.5. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
EXHIBIT E
FEDERAL PROVISIONS

This Exhibit is incorporated into the Agreement entered into between Contractor and County.

I. DEFINITIONS
a. **Government** means the United States of America and any executive department or agency thereof.
c. **Third Party Subcontract** means a subcontract at any tier entered into by Contractor or subcontractor, financed in whole or in part with Federal assistance originally derived from FEMA.

II. FEDERAL COMPLIANCE
a. This is an acknowledgement that FEMA financial assistance will be sought and if available used to fund all or a portion of the Agreement. Contractor shall at all times comply with all applicable regulations, policies, procedures, and FEMA Directives as they may be amended or promulgated from time to time during the term of this Agreement, including but not limited to those requirements of 2 CFR 200.317 through 200.326 and more fully set forth in Appendix II to Part 200 – Contract Provisions for non-Federal Entity Contracts Under Federal Awards, which is included herein for reference. Contractor’s failure to so comply shall constitute a material breach of the Agreement.
b. Contractor agrees to include the above clause in each third-party subcontract financed in whole or in part with Federal assistance provided by FEMA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

III. CLEAN AIR ACT (applicable to all contracts and subcontracts in excess $100,000, including indefinite quantities where the amount is expected to exceed $100,000 in any year)
a. Contractor agrees to comply with all applicable standards, orders, or regulations pursuant to the Clean Air Act, as amended, 42 U.S.C. Section 7401 et seq.
b. Contractor agrees to report each violation to The County of Marin and understands and agrees that the County of Marin will, in turn, report each violation to the FEMA, and the appropriate Environmental Protection Agency Regional Office.
c. Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provide by FEMA.
IV. FEDERAL WATER POLLUTION CONTROL ACT (applicable to all contracts and subcontracts in excess $100,000, including indefinite quantities where the amount is expected to exceed $100,000 in any year)
a. Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
b. Contractor agrees to report each violation to the County of Marin and understands that The County of Marin will, in turn, report each violation to FEMA, and the appropriate Environmental Protection Agency Regional Office.
c. Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

V. BYRD ANTI-LOBBYING AMENDMENT 31 U.S.C. §1352 (as amended)
a. Contractor shall not use or pay any funds received under this Agreement to influence or attempt to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
b. Contractor agrees to the provisions of Attachment 1, Certification Regarding Lobbying, attached hereto and incorporated herein (applicable for contracts or subcontracts in excess of $100,000).
c. Contractor agrees to include paragraphs a. and b. above in each third-party subcontract financed in whole or in part with Federal assistance provided by FEMA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

VI. PROCUREMENT OF RECOVERED MATERIALS
a. In the performance of the Agreement, Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired-
   i. Competitively within a timeframe providing for compliance with the contract performance schedule;
   ii. Meeting contract performance requirements;
   iii. At a reasonable price.
b. Information about this requirement, along with the list of EPA-designated items, is available at EPA’s Comprehensive Procurement Guidelines website. [https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program](https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program)
c. Contractor also agrees to comply with all other applicable requirements of Section 6002 of the “Solid Waste Disposal Act”.

VII. DEBARMENT AND SUSPENSION CLAUSE
a. The Agreement and this Exhibit is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, Contractor is required to verify that none of Contractor’s principals (defined at 2 C.F.R. §180.995) or its affiliates (defined at 2 C.F.R. §180.905) are excluded or disqualified (defined at 2 C.F.R. §180.935).

b. Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transactions it enters into.

c. This certification is a material representation of fact relied upon by the County of Marin. If it is later determined that Contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to the remedies available to the County of Marin, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

d. The bidder or proposer agrees to comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while the offer is valid and throughout the period of any contract that may arise out of this offer. The bidder or proposer agrees to include such compliance in its lower tier covered transactions.

VIII. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (applicable to all contracts in excess of $100,000 that involve the employment of mechanics or laborers or other construction work, but not to purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence)

a. Overtime requirements: No contractor or subcontractor contracting for any part of the contract work, which may require or involve the employment of laborers or mechanics, shall require or permit any such laborer or mechanic in any workweek, in which he or she is employed on such work, to work in excess of forty (40) hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one (1) and one-half (1/2) the basic rate of pay for all hours worked in excess of forty (40) hours in such workweek.

b. Violation; liability for unpaid wages; liquidated damages: In the event of any violation of the clause set forth in VII(a) of this section Contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen or guards, employed in violation of the clause
set forth in VIII(a) of this section, in the sum of $27 for each calendar day on
which such individual was required or permitted to work in excess of the
standard workweek of forty (40) hours without payment of the overtime wages
required by the clause set forth in VIII(a) of this section.

c. **Withholding for unpaid wages or liquidated damages:** the County of Marin shall
upon its own action or upon written request of an authorized representative of
the Department of Labor withhold or cause to be withheld, from any monies
payable on account of work performed by Contractor or subcontractor under
any such contract or any other Federal contract with the same prime contractor,
or any other federally-assisted contract subject to the Contract Work Hours and
Safety Standards Act, which is held by the same prime contractor, such sums
as may be determined to be necessary to satisfy any liabilities of such
contractor or subcontractor for unpaid wages and liquidated damages as
provided in the clause set forth in VIII(b) of this section.

d. **Subcontracts:** Contractor or subcontractor shall insert in any subcontracts the
clauses set forth in VIII(a) through (d) of this section and also a clause requiring
the subcontractors to include these clauses in any lower tier subcontracts. The
prime contractor shall be responsible for compliance by any subcontractor or
lower tier subcontractor with the clauses set forth in VIII(a) through (d) of this
section.

IX. DEPARTMENT OF HOMELAND SECURITY SEAL, LOGOS, FLAGS

a. Contractor shall not use the Department of Homeland Security (DHS) seal(s),
logos, crests, or reproductions of flags or likenesses of DHS agency officials
without specific FEMA approval.

X. ACCESS TO RECORDS

a. Contractor agrees to provide the County of Marin, the FEMA administrator, the
Comptroller General of the United States, or any of their authorized
representative access to any books, documents, papers, and records of
Contractor which are directly pertinent to the Agreement for the purposes of
making audits, examinations, excerpts and transcriptions.

b. Contractor agrees to permit any of the foregoing parties to reproduce by any
means whatsoever or to copy excerpts and transcriptions as reasonably
needed.

c. Contractor agrees to provide the FEMA Administrator or his authorized
representatives access to construction or other work sites pertaining to the
work being completed under the Agreement.

d. In compliance with the Disaster Recovery Act of 2018, the County of Marin and
Contractor acknowledge and agree that no language in the Agreement is
intended to prohibit audits or internal reviews by the FEMA Administrator or the
Comptroller General of the United States.
XI. NO OBLIGATION BY FEDERAL GOVERNMENT
a. The Federal Government is not a party to the Agreement or this Exhibit and is not subject to any obligations or liabilities to the non-Federal entity, contractor or any other party pertaining to any matter resulting from the contract.
b. Contractor agrees to include the above clause in each third-party subcontract financed in whole or in part with Federal assistance provided by FEMA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

XII. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS
a. Contractor acknowledges that the 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to Contractor’s actions pertaining to the Agreement.

XIII. TERMINATION FOR CAUSE
Contractor’s failure to perform or observe any term, covenant or condition of this Exhibit shall constitute an event of default under the Agreement and County may terminate the Agreement.

XIV. EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE (applicable to all construction contracts awarded meeting the definition of “federally assisted construction contract” under 41 CFR 61-1.3).
a. During the performance of the Agreement, Contractor agrees as follows:
   i. Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
   ii. Contractor will, in all solicitations or advertisements for employees placed by or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
   iii. Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or
applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with Contractor's legal duty to furnish information.

iv. Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

v. Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

vi. Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

vii. In the event of Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

viii. Contractor will include the portion of the sentence immediately preceding paragraph (i) and the provisions of paragraphs (i) through (viii) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. Contractor will take
such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, Contractor may request the United States to enter into such litigation to protect the interests of the United States. The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract. The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance. The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

XV. ANTI-KICKBACK ACT COMPLIANCE (applicable to all contracts and subgrants for construction or repair above $2,000 where the Davis-Bacon Act also applies; 44 CFR §13.36(i)(4))
a. Contractor agrees to comply with the Copeland “Anti-Kickback” Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR Part 3), as may be applicable, which are incorporated by reference into the Agreement.

b. Contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.

c. A breach of the contract clauses above may be grounds for termination of the Agreement, and for debarment as a contractor or subcontractor as provided in 29 C.F.R. § 5.12.

XVI. DAVIS-BACON ACT COMPLIANCE (applicable to construction contracts in excess of $2,000 awarded by grantees and subgrantees when required by Federal grant program legislation;)

a. To the extent required by any Federal grant programs applicable to expected funding or reimbursement of County’s expenses incurred in connection with the services provided under the Agreement, Contractor agrees to comply with the Davis-Bacon Act (40 U.S.C. 276a to 276a–7) as supplemented by Department of Labor regulations (29 CFR Part 5) as set forth below. These requirements are in addition to the requirements set forth in the Agreement.

b. Contractor shall be bound to the provisions of the Davis-Bacon Act, and agrees to be bound by all the provisions of Labor Code section 1771 regarding prevailing wages. All labor on this project shall be paid neither less than the greater of the minimum wage rates established by the U.S. Secretary of Labor (Federal Wage Rates), or by the State of California Director of Department of Industrial Relations (State Wage Rates). Current DIR requirements may be found at http://www.dir.ca.gov/lcp.asp.

XVII. PATENT RIGHTS (applicable to contracts for experimental, research, or development projects financed by FEMA)

a. General. If any invention, improvement, or discovery is conceived or first actually reduced to practice in the course of or under the Agreement, and that invention, improvement, or discovery is patentable under the laws of the United States of America or any foreign country, the County and Contractor agree to take actions necessary to provide immediate notice and a detailed report to FEMA.

b. Unless the Government later makes a contrary determination in writing, irrespective of Contractor's status (a large business, small business, state government or state instrumentality, local government, nonprofit organization, institution of higher education, individual), the County and Contractor agree to take the necessary actions to provide, through FEMA, those rights in that

c. Contractor agrees to include paragraphs a. and b. above in each third-party subcontract for experimental, developmental, or research work financed in whole or in part with Federal assistance provided by FEMA.

XVIII. INCORPORATION OF UNIFORM ADMINISTRATIVE REQUIREMENTS

a. The preceding provisions include, in part, certain standard terms and conditions required by FEMA, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by FEMA are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FEMA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in the Agreement. Contractor shall not perform any act, fail to perform any act, or refuse to comply with any County requests that would cause County to be in violation of the FEMA terms and conditions.
Attachment 1

CERTIFICATION REGARDING LOBBYING
Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loan, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Contractor Signature ___________________________ Date ___________________________
THE FOLLOWING EXHIBITS ARE INCLUDED TO COMPLETE THIS CONTRACT:

<table>
<thead>
<tr>
<th>EXHIBIT</th>
<th>DESCRIPTION</th>
<th>INCLUDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>SCOPE OF WORK</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>TERMS AND CONDITIONS</td>
<td>XX</td>
</tr>
<tr>
<td>C</td>
<td>INSURANCE WAIVER (if needed)</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>FEE AND PAYMENT SCHEDULE (if needed)</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>FEDERAL PROVISIONS (if needed)</td>
<td></td>
</tr>
</tbody>
</table>
Attachment 3 – CDFW Permit
October 1, 2021

Hugh Davis
Marin County Flood Control and Water Conservation District
3501 Civic Center Drive
San Rafael, CA 94903
hdavis@marincounty.org

Dear Mr. Davis:

Final Lake or Streambed Alteration Agreement, Notification No. 1600-2020-0146-R3, San Anselmo Flood Risk Reduction Project

Enclosed is the final Streambed Alteration Agreement (Agreement) for the San Anselmo Flood Risk Reduction Project (Project). Before the California Department of Fish and Wildlife (CDFW) may issue an Agreement, it must comply with the California Environmental Quality Act (CEQA). In this case, CDFW acting as a responsible agency filed a Notice of Determination (NOD) within five working days of signing the Agreement. The NOD was based on information contained in the final Environmental Impact Report prepared by the lead agency.

Under CEQA, the filing of an NOD triggers a 30-day statute of limitations period during which an interested party may challenge the filing agency’s approval of the Project. You may begin the Project before the statute of limitations 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 letter, please contact Amanda Culpepper, Environmental Scientist, by email at amanda.culpepper@wildlife.ca.gov.

Sincerely,

Craig J. Weightman, Environmental Program Manager

e: Leane Dunn, ldunn@esassoc.com

California Department of Fish and Wildlife
Captain B. Bundesen, Law Enforcement Division

Conserving California’s Wildlife Since 1870
This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and Marin County Flood Control and Water Conservation District (Permittee) as represented by Hugh Davis.

RECITALS

WHEREAS, pursuant to Fish and Game Code section 1602, Permittee notified CDFW on June 2, 2020 and provided subsequent documents that Permittee intends to complete the Project described herein.

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

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

NOW THEREFORE, Permittee agrees to complete the Project in accordance with the Agreement.

PROJECT LOCATION

The Project is located at two locations, one in an unincorporated area of the County of Marin and the second in the City of San Anselmo, County of Marin, State of California (Exhibit A):

**Location 1:** Flood Diversion and Storage (FDS) Basin site is located on Fairfax Creek, approximately Latitude 38.0023°N, Longitude 122.6103°W. The street address is 3000 Sir Francis Drake Boulevard, Fairfax, CA 94930. The site is bounded by Sir Francis Drake Boulevard to the south, Deer Creek Court and residential properties to the west, Loma Alta Open Space Preserve to the north, and Shadow Creek Court and residential properties to the east. The Assessor’s Parcel Number for the site is 174-060-06.

**Location 2:** Downtown San Anselmo site is located on San Anselmo Creek approximately Latitude 37.9761°N, Longitude 122.5626°W. The street addresses are
634-636 San Anselmo Avenue, San Anselmo, CA 94960. The site is immediately east of the intersection of Tamalpais Avenue and San Anselmo Avenue. The Assessor’s Parcel Numbers are 006-102-28, 006-102-29 and 006-102-32.

PROJECT DESCRIPTION

The Project is limited to flood risk reduction activities at Location 1, the FDS Basin site, and Location 2, the Downtown San Anselmo site. The activities at Location 1 include the creation of a passive flood diversion basin. The activities at Location 2 include the removal of a building that spans San Anselmo Creek (hereafter, bridge-building). Detailed Project activities are described below. The Project will occur in two phases. Phase one will include the creation of the FDS Basin as a passive flood control structure and associated initial maintenance activities, and phase two will include the work at the Downtown San Anselmo site.

Location 1: At the FDS Basin site, the Project will create an approximately 550-foot-long, 350-foot-wide, and 13-foot-deep off-channel detention basin (FDS Basin) and associated system that diverts water from Fairfax Creek into the FDS Basin during 5-year or greater storm events to prevent downstream community flooding (Exhibits B and C). The FDS Basin will be located at a former plant nursery. Associated infrastructure with the plant nursery was removed previously. This work includes the following Activities A through K:

A. Excavating approximately 30,000 cubic yards of sediment in the floodplain and riparian habitat of Fairfax Creek to create the FDS Basin for an approximate storage volume of 35 acre-feet. The basin bottom will have a 0.5% slope toward the outlet at the southeast corner and will be vegetated with native species. The FDS Basin will be surrounded by an approximately 15-foot-tall perimeter levee with fencing.

B. Constructing an approximately 1,000-foot-long low-flow channel with multiple branches at the bottom of the FDS Basin, allowing for fish passage through the basin and back to Fairfax Creek. The trapezoidal channel will be approximately 6 feet wide at the top-of-bank, 3 feet wide at the base, and approximately 0.5 feet deep. The low-flow channel will connect to the 18-inch-diameter outlet pipe at the southeast corner of the FDS Basin, directing flow back to Fairfax Creek (Activity E).

C. Installing a 140-foot-long, 100-foot-wide side weir along Fairfax Creek and the southern perimeter of the FDS Basin, at the southwest corner of the FDS Basin at 16 Deer Creek Court upstream of the existing access bridge. The weir will be covered in articulated concrete block and seeded between the blocks with a locally sourced native seed mix. The weir crest height will be approximately 8 feet lower than the rest of the FDS Basin perimeter levee to allow stormwater to passively flow into the FDS Basin during high flows. Approximately 837 cubic yards of ½-ton rock riprap will be placed along the base of the side weir along approximately 150 linear feet of Fairfax Creek.
D. Installing an approximately 250-foot-long, 15-foot-wide articulated concrete block auxiliary weir along Fairfax Creek and the southern perimeter of the FDS Basin, between an existing upstream vehicle maintenance access bridge and proposed outfall pipes downstream (Activity E). The spaces between the articulated concrete blocks will be seeded with a local seed mix. The weir crest height will be approximately 3 feet lower than the rest of the FDS Basin perimeter levee to allow excess water in the FDS Basin to flow back to the creek rather than overtop the FDS Basin and flood neighboring residences. The auxiliary weir acts as an emergency back-up drain for the FDS Basin during extreme consecutive storm events. Approximately 3,750 square feet of ½-ton rock riprap will be placed on the FDS Basin bank adjacent to the auxiliary weir.

E. Installing two reinforced concrete pipe (RCP) FDS Basin outlet pipes with associated approximately 6-foot-long, 8-foot-wide, intermediate concrete vault, steel trash rack, and concrete inlet, that outfalls into Fairfax Creek downstream of the auxiliary weir (Activity D). One approximately 50-foot-long, 18-inch-diameter RCP will always be open to allow the FDS Basin to slowly drain after a flood event. The second approximately 200-foot-long, 36-inch-diameter RCP inlet will typically remain closed with a slide gate at the intermediate vault. The slide gate may be opened to allow the FDS Basin to drain more quickly back to Fairfax Creek. Both RCPs will have flap gates at the upstream ends to prevent flows from backing up into the basin from the downstream end during storm events. The dual 18-inch-diameter and 36-inch-diameter RCPs end at the intermediate concrete vault and transition to a single 36-inch RCP that outlets to Fairfax Creek. Upstream of the pipe inlets, the Project will install an approximately 5-foot-tall, 15-foot-wide fabricated steel trash rack to prevent the pipes from clogging with debris. The trash rack will be installed with approximately 5-foot tall concrete walls that attach to the concrete base of the pipe inlet at the southeast corner of the FDS Basin (Exhibit B). The 36-inch-diameter RCP will have a slide gate connected by a stem with a handwheel for manual opening and closing located at the intermediate concrete vault. The slide gate will remain in the closed position except when the FDS Basin must be drained faster than the single 18-inch pipe allows. Approximately 160 cubic yards of ½-ton and 2-ton rock riprap will be installed over 1,200 square feet of the bank of Fairfax Creek at the outlet of the 36-inch-diameter pipe.

F. Installing one approximately 15-foot-wide, 40-foot-long creek access ramp from the left bank floodplain and riparian habitat of Fairfax Creek near the auxiliary weir downstream of the existing access bridge, as identified in Activity D. This ramp will allow vehicular access to Fairfax Creek for ongoing maintenance associated with the FDS Basin system. The ramp will have an approximately 15% slope and an articulated concrete block surface seeded between the blocks with native grass seed. Access to the creek for maintenance activities upstream of the existing bridge will be from the side weir (Activity C).

G. Installing an approximately 750-foot-long interceptor channel V-ditch that follows the northern and eastern perimeter of the FDS Basin. The V-ditch will
connect to an existing earthen swale on the east side of the site and discharge into Fairfax Creek downstream of the FDS Basin. The V-ditch will be earthen and vegetated with native species, except for an approximately 40-foot-long segment in the northeast corner that will be lined with approximately 30 cubic yards of 150-pound rock riprap. The outfall at Fairfax Creek will be graded and rocked to match the elevation and material of Fairfax Creek. An additional approximately 25 cubic yards of mixed $\frac{1}{2}$-ton rock riprap will be placed in the ditch and along the bank of the ditch where it meets Fairfax Creek and the outlet outfall (Activity E).

H. Installing an approximately 480-foot-long fence along Sir Francis Drake Boulevard within the floodplain and riparian habitat of Fairfax Creek.

I. Removing an existing 1-inch-diameter water pipeline and associated supports that cross Fairfax Creek. The water pipeline will be capped off.

J. Removing 26 trees from the floodplain and riparian area of Fairfax Creek (see Table 1).

K. Maintaining the FDS Basin system for two years through large woody debris and sediment management (Exhibits D and E). Annually, the 1,500-foot-long segment of Fairfax Creek and Baywood Canyon Creek upstream of the FDS Basin diversion system will be monitored for large woody debris (LWD) that could accumulate on the side weir or within the FDS Basin. Removal or management of LWD will only occur for those pieces under 36 feet in length. LWD longer than 36 feet are considered too large to be mobilized and exported during high flows. Sediment accumulation is expected between the side weir and the outfall of the FDS Basin outlet pipes into Fairfax Creek, henceforth called the deposition reach, when flows are higher than the 5-year flood. Aggraded sediment will be removed from the channel bed in the deposition reach when the channel has aggraded by approximately 120 cubic yards of sediment, and during the dry season. Sediment will be stockpiled on-site in the FDS Basin and passively returned to Fairfax Creek downstream of the FDS Basin outlet pipe.

Location 2: The Downtown San Anselmo site activities, intended in part to mitigate impacts from the FDS Basin, include removing an existing bridge-building spanning San Anselmo Creek, restoring the stream bank, and constructing a new approximately 60-foot-long, 25-to-28-foot-wide free-spanning bridge across San Anselmo Creek (Exhibit F). This work includes the following Activities A through J:

A. Removing the bridge-building from San Anselmo Creek, including the approximately 6,100-square-foot concrete deck and two approximately 100-foot-long concrete abutment walls on the left bank.

B. Replacing the right bank approximately 100-foot-long concrete abutment wall with an approximately 75-foot-long, 20-foot-tall concrete cantilevered retaining wall to support the pedestrian plaza (Activity E) adjacent to San Anselmo Avenue; and constructing an approximately 11-foot-wide concrete footing approximately three feet below the streambed of San Anselmo Creek. Approximately 305 cubic yards
of rock riprap will be buried below the channel bed along the buried footing of the retaining wall.

C. Grading and stabilizing approximately 170 linear feet of the left bank. An approximately 20-foot-long section beneath the proposed pedestrian bridge (Activity G) will be laid back and graded to an approximately 1.5:1 slope. Within this 20-foot-long section, approximately 40 cubic yards of planted ½-ton rock riprap will be installed on 350 square feet of bank up to 3 feet in depth, and approximately 6 cubic yards of ½-ton rock riprap will be placed within 50 square feet at the top of bank up to 3 feet in depth. An approximately 15-foot-long section of the channel toe immediately upstream of the pedestrian bridge will be graded and approximately 7 cubic yards of 1-ton rock riprap will be installed within a 65-square-foot area. An approximately 85-foot-long section immediately downstream of the proposed pedestrian bridge (Activity G) will be laid back and graded to an approximately 1.5:1 slope. A rock toe consisting of approximately 70 cubic yards of ½-ton rock riprap will be installed approximately three feet below the streambed and extend up the bank approximately five feet above the streambed. The exposed rock riprap will be interplanted with native riparian plants. Approximately 1,600 square feet of Vegetated Soil Lifts (VSLs) will be installed above the rock toe. An additional downstream 50-foot-long section, below an existing stage (Activity H), will be graded and stabilized with an approximately 510 square-foot VSL.

D. Grading and stabilizing approximately 50 linear feet of the right bank below the existing kiosk. Approximately 13 cubic yards of 1-ton rock riprap will be installed along approximately 10 linear feet of the right bank to a depth of approximately 3 feet and extend up to the top of the bank. VSLs will be installed along the remaining 40 linear feet of the bank. The exposed bank rock riprap and VSLs will be planted with native riparian plants, including willows, alders, and dogwood.

E. Installing an approximately 100-foot-long pedestrian plaza along the top of the right bank and adjacent to San Anselmo Avenue. The portion of the plaza immediately above the right bank and retaining wall (Activity B) will consist of approximately 125 square feet of wooden decking and a guardrail. The approximately 3-foot-wide section of wooden decking closest to San Anselmo Creek will be approximately 1.5 feet lower than the rest of the deck. The side of the deck closest to San Anselmo Avenue will incorporate a removable floodwall system described further in Activity F. The rest of the pedestrian plaza consists of a 16-foot-long, 5-foot-wide concrete sidewalk immediately adjacent to San Anselmo Avenue.

F. Installing a removable floodwall barrier along the top of the right bank within the pedestrian plaza. Three approximately 1-foot-tall, 10-foot-long, 5-foot-wide concrete seat walls will be permanently installed at the edge of the wooden deck and cement portion of the pedestrian plaza. Each of the seat walls will be approximately 10 feet apart to allow for removable floodwall inserts to be placed during high flow events, creating a floodwall.
G. Installing an approximately 60-foot-long, 25-to-28-foot-wide free-spanning, timber-trussed, pedestrian bridge at the upstream end of the Downtown San Anselmo site. The bridge width varies along its length and is widest on the right bank where it meets the pedestrian plaza. The left bank side of the bridge will be approximately 20 feet wide and the right bank side approximately 28 feet wide. The upstream side of the bridge is adjacent to another existing bridge-building that will remain on site, with a narrow gap between the structures. The right bank concrete abutment will be approximately 45 feet wide and the left bank concrete abutment will be approximately 25 feet wide. The right bank abutment will be similar to the new retaining wall (Activity B) with a buried footing and approximately 33 cubic yards of buried rock riprap below the channel bed. The left bank abutment will be supported by a footing buried near the top of the left bank stabilization improvements.

H. Reconstructing the existing approximately 330-square-foot stage deck and maintenance path along the left bank. The stage deck and supporting piers will be removed to allow for creek access during the in-stream construction phases and will be replaced in-kind. The existing 6-foot-wide maintenance access path will be reconstructed to a 4-foot-wide path with timber stairs and a handrail along one side. Approximately 6 cubic yards of rock riprap will be placed on approximately 20 square feet of the landward side of the path. Approximately 14 square feet of existing rock riprap will be removed.

I. Modifying four existing storm drains that discharge into San Anselmo Creek.
   i. An existing 22-foot-long, 24-inch diameter RCP, on the left bank of San Anselmo Creek at the site of the new pedestrian bridge, will be replaced in-kind and slightly realigned so that the pipe outfall will discharge beneath the bridge.
   ii. A 10-foot segment of an existing 12-inch-diameter RCP on the right bank of San Anselmo Creek will be replaced where it extends through the replacement retaining wall. The storm drain will discharge on the buried footing and buried riprap in the channel (Activity B and G).
   iii. A 10-foot segment of an existing 24-inch-diameter RCP on the right bank of San Anselmo Creek near the remaining bridge-building and the new pedestrian bridge will be replaced where it extends through the pedestrian bridge abutment. The storm drain will discharge onto the buried footing and buried riprap in the channel (Activity B and G).
   iv. An existing 12-foot-long, 12-inch-diameter RCP on the left bank beneath the existing stage would be replaced with a new 25-foot long, 12-inch-diameter RCP. The storm drain will outlet into existing rock riprap beneath the stage.

J. Removing one riparian tree (see Table 1).
TABLE 1 Trees to be Removed

<table>
<thead>
<tr>
<th>Tree Species</th>
<th>Diameter at Breast Height Range (inches)</th>
<th>Number of Trees</th>
<th>Location (1-FDS Basin, 2-Downtown San Anselmo)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ash (Fraxinus sp.)</td>
<td>5-10</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Bigleaf maple (Acer macrophyllum)</td>
<td>10-25</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>California bay (Umbellularia californica)</td>
<td>5-10</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>California bay (Umbellularia californica)</td>
<td>10-25</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>California bay (Umbellularia californica)</td>
<td>&gt;25</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Coast live oak (Quercus agrifolia)</td>
<td>5-10</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Unknown non-native</td>
<td>10-25</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Unknown non-native</td>
<td>&gt;25</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Alder (Alnus sp.)</td>
<td>10-25</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Total 27

In total, the Project will temporarily impact approximately 0.61 acres of open water and riparian habitat on Fairfax Creek and approximately 0.13 acres of open water and riparian habitat on San Anselmo Creek, for a total of 0.74 acres of temporary impacts. All temporarily impacted areas will be restored and enhanced to pre-Project conditions or better.

The Project will permanently impact approximately 0.24 acres and 195 linear feet of open water and riparian habitat on Fairfax Creek and approximately 0.03 acres and 72 linear feet of open water and riparian habitat on San Anselmo Creek, for a total of 0.27 acres and 267 linear feet of permanent impacts. The Project will mitigate 0.05 acres and 45 linear feet of permanent impacts by restoring and enhancing San Anselmo Creek open water and riparian habitat through removal of the 0.10 acre and 90-linear-foot bridge-building and associated bank restoration. The Project will mitigate the remaining 0.22 acres and 222 linear feet of permanent impacts by restoring and enhancing 0.66 acres and 666 linear feet, for a total of 0.76 acres and 756 linear feet of mitigation for permanent impacts as outlined in Measure 3.2.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include:

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1 Updates to the tree removal table may occur in the Riparian Revegetation, Mitigation, and Monitoring Plan approved by CDFW (see Measure 3.2)
Northern spotted owl (*Strix occidentalis caurina*), California Endangered Species Act (CESA) and federal Endangered Species Act (ESA) listed as threatened

Central California Coast Steelhead (*Oncorhynchus mykiss irideus pop. 8*), ESA listed as threatened

California red-legged frog (*Rana draytonii*), ESA listed as threatened and California Species of Special Concern (SSC)

Foothill yellow-legged frog, Northwest/North Coast clade (*Rana boylii*), SSC

California giant salamander (*Dicamptodon ensatus*), SSC

Western pond turtle (*Emys marmorata*), SSC

Tomales roach (*Lavinia symmetricus ssp. 2*), SSC

Pacific lamprey (*Entosphenus tridentatus*), SSC

Riffle sculpin (*Cottus gulosus*), SSC

Pallid bat (*Antrozous pallidus*), SSC

Napa false indigo (*Amorpha californica var. napensis*), California Rare Plant Rank (CRPR) 1B.2

Congested-headed hayfield tarplant (*Hemizonia congesta spp. congesta*), CRPR 1B.2

Thin-lobed horkelia (*Horkelia tenuiloba*), CRPR 1B.2

Nesting birds

Riparian habitat

Aquatic habitat

Common aquatic and terrestrial species

Water quality

Fish passage

The adverse effects the project could have on the fish or wildlife resources identified above include:

- Loss of natural bed or bank
- Temporary and permanent loss of riparian habitat
- Change in contour of bed, bank, and channel
- Change in flow depth, width, or velocity
- Change in composition of channel materials
- Change in gradient of bed, channel, or bank
- Change in channel cross-section
- Degradation or aggradation of channel
- Colonization by exotic plant species
- Short term release of contaminants
- Long term release of contaminants
- Increased turbidity
- Increased sedimentation
- Restriction or increase in sediment transport
- Debris jams
- Debris transport impedance
• Loss of bank stability during construction
• Increased bank erosion during Project construction
• Soil erosion, compaction, and other disturbance to soil layer
• Change in floodplain composition
• Loss of aquatic and terrestrial wildlife species
• Temporary impediment to migration of aquatic and terrestrial species
• Disruption to nesting birds and other wildlife
• Deposit of material into the watercourse
• Disturbance from Project activities
• Accelerated channel scour
• Change in composition of channel materials
• Change to, or loss or decline of natural bed substrate
• Construction pits or trenches that can trap terrestrial organisms
• Temporary change in streamflow
• Diversion of water from, or around, activity site
• Dewatering
• Rewatering
• Change in flow depth, width, or velocity
• Flow restriction
• Change in channel form

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, 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 CDFW personnel, or personnel from another state, federal, or local agency upon request.

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.

1.3 Notification of Conflicting Provisions. Permittee shall notify CDFW 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, CDFW shall contact Permittee to resolve any conflict.
1.4 **Designer Oversight.** The Project designers or another designated qualified professional shall oversee the construction of the project to ensure all Project elements are being constructed at the correct locations, elevations, grades, and slopes. A field log shall be kept documenting the oversight and provided to CDFW upon request.

1.5 **Project Site Entry.** Permittee agrees that CDFW personnel may enter the Project site at any time to verify compliance with the Agreement.

1.6 **Notify CDFW Prior to Work.** The Permittee shall notify CDFW by email at least five working days prior to commencement of covered activities. See contact information below.

1.7 **No Trespass.** To the extent that any provisions of this Agreement provide for activities that require the Permittee to traverse another owner's property, such provisions are agreed to with the understanding that the Permittee possesses the legal right to so traverse. In the absence of such right, any such provision is void.

1.8 **Unauthorized Take.** The Permittee is required to comply with all applicable State and Federal laws, including the California Endangered Species Act (CESA) and Federal Endangered Species Act. This Agreement does not authorize the take\(^2\) of any State or Federal endangered or threatened species. Liability for any take or incidental take of such listed species remains the responsibility of the Permittee for the duration of the project. Any unauthorized take of such listed species may result in prosecution and nullification of the Agreement.

1.9 **Fish Passage.** The project shall be in compliance with Fish and Game Code section 5901 and shall not install or maintain any device or contrivance that prevents, impedes, or tends to prevent or impede, the passing of fish\(^3\) up and down stream.

1.10 **Designated Representative.** Before initiating ground-disturbing project activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this Agreement. The Permittee shall notify CDFW in writing 5 days prior to commencement of project activities of the Designated Representative’s name, business address, and contact information. Permittee shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this Agreement.

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\(^2\) Take, as defined in Fish and Game Code section 86, means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.

\(^3\) Fish, as defined in Fish and Game Code Section 45, means a wild fish, mollusk, crustacean, invertebrate, amphibian, or part, spawn, or ovum of any of those animals.
2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

Work Period and Design

2.1 Work Period. All work shall begin on or after June 15 and all work shall be completed by October 31. Revegetation work is not limited to this work window but must be completed within the same season as Project activities.

2.2 Work Period Modification. If a work period modification is needed, including beginning prior to June 15, the work may be permitted outside of the work period by a CDFW representative who reviewed the Project, or if unavailable, through contact with the Regional Office at (707) 428-2002. Permittee shall submit a written request for a work period variance on a week-by-week basis to CDFW. The work period variance request should consider the effects of noise, 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 period variances are issued at the discretion of CDFW. CDFW reserves the right to require additional measures to protect fish and wildlife resources as a condition for granting the variance. At minimum, the work period variance request shall:

1) Describe the extent of work already completed.
2) Detail the activities that remain to be completed.
3) Provide a National Weather Service forecast covering the time needed, up to one week, to complete a phase or activity.
4) Detail the time required to complete each of the remaining activities.
5) Provide photographs of both the completed and proposed work sites.
6) Include an assessment of additional biological impacts as a result of the work extension.

2.3 Conduct Work During Daylight Hours. Work is restricted to daylight hours (one hour after sunrise to sunset).

2.4 Work According to Documents. Except as they are contradicted by measures required by this Agreement, all work shall be conducted in conformance with the project description above and the avoidance, minimization, and mitigation measures provided in the notification package.

2.5 Work According to Plans. Final stamped engineered design plans shall be submitted to CDFW a minimum of 15 days prior to the start of Project activities, for review and written acceptance prior to Project start. The final plans shall be based on the Project design plans submitted to CDFW titled:

1) San Anselmo Flood Risk Reduction Passive Flood Diversion Storage Site
Weather Restrictions

2.6 Work Period in Dry Weather Only. Project work shall be restricted to dry weather, as allowed during the work period specified in Measure 2.1. The Permittee shall monitor forecasted precipitation. When a ¼-inch or more of precipitation is forecasted to occur, the Permittee shall stop work before precipitation commences. No Project activity may be started if its associated erosion control measures cannot be completed prior to the onset of precipitation. After any storm event, the Permittee shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sediment problems and take corrective action as needed. Seventy-two hour weather forecasts from the National Weather Service shall be consulted and work shall not resume until runoff ceases and there is less than a 30 percent forecast for precipitation for the following 24-hour period. Weather forecasts shall be documented upon request by CDFW.

Dewatering and Aquatic Species Capture and Relocation

2.7 Water Diversion and Capture and Relocation Plan. Work shall be performed in isolation from the stream. If water is present, then the Permittee shall develop a Water Diversion and Capture and Relocation Plan (Plan) for CDFW review and acceptance at least 30 days prior to the start of the Project. The Plan shall consider partial or full stream diversion and dewatering. The Plan should consider the use of coffer dams upstream and downstream of the work site and divert all flow from upstream of the upstream dam to downstream of the downstream dam, through a suitably sized pipe. If possible, gravity flow is the preferred method of water diversion. If a pump is used, it shall be operated at the rate of flow that passed through the site; pumping rates shall not dewater nor impound water on the upstream side of the coffer dam. Coffer dams shall be constructed as close as practicable upstream and downstream of the work area using clean gravel bags. The stacked gravel bags may be sealed with plastic sheeting. All coffer dam materials shall be removed from the stream upon project completion within a timely manner. Normal flows shall be restored to the affected creek immediately upon
completion of work at that location. If the coffer dams or stream diversion fail, they shall be repaired immediately. Diversion shall be conducted such that water at the downstream end does not scour the channel bed or banks. The Plan shall also address the capture and relocation of species that may be present in the dewatered area. Authorization of any other diversion method shall be at the discretion of CDFW. Water diversion activities shall not occur until frog habitat assessments and surveys have been completed and no foothill yellow-legged frogs have been found, unless otherwise approved by CDFW (see Measure 2.21).

2.7.1 Capture Methods. Capture methods may include dip nets. All nets shall be made of a soft braded nylon material that is non-abrasive. Mesh sizing shall be matched to species and the life stages likely encountered. Electrofishing shall not be used unless recommended by a Qualified Biologist and approved in writing by CDFW. Capture and handling of aquatic animals shall be minimized and the number of animals captured and moved at any one time shall be limited to the number that can be relocated without stress or injury.

2.7.2 Aquatic Animal Handling. Prior to handling animals, all hands and equipment shall be wetted down with stream water and shall be free of any materials including hand sanitizers, sunscreen, or insect repellent. No animals shall be handled with dry hands or dry equipment.

2.7.3 Live Wells or Holding Facilities. If live wells or holding facilities will be used during capture and relocation, the following shall be implemented:

- An aeration system shall be used in any live well or other holding facility. The aerator shall be operating prior to placing animals in it to ensure that sufficient oxygen is present during the adjustment period and to minimize the build-up of toxic carbon dioxide in holding waters. The aeration rate and the number of animals in each holding facility shall be managed such that the dissolved oxygen concentration shall be maintained above 6 parts per million.
- Water from the local collection site shall be used in live wells or other holding facilities during the loading and transport. At no time will chlorinated tap water be used.
- Live wells or other holding facilities shall be sufficiently sized to minimize stress.
- Dotted smartweed (Persicaria punctata) shall not be placed or allowed to enter live wells or holding facilities.
- Water temperatures within any live well or other holding facility shall be kept at or below water temperature at the collection site. Temperatures must be managed in such a way as to minimize stress; for example, floating a sealed bag of ice in each container.

2.7.4 Non-native Aquatic Organisms. No non-native animals captured shall be returned to the stream or released alive.
2.7.5 **Equipment Sterilization.** Before and after each relocation effort all equipment shall be properly sterilized to ensure it is free of aquatic pathogens or invasive species. Equipment sterilization shall follow prevention Best Management Practices such as those prepared by CDFW’s Northern Region, [https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=92821&inline](https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=92821&inline), or other methodology accepted by CDFW in writing.

2.8 **Screen Intake.** The pump intake apparatus shall be screened with a fine mesh screen. The screen shall be cleaned as needed. The following National Marine Fisheries Service (NMFS) fish screening requirements shall be implemented:

- A self-cleaning screen shall have at least 2.5 square feet of submerged screen material for each cubic foot per second (450 gallons per minute) of the maximum diversion rate.
- A screen which is not self-cleaning shall have at least 5 square feet of submerged screen material for each cubic foot per second of the maximum diversion rate.
- Round openings in the screen shall not exceed 3/32-inch diameter, square openings shall not exceed 3/32-inch measured diagonally, and slotted openings shall not exceed 0.069 inches in width.
- The screen may be constructed of any rigid woven, perforated, or slotted material that provides water passage while physically excluding fish. Screen material shall provide a minimum of 27% open area, but more open area is better. Stainless steel is recommended to minimize corrosion problems.
- The screen shall be designed to distribute the flow uniformly over the entire screen area. The screen face generally should be parallel to the flow of the stream.
- The screen shall be cleaned as frequently as necessary to prevent the approach velocity from exceeding 0.4 feet per second. The screen shall be kept in good repair and shall be used whenever water is being pumped. The applicant is advised to consult with NMFS to ensure that all their design criteria are being met.

2.9 **Dewater Work Site.** Once water has been diverted around the work area, the site shall be dewatered to provide an adequately dry work area. Any muddy or otherwise contaminated water shall be pumped to a settling tank, dewatering filter bag, upland area, or other CDFW-approved location prior to re-entering the creek.

2.10 **Qualified Biologist to Check Dewatered Area.** The Qualified Biologist shall check daily for stranded aquatic life as the water level in the dewatering area drops and until dewatering facilities are removed. All stranded native aquatic vertebrates in the dewatered areas shall be immediately relocated to the nearest suitable habitat. Capture and relocation shall be conducted in a manner that minimizes stress and injury to captured animals.
2.11 Groundwater Encountered. Nuisance groundwater encountered during excavation within the streambed shall be discharged at a location where it will infiltrate into the soil, resulting in no overland flow. Turbid water shall not be allowed to flow downstream.

General Wildlife Protection and Prevention

2.12 CDFW-Approved Qualified Biologist(s) and Monitor(s). At least 14 days prior to the start of Project activities, Permittee shall submit to CDFW for written approval, the names and resumes of all Qualified Biologists and Biological Monitors involved in conducting surveys and/or monitoring work.

- A Qualified Biologist is an individual who holds a bachelor degree from an accredited university and 1) is knowledgeable in relevant species' life histories and ecology, 2) can correctly identify relevant species, 3) has conducted field surveys for relevant species, 4) is familiar with relevant survey protocols, and 5) is knowledgeable of state and federal laws regarding the protection of sensitive species.

- A Biological Monitor is an individual who shall have academic and professional experience in biological sciences and related resource management activities as it pertains to this Project, experience with construction-level biological monitoring, be able to recognize species that may be present within the Project area, and be familiar with the habitats and behavior of those species.

2.13 Biological Monitor On-site. The Permittee or Qualified Biologist shall designate a person to monitor on-site compliance with all conditions of this Agreement. The Biological Monitor shall have the authority to halt Project activities in order to comply with the terms of this Agreement and otherwise avoid impacts to species and or habitats.

2.14 Training Session for Personnel. Permittee shall ensure that a CDFW-approved Qualified Biologist conducts an education program for all persons employed on the Project prior to performing covered activities. Instruction shall consist of a presentation by the designated Qualified Biologist that includes a discussion of the biology and general behavior of any sensitive species which may be in the area, how they may be encountered within the work area, and procedures to follow when they are encountered. The status of CESA and ESA listed species, including legal protection, penalties for violations, and Project-specific protective measures provided in this Agreement shall be discussed. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to on-site Project activity. Copies of the Agreement for this Project shall be maintained at the worksite with the Project supervisor. Permittee or Qualified Biologist shall prepare and distribute wallet-sized cards or a factsheet handout containing this information for workers to carry on-site. Upon completion of the program, employees shall sign an affidavit stating they attended the program.
and understand all protection measures. These forms shall be filed at the Permitee’s office and be available to CDFW upon request.

2.15 **Trenching.** At the end of each workday all trenches and holes greater than one foot deep shall be covered to prevent wildlife from entering. When trenches cannot be fully covered, an escape ramp shall be placed at each end of any constructed open trench to allow any wildlife that may have become entrapped in the trench to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degrees.

2.16 **Pipes, Hoses, and Similar Structures.** All pipes, hoses, or similar structures less than 12 inches in diameter shall be closed or covered to prevent animal entry. All construction pipes or similar structures greater than 2 inches in diameter stored at the Project site overnight shall be inspected thoroughly for wildlife before the pipe or similar structure is buried, capped, used, or moved.

2.17 **No Excavation in Stream.** No excavation shall occur in the portion of the stream bed where flowing water is present or anticipated during the seasonal work period.

2.18 **Refueling of Equipment.** Refueling of construction equipment and vehicles may not occur within 175 feet of any water body, or anywhere that spilled fuel could drain to a water body. Tarps or similar material shall be placed underneath the construction equipment and vehicles, when refueling, to capture incidental spillage of fuels. Equipment and vehicles operating in the project area shall be checked and maintained daily to prevent leaks of fuels, lubricants, or other liquids.

**Northern Spotted Owl Protection**

2.19 **Northern Spotted Owl Surveys.** No Project activities within 0.25 miles of northern spotted owl nesting habitat shall occur from March 15 to August 31, unless northern spotted owl surveys have been completed by a Qualified Biologist following the U.S. Fish and Wildlife Service’s (USFWS) *Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls*, dated (revised) January 9, 2012. Surveys shall be conducted in accordance with Section 9 of the survey protocol, *Surveys for Disturbance-Only Projects*. If breeding northern spotted owls are detected during surveys, a quarter mile no-disturbance buffer zone shall be implemented around the nest. Survey results shall be provided to CDFW and to the Spotted Owl Observations Database (https://wildlife.ca.gov/Data/CNDDB/Spotted-Owl-Info). No Project activities shall occur within the buffer zone until the end of breeding season, or a Qualified Biologist determines that the nest is no longer active, unless otherwise approved in writing by CDFW.

Alternate buffer zones may be proposed by a Qualified Biologist after conducting an auditory and visual disturbance analysis following the USFWS guidance,
Western Pond Turtle Protection

2.20 Western Pond Turtle Surveys. No more than two weeks prior to the commencement of ground-disturbing activities, a Qualified Biologist shall perform surveys for western pond turtles and their nests within aquatic and upland habitat at the Project site. Surveys shall encompass individual turtles and nest sites. An additional survey will occur within 48 hours prior to project start. If a pond turtle or nest is detected at any time CDFW shall be notified immediately. Survey results will be submitted to CDFW prior to construction activities. All western pond turtles observed on-site shall be avoided and allowed to leave the Project area of their own volition or may be relocated with prior written approval from CDFW. Any turtle nest sites shall be avoided with an appropriate buffer identified by a Qualified Biologist and accepted by CDFW. CDFW reserves the right to provide additional measures to this Agreement, such as a Pond Turtle Habitat Improvement Plan, if pond turtles or their nests are found.

Foothill Yellow-legged Frog Protection

2.21 Foothill Yellow-legged Frog Habitat Assessment and Surveys. If the Project area is dry, then at least two weeks prior to the commencement of ground-disturbing activities, the Project area and nearby vicinity, including a minimum of 500 feet upstream and downstream of the Project area, shall be assessed by a Qualified Biologist for the presence of foothill yellow-legged. For survey areas that are inaccessible, surveys shall be conducted using binoculars from an accessible vantage point and such areas shall be surveyed as completely as possible given access constraints. If habitat occurs, then no more than two weeks prior to ground-disturbing activities, the area will be surveyed by a Qualified Biologist, including searching cavities under rocks, within vegetation such as sedges and other clumped vegetation, and under undercut banks. If the Project area includes standing or flowing water, then the Permittee shall submit an appropriate survey methodology to CDFW at least 30 days prior to Project activities. The results of the survey and habitat assessment shall be emailed to CDFW (see Contact Information) for written acceptance prior to starting Project activities. If foothill yellow-legged frogs are encountered during the surveys or Project activities, the Project shall not proceed or all work shall cease until the frog, through its own volition, moves out of harm’s way or CDFW has provided permission in writing to proceed with the Project. The Permittee shall implement additional protection measures at the discretion of CDFW, such as an exclusion fence and/or a Foothill Yellow-Legged Frog Protection and Habitat Improvement Plan, if foothill yellow-legged frogs are found.
Bat Roost Protection

2.22 Bat Habitat Assessment. A Qualified Biologist shall perform a habitat assessment of all trees and other structures proposed for removal at least 120 days prior to starting work. If any of the trees or structures contain suitable bat roosting habitat (e.g., cavities, crevices, deep bark fissures, suitable canopy), then bat roost surveys shall be conducted pursuant to Measure 2.23, or bats shall be assumed to be present.

2.23 Bat Roost Survey and Exclusion Plan. Any roost habitat, including bridges, structures, and trees, shall be surveyed for bats by a Qualified Bat Biologist at least 90 days prior to the beginning of Project-related activities. If roosting bats are detected in bridges or structures, an associated bat exclusion plan shall be submitted to CDFW for approval and implemented. The plan shall recognize that both the maternity and winter roosting seasons are vulnerable times for bats and require exclusion outside of these times, generally between March 1 and April 15 or September 1 and October 15 when temperatures are sufficiently warm. Survey and exclusion plan implementation results shall be submitted to CDFW for written acceptance prior to Project construction activities.

2.24 Bat Habitat Removal. Removal of bridges or structures shall not start until the CDFW-approved Qualified Bat Biologist confirms that bats have left the site pursuant to the bat exclusion plan. Bat habitat shall be removed during seasonal periods of bat activity from approximately March 1 through April 15 and September 1 through October 15, unless: 1) the Qualified Biologist confirms bats are absent using a survey methodology approved in writing by CDFW, and CDFW accepts the survey results in writing, or 2) otherwise approved in writing by CDFW. Trees that may be occupied by bats shall be removed using the following two-day phased removal method: On the first day, under the supervision of a Qualified Biologist, all tree limbs not containing suitable bat roosting habitat (e.g., cavities, crevices, deep bark fissures) shall be removed with chainsaws only. The next day, the rest of the tree shall be felled/removed. If any injured or killed bats are observed while removing habitat, all removal activities shall cease immediately, and Permittee shall contact CDFW within 24 hours. In this event, habitat removal activities shall not resume until CDFW has provided written permission.

Nesting Bird Surveys, Prohibitions, and Buffers

2.25 Breeding Bird Nest Take Prohibition. Permittee shall avoid active nests occurring at or near the Project site. Permittee is responsible for complying with Fish and Game Code section 3503 et seq. and the Migratory Bird Treaty Act of 1918.

2.26 Nesting Bird Surveys. If construction, grading, vegetation removal, or other Project-related activities are scheduled during the nesting season, February 1 to August 31, a focused survey for active nests within a minimum of 500 feet from the Project site shall be conducted by a Qualified Biologist within 7 days prior to the beginning
of Project-related activities. For survey areas that are inaccessible, surveys shall be conducted using binoculars from an accessible vantage point and such areas shall be surveyed as completely as possible given access constraints. The results of the survey shall be sent to CDFW by email prior to the start of Project activities. Refer to Notification Number 1600-2020-0146-R3 when submitting the survey to CDFW. If an active nest is found, Permittee shall consult with CDFW regarding appropriate action to comply with Fish and Game Code. If a lapse in Project-related work of 7 days or longer occurs, another focused survey and if needed, consultation with CDFW, shall be required before Project work can be reinitiated.

2.27 Active Nest Buffers. If an active nest is found during surveys, Permittee or the Qualified Biologist shall consult with CDFW regarding appropriate action to comply with State and federal laws. Active nest sites shall be designated as “Ecologically Sensitive Areas” (ESA) and protected (while occupied) during Project work by demarking a “No Work Zone” around each nest site.

- Buffer distances for bird nests should be site-specific and an appropriate distance, as determined by a Qualified Biologist. The buffer distances should be specified to protect the bird’s normal bird behavior to prevent nesting failure or abandonment. The buffer distance recommendation should be developed after field investigations that evaluate the bird(s) apparent distress in the presence of people or equipment at various distances. Abnormal nesting behaviors which may cause reproductive harm include, but are not limited to, defensive flights/vocalizations directed towards Project personnel, standing up from a brooding position, and flying away from the nest. The Qualified Biologist and Biological Monitor shall have authority to order the cessation of all nearby Project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established.

2.28 Nesting Habitat Removal or Modification. No habitat removal or modification shall occur within the ESA-marked nest zone (see above measure) until the young have fully fledged and will no longer be adversely affected by the Project, as determined by a Qualified Biologist or Biological Monitor. Any trees or shrubs that are removed shall be “downed” in such a manner as to minimize disturbance to stable soil conditions.

Special-status Plant Protection

2.29 Special-status Plants Surveys. Where potential habitat exists, a Qualified Biologist shall conduct botanical surveys during the appropriate blooming period for all special-status plants that have the potential to occur on or adjacent to the Project site up to two seasons prior to the start of construction. Surveys should be conducted following Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities, prepared by CDFW, dated March 20, 2018. (https://nrm.dfg.ca.gov/LocalHandler.ashx)
Vegetation Protection and Prevention

2.30 Habitat Protection. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete the Project. Vegetation outside the construction corridor shall not be removed or damaged without prior consultation and approval of a CDFW representative.

2.31 Vegetation Marked for Protection. Prior to Project activities, the Permittee shall clearly mark all vegetation within the Project area that shall be avoided during Project activities.

2.32 Tree Drip Line. Construction materials, equipment storage, and parking areas shall be located outside the drip line of any preserved tree. Construction equipment shall not cause root compaction.

2.33 Riparian Tree Protection. For each existing tree with a greater than five-inch diameter (at breast height) within or adjacent to the work area, a critical root zone shall be established by the Qualified Biologist. The critical root zone shall extend from the trunk to the drip-line (i.e., the outer extent of the tree canopy) of each tree within the project area and shall be flagged or fenced off from work. Protection and avoidance of the critical root zone shall be emphasized during the on-site education program to avoid impacts. If work will be conducted within the root protection zone of a tree, then that tree shall be considered an “impacted tree” and the Permittee or Qualified Biologist shall monitor the tree for signs of mortality as a result of project. If the tree becomes injured or shows signs of mortality, additional revegetation actions shall be required.

2.34 Tree Removal. A total of 27 riparian trees may be removed (see Table 1). Any additional proposed tree removal shall be submitted to CDFW for review and written approval prior to removal.

2.35 Compensatory Mitigation. The Permittee shall mitigate for temporary and permanent impacts from the Project, including removed trees, as per Measure 3.1 and Measure 3.2.

2.36 Treat Exposed Areas. All exposed/disturbed areas and access points within the riparian zone left barren of vegetation as a result of the construction activities shall be restored by seeding with a blend of native erosion control grass seed. Seeded areas shall be mulched. Landscape fabric shall not be used. Revegetation shall be
completed as soon as possible after construction activities in those areas cease. Seeding placed after October 15 must be covered with broadcast straw, jute netting, coconut fiber blanket or similar erosion control blanket.

2.37 **Exotic Plants.** Permittee shall not plant, seed or otherwise introduce invasive exotic plant species. Prohibited exotic plant species include those identified in the California Invasive Plant Council's database, which is accessible at: [http://www.cal-ipc.org/ip/inventory/index.php](http://www.cal-ipc.org/ip/inventory/index.php).

2.38 **Control Invasive Species.** Permittee shall be responsible for monitoring and if needed, eradication of invasive exotic species that may occur within the Project area for a minimum of two years following construction. All revegetation efforts shall include local plant materials native to the Project area.

2.39 **Allowable Herbicide.** If herbicide use is necessary, only herbicides registered with the California Department of Pesticide Regulation shall be used. All herbicides shall be applied in accordance with regulations set forth by the California Department of Pesticide Regulation and according to label instructions. Only herbicides approved for use in aquatic environments are permitted. Care shall be taken to avoid herbicide contact with native vegetation, and it shall only be applied on calm days (wind speed less than 5 miles per hour) to prevent airborne transfer of herbicide. No herbicides shall be used where threatened or endangered species occur, unless otherwise approved in writing by CDFW.

2.40 **Disposal of Vegetation and Debris.** All removed vegetation and debris shall be moved outside the ordinary high-water mark prior to inundation by water. All removed vegetation and debris shall be disposed of according to state and local laws and ordinances.

**FDS Basin Maintenance and Monitoring**

2.41 **No Long-term Water Storage.** The FDS Basin shall never hold water diverted from Fairfax Creek for longer than 12 hours. During the wet season, the FDS Basin may sustain surface and groundwater that is recharged seasonally from precipitation events, comparable to Fairfax Creek water levels.

2.42 **Aquatic Species Monitoring and Rescue Plan.** To prevent aquatic species from being stranded in the FDS Basin during and after passive diversion activities, the Permittee shall provide an Aquatic Species Monitoring and Rescue Plan (Rescue Plan) to CDFW for written approval within 60 days of the effective date of this Agreement. The Rescue Plan shall include an on-site Biological Monitor during FDS Basin draining operations and identify aquatic species capture and relocation information, similar to what is required by Measure 2.7. The Rescue Plan shall remain in place a minimum of five passive diversion storm events. If stranded aquatic species are observed during any of these storm events, then the Rescue Plan will remain in place in perpetuity, unless otherwise approved by CDFW in
writing. If no stranded aquatic species are observed during the five storm events, then the Permittee may request that CDFW suspend or modify this requirement. Suspension or modification of the Rescue Plan is at the discretion of CDFW and must be approved in writing.

2.43 FDS Basin Monitoring. Upon completion of phase 1 of the Project, Permittee shall implement a 5-year monitoring plan to ensure the FDS Basin system is functioning properly and is passing fish appropriately. Monitoring shall include immediately after high flow periods when the FDS Basin is draining water back to Fairfax Creek. Annual reports shall be submitted to CDFW by January 31 each year describing the number of times the FDS Basin received water via the side weir, storm flows during passive diversion activities, elevation of water within the FDS Basin, obstructions or maintenance issues, Large Woody Debris maintenance, sediment maintenance, and any other relevant information.

2.44 Routine Maintenance Agreement. Monitoring and maintenance for Large Woody Debris (LWD) and sediment associated with the FDS Basin site pursuant to Measures 2.45 and 2.46 shall occur for a maximum of two years under this Agreement. The Permittee shall notify for and receive a Routine Maintenance Agreement from CDFW for the ongoing LWD and sediment maintenance associated with the FDS Basin site.

2.45 Large Woody Debris Maintenance and Monitoring. LWD maintenance and monitoring shall occur in accordance with the Large Woody Debris Management Plan – June 2021 (Exhibit D). Only LWD less than 36 feet long, short enough to be mobilized by flood flows, may be removed from the channel. Live tree removal as a preventative measure is not authorized under this Agreement without additional written approval from CDFW. Additional tree removal will require tree replacement plantings as described in Measure 3.1. Limbing or pruning of trees shall not remove more than 25% of the foliage of an individual tree in a single year.

2.46 Sediment Maintenance and Monitoring. Sediment maintenance and monitoring shall occur in accordance with the Preliminary Sediment Management Plan for Fairfax Creek at the Sunnyside Passive Flood Diversion Storage (FDS) Site (Exhibit E). Sediment removal shall occur during the work period identified in Measure 2.1 and during dry weather. Sediment may only be stored in the FDS Basin as identified in the FDS Basin plans (Exhibit C).

Bridge Design and Construction

2.47 Bridge to Pass 100-year Flood Flows. The Downtown San Anselmo pedestrian bridge shall be of sufficient height to allow unrestricted passage of water and debris during 100-year storms, or, shall be designed to exceed the passage allowance of immediately adjacent bridge-buildings. If adjacent bridge-buildings are elevated or removed, then the pedestrian bridge shall be detached and lifted, the foundation raised, and the bridge re-set and re-bolted at an elevation that
allows for 100-year storm flows plus sediment and debris to pass freely beneath the bridge. As long as the bridge remains, the Permittee is responsible for maintaining free-flowing conditions under the bridge and clearing of all debris. Substantial changes to the bed, channel, or bank necessary for maintenance may require separate notification under Fish and Game Code section 1602, subdivision (a).

2.48 Abutment Location. Abutments shall be located outside the stream banks and above ordinary high water, or shall replace existing stream bank abutments in-kind.

Concrete and Cement-based Products

2.49 Cement Based Products. All cement-based products (concrete, mortar, etc.) poured or applied wet onsite shall be excluded from the wetted channel or areas where they may come into contact with water for a period of 30 days after application. During that time the product shall be kept moist and runoff from the product shall not be allowed to enter the stream. Commercial sealants may be applied to the product surface or mixture where difficulty in excluding flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is cured.

2.50 Concrete – Primary Containment. The Permittee shall install the necessary containment structures to control the placement of wet concrete and to prevent it from entering the channel outside of those structures. No concrete shall be poured within the high flow line if the 15-day weather forecast indicates any day with a greater than 20% chance of rain.

2.51 Concrete – Designated Monitor. At all times when the Permittee is pouring or working with wet concrete there shall be a designated monitor to inspect the containment structures and ensure that no concrete or other debris enters into the channel outside of those structures.

Culvert Design and Construction

2.52 Culvert Design. The culvert design shall be:

- Adequately sized to convey the 100-year storm flow, or the appropriate design as approved by CDFW in writing, with a headwall to depth ratio that is able to sufficiently pass sediment loads.
- Properly aligned within the channel and otherwise engineered, installed and maintained, to resist washout and erosion of the stream bed, stream banks and/or fill.
- Designed to facilitate the transport of debris and sediment.
• Passable to fish as required under Fish and Game Code section 5901.

2.53 Culvert Backfill. Backfill material shall be free of tree limbs or other debris that could dent pipe or allow water to seep around pipe. The crossing backfill base and sidewall material shall be compacted before the pipe is placed in its bed. A minimum amount of fill material shall be used for the bed to reduce seepage into and along the fill.

2.54 Culverts Shall be Kept Open. Culverts shall be maintained and kept free flowing year-round for as long as they are in place. Substantial changes to the bed, channel, or bank necessary for maintenance may require separate notification under Fish and Game Code section 1602, subdivision (a).

2.55 Culvert Monitoring. Permittee shall monitor all culverts for a minimum five-year monitoring period to ensure culverts are functioning as intended and are not creating debris jams or excessive erosion downstream of culverts. Permittee shall contact CDFW of any excessive stream erosion or debris jams observed within and around culverts to determine appropriate remediation measures. At the discretion of CDFW, implementation of measures to address excessive streambed and bank erosion may require an amendment to this Agreement.

Rock Armoring

2.56 Rock Slope Protection - Limitations. Rock slope protection (i.e., RSP or riprap) shall not be used for armoring/protecting the bank if any of the following criteria apply:

• Rock slope protection could transfer erosive forces to the opposite bank or another area downstream;

• Rock slope protection would narrow or otherwise constrain the stream channel, limiting passage of peak flows and debris; or

• Installation of the rock would require removal of woody vegetation and/or trees over 4" DBH, unless otherwise permitted in this Agreement.

2.57 Rock Slope Protection. Permittee shall install angular, energy dissipating rock slope protection that is properly sized to withstand wash out during peak flows. 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.

2.58 Fill Voids in Rock Slope Protection. Permittee shall ensure that all voids and spaces within the riprap are filled with smaller rock, gravels, and native soil material, and/or willow cuttings. Cementitious grouts shall not be used.
2.59 **Geotextile Linings.** If non-biodegradable geotextile linings must be used to ensure the engineered stability of the rock slope protection, it shall be monitored for the life of the project to ensure that it is never exposed to the stream. If the geotextile fabric is exposed to the stream, CDFW must be notified, proper permits acquired, and the rock slope protection structure must be repaired immediately. This may require additional permits from CDFW.

**Erosion and Sediment Control**

2.60 **Erosion control.** At no time shall silt laden runoff be allowed to enter a river, stream, or lake or directed to where it may enter a river, stream, or lake. Erosion control measures shall be utilized throughout all phases of operation where sediment runoff from exposed slopes threatens to enter a river, stream, or lake. Erosion control measures, such as, silt fences, straw hay bales, gravel or rock lined ditches, water check bars, and broadcasted straw shall be used wherever sediment has the potential to leave the work site and enter the river, stream, or lake.

2.61 **Monofilament.** Permittee shall not use erosion control materials containing plastic monofilament netting (erosion control matting) or similar material containing netting within the project area due to documented evidence of amphibians and reptiles becoming entangled or trapped in such material. Acceptable substitutes include coconut coir matting or similar.

2.62 **Erosion Control Monitoring.** Permittee shall monitor erosion control measures during and after each storm event and repair and/or replace ineffective measures immediately.

2.63 **Disposal and Removal of Materials.** All removed spoils and construction debris shall be moved outside the work area prior to inundation by water. Spoil sites shall not be located within the stream channel or areas that may be subjected to stream flows, where spoil may be washed back into a stream, or where it may impact streambed habitat, aquatic or riparian vegetation. All removed material shall be disposed of according to State and local laws and ordinances.

**Equipment and Vehicles**

2.64 **Operating Equipment and Vehicle Leaks.** Any equipment or vehicles driven and/or operated adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that could be deleterious to aquatic and terrestrial life or riparian habitat.

2.65 **Stationary Equipment Leaks.** Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to the stream shall be positioned over drip pans. Stationary heavy equipment shall have suitable
containment to handle a catastrophic spill/leak.

2.66 **Equipment Storage.** Staging and storage areas for equipment, materials, fuels, lubricants, and solvents, shall be located outside of the stream channel and banks.

**Material Handling, Debris, and Waste**

2.67 **Stockpiled Materials.** Building materials and/or construction equipment shall not be stockpiled or stored where they may be washed into the water or cover aquatic or riparian vegetation. Stockpiles shall be covered when measurable rain is forecasted.

2.68 **No Dumping.** Permittee and all contractors, subcontractors, and employees shall not dump any litter or construction debris within the stream, or where it may pass into the stream.

2.69 **Pick Up Debris.** Permittee shall pick up all debris and waste daily.

2.70 **Wash water.** Water containing mud, silt, or other pollutants from equipment washing or other activities, shall not be allowed to enter a lake or flowing stream or placed in locations that may be subjected to high storm flows.

**Toxic and Hazardous Material**

2.71 **Toxic Materials.** Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into the stream or its tributaries shall be contained in watertight containers or removed from the project site.

2.72 **Hazardous Materials.** Debris, soil, silt, bark, slash, sawdust, rubbish, creosote-treated wood, 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, wildlife, or riparian habitat resulting from the project related activities shall be prevented from contaminating the soil and/or entering the Waters of the State.

**Spills and Emergencies**

2.73 **Spill Kits.** Prior to entering the work site, all field personnel shall know the location of spill kits and trained in their appropriate use.

2.74 **Spill of Material Deleterious to Fish and Wildlife.** In the event of a hazardous materials spill into a stream (e.g., concrete or bentonite), Permittee shall immediately notify the California Office of Emergency Services State Warning Center by calling 1-800-852-7550 and immediately provide written notification to CDFW by email at AskBDR@wildlife.ca.gov. Permittee shall take all reasonable measures to document the extent of the impacts and affected areas including...
photographic documentation of affected areas, injured fish and wildlife. If dead fish or wildlife are found in the affected area, Permittee shall collect carcasses and immediately deliver them to CDFW. Permittee shall meet with CDFW within ten days of the reported spill in order to develop a resolution including: site clean-up, site remediation and compensatory mitigation for the harm caused to fish, wildlife and the habitats on which they depend as a result of the spill. The Permittee shall be responsible for all spill clean-up, site remediation and compensatory mitigation costs. Spill of materials to waters of the state that are deleterious to fish and wildlife are in violation of Fish and Game Code section 5650 et. seq. and are subject to civil penalties for each person responsible. CDFW reserves the right to refer the matter to the District Attorney’s Office if a resolution cannot be agreed upon and achieved within a specified timeframe, generally six months from the date of the incident.

2.75 Spill Containment. All activities performed in or near a river, stream, or lake shall have absorbent materials designated for spill containment and cleanup activities on-site for use in an accidental spill. The Permittee shall immediately notify the California Emergency Management Agency at 1-800-852-7550 and immediately initiate the cleanup activities. CDFW shall be notified by the Permittee and consulted regarding cleanup procedures.

3. Compensatory Measures

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each measure listed below.

3.1 Tree Replacement. Any trees that were within the channel or riparian zone removed or impacted as a result of the Project shall be replaced pursuant to the below ratios, unless otherwise approved in writing by CDFW.

Oak trees:
- 4:1 replacement for trees 5 to 10 inches diameter at breast height (DBH)
- 5:1 replacement for trees greater than 10 inches to 15 inches DBH
- 10:1 replacement for trees greater than 15-inch DBH, which are considered old growth oaks

Replacement oaks shall come from nursery stock grown from locally sourced acorns, or from acorns gathered locally, preferably from the same watershed in which they are planted. The trees should be able to survive the last two years of the minimum five-year monitoring period without irrigation.

Any other trees shall be mitigated at the following ratios:
- 1:1 replacement for non-native trees
- 3:1 replacement for trees 5-inch DBH to 10-inch DBH
- 6:1 replacement for trees greater than 10-inch DBH
3.2 Riparian Revegetation, Mitigation, and Monitoring Plan. A Riparian Revegetation, Mitigation, and Monitoring plan (RMMP) shall be submitted to CDFW for acceptance within 60 days of the Effective Date of the Agreement. The RMMP shall: (1) describe the on-site restoration and enhancement of 0.74 acres that will be temporarily impacted; (2) describe and identify the in-watershed restoration and enhancement of a minimum of 0.76 acres and 756 linear feet of open water and riparian habitat, including 0.10 acres and 90 linear feet of restoration at the Downtown San Anselmo site, to provide compensatory mitigation for permanent impacts to 0.27 acres and 267 linear feet of open water and riparian habitat; and (3) be implemented the same year that impacts occur, unless otherwise approved in writing by CDFW. If restoration occurs at a later date, additional restoration activities may be required at the discretion of CDFW and shall be implemented by the Permittee.

Tree replacement ratios shall adhere to those identified in the measure above. The RMMP shall include a detailed native plant species palette and map showing plant spacing, and specific performance criteria, monitoring, adaptive management, and invasive species removal to allow for successful habitat creation and maintenance. To ensure a successful revegetation effort, all plantings shall be monitored and maintained as necessary for a minimum of five years. Each category of plantings (i.e., oaks, other native trees, understory vegetation) shall have a minimum of 80% survival at the end of the minimum monitoring period. If the survival requirements are not meeting these goals, the Permittee is responsible for replacement planting, additional watering, invasive exotic eradication, or any other practice, to achieve these requirements. Replacement plants shall be monitored with the same survival requirements for five years after planting.

3.3 Phytophthora. Permittee shall ensure that all plantings come from local nurseries implementing best management practices to avoid and minimize the spread of Phytophthora.

4. Reporting Measures

Permittee shall meet each reporting requirement described below.

4.1 Notification Prior to Work. Per Measure 1.6, Notify CDFW Prior to Work, at least 5 days prior to the start of Project activities, Permittee shall notify CDFW that work will commence.

4.2 Notification of Designated Representative. Per Measure 1.10, Designated Representative, at least 5 days prior to the start of Project activities, Permittee shall submit to CDFW the name, business address, and contact information of the Designated Representative.
4.3 **Engineer Stamped Design Plans.** Per Measure 2.5, Work According to Plans, at least 15 days prior to the start of Project activities, Permittee shall submit to CDFW the final stamped engineered design plans for review and acceptance.

4.4 **Water Diversion and Capture and Relocation Plan.** Per Measure 2.7, Permittee shall develop a Water Diversion and Capture and Relocation Plan (Plan) for CDFW review and acceptance at least 30 days prior to the start of the Project. The Plan shall consider partial or full stream diversion and dewatering and shall address the capture and relocation of aquatic species that may be present.

4.5 **Qualified Biologist Approval.** Per Measure 2.12, CDFW-Approved Qualified Biologist(s) and Monitor(s), no later than 14 days prior to Project activities Permittee shall submit to CDFW, for review and approval, the qualifications for the biologist(s) that shall oversee the implementation of the conditions in this Agreement and conduct surveys or monitoring work.

4.6 **Survey Reports.** Per Measures 2.19, 2.20, 2.21, 2.22, 2.23, 2.24, 2.26, and 2.29 survey results for nesting birds and all other sensitive species shall be submitted to CDFW for review and written acceptance prior to the start of work.

4.7 **Aquatic Species Monitoring and Rescue Plan.** Per Measure 2.42, Aquatic Species Monitoring and Rescue Plan, within 60 days of the effective date of this Agreement, Permittee shall submit an Aquatic Species Monitoring and Rescue Plan for FDS Basin operations to CDFW for review and written approval.

4.8 **FDS Basin Monitoring.** Per Measure 2.43, FDS Basin Monitoring, Permittee shall implement a 5-year monitoring plan to ensure the FDS Basin system is functioning properly and is passing fish. Annual reports shall be submitted to CDFW by January 31 each year describing the number of times the FDS Basin received flows from Fairfax Creek, the storm intervals during passive diversion activities, elevation of water within the basin, obstructions or maintenance issues, LWD and sediment maintenance (limited to two years under this Agreement), and any other relevant information.

4.9 **Monitoring Reports.** Permittee shall submit to CDFW a status report by January 31 every year until restoration goals identified in Measure 3.2 are accomplished. This report shall include the survival and percent cover of species planted and native species that have colonized the area. The number by species of plants replaced, an overview of the revegetation effort, and the method used to assess these parameters shall also be included. The report shall include photos from designated photo stations and other relevant information such as: a summary of invasive species control, methods used to remove non-native plants, culvert monitoring data, and a list of wildlife observed on-site. After CDFW’s review of the fifth-year monitoring report, if plantings have achieved the required success criteria, and culverts appear to be functioning as intended (Measure 2.55), CDFW shall email Permittee stating that the monitoring requirements have been satisfied.
4.10 Photographic Documentation of Work. Prior to commencement of work a minimum of eight (8) vantage points that offer representative views of each of the Project sites (FDS Basin site and Downtown San Anselmo site) and work areas shall be identified. The Permittee shall photograph the Project area from each of the vantage points, noting the direction and magnification of each photo. Upon completion of work, the Permittee shall photograph post-Project conditions from the vantage points using the same direction and magnification as pre-Project photos. A reference key shall be submitted with the photos describing the location of the photo, the direction of the view, and whether the photo is pre- or post-construction. All photos shall be submitted within 30 days of Project conclusion.

4.11 Notification to the California Natural Diversity Database. If any listed, rare, or special status species are detected during Project surveys or on or around the Project site during Project activities, the Permittee shall submit CNDDB Field Survey Forms to CDFW in the manner described at the CNDDB website (https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data) within five working days of the sightings. Copies of such submittals shall also be submitted to the CDFW regional office as specified below.

4.12 As-Builts. A Record of Construction (As-Built Plans) shall be submitted to CDFW within 60 days of completion of each phase of the Project.

CONTACT INFORMATION

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

To Permittee:

Hugh Davis, Associate Civil Engineer
Marin County Flood Control and Conservation District
3501 Civic Center Drive
San Rafael, CA 94903
(415) 473-4232
hdavis@marincounty.org
To Contact Person:

Leane Dunn
Environmental Science Associates (ESA)
1425 North McDowell Boulevard, Suite 200
Petaluma, CA 94954
(707) 800-2729
ldunn@esassoc.com

To CDFW:

Department of Fish and Wildlife
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, California 94534
Attn: Lake and Streambed Alteration Program – Amanda Culpepper
Notification #1600-2020-0146-R3
amanda.culpepper@wildlife.ca.gov

LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

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

SUSPENSION AND REVOCATION

CDFW 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 CDFW 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 CDFW 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 CDFW to issue the notice.
ENFORCEMENT

Nothing in the Agreement precludes CDFW 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 CDFW's enforcement authority or that of its enforcement personnel.

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 complying with, or 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. For example, if the project causes take of a species listed as threatened or endangered under the Endangered Species Act (ESA), such take will be unlawful under the ESA absent a permit or other form of authorization from the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

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 Fish and Game Code including, but not limited to, Fish and Game Code sections 2050 et seq. (threatened and endangered species), section 3503 (bird nests and eggs), section 3503.5 (birds of prey), section 5650 (water pollution), section 5652 (refuse disposal into water), section 5901 (fish passage), section 5937 (sufficient water for fish), and section 5948 (obstruction of stream).

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.

AMENDMENT

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and Permittee. To request an amendment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). Submit the form and fee to the CDFW regional office that serves the area where the project is located.
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 CDFW 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 CDFW a completed CDFW “Request to Amend Lake or Streambed Alteration” form and include with the completed form payment of the minor amendment fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). Submit the form and fee to the CDFW regional office that serves the area where the project is located.

EXTENSIONS

In accordance with Fish and Game Code section 1605, subdivision (b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement’s term. To request an extension, Permittee shall submit to CDFW a completed CDFW “Request to Extend Lake or Streambed Alteration” form and include with the completed form payment of the extension fee identified in CDFW’s current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with Fish and Game Code section 1605, subdivisions (b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code § 1605, subd. (f)). Submit the form and fee to the CDFW regional office that serves the area where the project is located.

EFFECTIVE DATE

The Agreement becomes effective on the date of CDFW’s signature, which shall be: 1) after Permittee’s signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable Fish and Game Code section 711.4 filing fee listed at https://www.wildlife.ca.gov/Conservation/CEQA/Fees.

TERM

This Agreement shall expire on December 31, 2025, 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 Fish and Game Code section 1605, subdivision (a)(2) requires.
EXHIBITS

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

A. Exhibit A. Figure 1 Project Location, prepared by CH2M, dated May 2020.
B. Exhibit B. Figure 1 Sediment Management Plan: Locations of SMP Activities, prepared by Stetson Engineers, Inc., dated June 15, 2021.
F. Exhibit F. San Anselmo Creek Park Flood Control Project, prepared by RHAA Landscape Architecture and Planning, dated October 30, 2019; San Anselmo Flood Risk Reduction Project Building Bridge No. 2, Phase II 90%, prepared by Stetson Engineers, Inc., Gei Consultants, California Infrastructure Consultancy, Geomorph Design, and Roth LaMotte Landscape Architecture, dated March 11, 2021.

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.

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 CDFW in accordance with Fish and Game Code section 1602.
CONCURRENCE

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

FOR MARIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

Hugh Davis
Associate Civil Engineer

10/1/2021

FOR DEPARTMENT OF FISH AND WILDLIFE

Craig J. Weightman
Environmental Program Manager

10/1/2021

Prepared by: Amanda Culpepper
Environmental Scientist

Date Sent: March 22, 2021
Date Revised: September 30, 2021
Attachment 4 – RWQCB Permit
CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER for:

San Anselmo Flood Risk Reduction Project, Marin County

Sent via electronic mail: No hard copy to follow

Effective Date: February 7, 2022

RM 438256
Place ID 866970
WDID# 2 CW438256

Applicant: Marin County Flood Control District
3501 Civic Center Dr.
San Rafael, CA 94903
Attn: Hugh Davis
Phone: (415) 473-4232
Email: hdavis@marincounty.org

Applicant’s Agent: Environmental Science Associates (ESA)
180 Grand Ave., Suite 1050
Oakland, CA 94612
Attn: Leane Dunn
Phone: (707) 800-2729
Email: ldunn@esassoc.com

Water Board Staff: Nicole Fairley
1515 Clay Street, Suite 1400
Oakland, CA 94612
Phone: (510) 622-2424
Email: nicole.fairley@waterboards.ca.gov
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### ORDER

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Order

This Clean Water Act (CWA) section 401 Water Quality Certification and Order (Order) is issued at the request of the Marin County Flood Control District (Permittee) for the San Anselmo Flood Risk Reduction Project (Project). We received the application for certification (Application) on May 22, 2020.

The Permittee has also applied to the U.S. Army Corps of Engineers (Corps), Regulatory Branch for coverage under a Nationwide Permit 13 (Bank Stabilization), pursuant to CWA Section 404 (33 USC 1344).

I. Project

The Project is located at two different sites within the larger Corte Madera Creek Watershed in Ross Valley, Marin County. Location 1 is the Flood Diversion and Storage (FDS) Basin site along Fairfax Creek at 3000 Sir Francis Drake Blvd, Fairfax (38.002286, -122.610339). Location 2 is the downtown San Anselmo Building Bridge Removal site over San Anselmo Creek at 634-636 San Anselmo Avenue (37.976107, -122.562403). The Project purpose is to reduce the risks related to both frequency and severity of flooding for vulnerable properties in Fairfax, San Anselmo, Ross, and Kentfield during severe flood events greater than the 5-year storm, while also incorporating environmental and recreational enhancements. To achieve this, the following Project activities will be implemented to reduce peak flood discharge and store floodwater that would otherwise overtop the creek and flood properties in the floodplain.

Location 1: FDS Basin

A 550-foot long, 350-foot wide, and 13-foot deep off-channel detention basin (FDS Basin) will be constructed in uplands adjacent to Fairfax Creek, along with a passive diversion structure that will divert water from Fairfax Creek into the FDS Basin during 5-year or greater storm events. This basin will store floodwaters to reduce the risk of downstream community flooding in downtown Fairfax. The following will be implemented at this site:

a. Excavate approximately 30,000 cubic yards (CY) of sediment in the floodplain/riparian habitat of Fairfax Creek and adjacent uplands to create the FDS Basin with approximately 35 acre-feet of storage volume. The basin bottom will have a 0.5 percent slope towards the outlet at the southeast corner, will be vegetated with native species, and will be surrounded by an approximately 15-foot-tall perimeter levee with fencing;

b. Construct a low flow channel of approximately 1,000 linear feet (LF) with multiple branches at the bottom of the FDS Basin that connects to the dual outlet pipes at the southeast corner of the basin. This trapezoidal channel will be approximately 6-feet wide, top of bank to top of bank, 3 feet wide at the bed, and 0.5 feet deep, and will facilitate fish passage through the basin and back to Fairfax Creek;
c. Install a 140-foot long, 100-foot wide inlet side weir along Fairfax Creek and the southern perimeter of the FDS Basin, between an existing vehicle maintenance access bridge and 16 Deer Creek Ct. The weir surface will be constructed of articulated concrete blocks held together with interconnected wire within the concrete and open cells that allow for native seeding and herbaceous vegetation growth throughout the weir surface. The weir crest height will be approximately 8 feet lower than the rest of the FDS Basin perimeter levee to allow floodwater to passively flow into the basin during high flows. Approximately 837 CY of ½-ton rock slope protection will be placed along 150 LF of the base of the side weir in Fairfax Creek to prevent erosional knickpoints from forming around the weir structure;

d. Install a 250 LF, 15-ft wide articulated concrete block auxiliary weir outside of the floodplain of Fairfax Creek along the southern perimeter of the FDS Basin, downstream of the inlet weir and access bridge, but upstream of the basin outfall pipes. The weir crest height will be approximately 3 feet lower than the rest of the basin perimeter levee so excess water in the basin during flood events can flow back into the creek to maintain the freeboard needed adjacent to neighboring properties;

e. Install two FDS Basin outlet pipes with associated steel trash rack and concrete inlet, and rocked outfall that conveys stored floodwaters from the basin into Fairfax Creek downstream of the auxiliary weir. One 50 LF, 18-inch diameter reinforced concrete pipe (RCP) will convey flow from the basin into an intermediate vault that would always remain open to allow the basin the passively fill during flood events and slowly drain the basin after a flood event. One 200 LF, 36-inch diameter RCP will be installed parallel to the 18-inch pipe and extending further to outfall into Fairfax Creek. This pipe will remain closed with a slide gate at the intermediate vault to allow the basin to detain floodwater and as needed, the gate will be opened to drain the basin more quickly back into the creek. These pipes will include flap gates to prevent creek flow from backing up into the basin and a 5-ft tall, 15-ft wide, fabricated steel trash rack will be installed upstream of the pipe inlets to prevent the pipes from clogging with debris. The trash rack will be installed with 5-ft tall concrete walls that attach to the concrete base of the pipe to make up the inlet structure. At the outlet in Fairfax Creek, approximately 160 CY of ½-ton and 2-ton rock will be installed on 1,200 square feet (sf) if the bank and bed to prevent erosion;

f. A creek access ramp will be constructed from the left bank of Fairfax Creek near the auxiliary weir downstream of the existing access bridge. This ramp will be 15-ft wide and 40-ft long, constructed with articulated concrete block surface, and allow vehicular access to the creek for ongoing maintenance associated with the FDS Basin;

g. Stormwater from surrounding open space will be collected in a 750 LF interceptor stormwater V-ditch that follows the northern and easter perimeter of the basin and discharges into Fairfax Creek downstream of the
diversion basin. This V-ditch will be constructed in uplands, will be earthen and vegetated with native species for the majority of its length and discharges into Fairfax Creek adjacent to the basin outfall pipe. A 40 LF section of the ditch will be rock lined for added protection where the ditch travels at a slightly steeper slope down the side of the basin’s perimeter levee. The ditch outfall at Fairfax Creek will have 25 CY of ½-ton rock installed to provide a smooth transition and prevent erosion;

t. A 480 LF fence will be installed along Sir Francis Drake Boulevard within the floodplain/riparian habitat of Fairfax Creek;
i. To install the weirs and other Project components along Fairfax Creek, 33 riparian trees must be removed;

Location 2: Downtown San Anselmo Bridge-Building Removal

An existing bridge-building that spans San Anselmo Creek is currently exacerbating flood risk due to the undersized box culvert-shaped segment foundation that is obstructing flow. The bridge-building consists of a base concrete “bridge and deck” spanning San Anselmo Creek with a single-story, 3,000 sf wood-frame and masonry building. The structure is approximately 60-ft long and 90-ft wide and the building deck foundation is supported on concrete abutment walls, piers, and footings in the creek bed. Removal of this bridge-building and its foundational structure will reduce the frequency and severity of overbank flooding onto San Anselmo Avenue by increasing channel capacity at this location and will restore valuable aquatic habitat within San Anselmo Creek and its riparian corridor. A new free spanning pedestrian bridge will be installed to connect to a pedestrian plaza to enhance recreational viewing and usage of the Creekside Park. The following specific work activities will be implemented at this site;

j. Remove the bridge-building from San Anselmo Creek, including the approximately 6,100 sf concrete deck and two approximately 100-ft-long concrete abutment walls on the left bank;
k. Replace the right bank’s existing 100 LF concrete abutment wall with a 75 LF, 20-ft-tall concrete cantilevered retaining wall to support the pedestrian plaza (Activity n) adjacent to San Anselmo Avenue. An 11-ft-wide concrete footing will be constructed approximately three feet below the streambed of San Anselmo Creek. Approximately 305 cubic yards of filter fabric wrapped riprap would be buried below the channel bed along the buried footing for the retaining wall;
l. Approximately 170 LF of the left bank will be graded and stabilized following the removal of the retaining walls. A 20 LF section beneath the proposed pedestrian bridge (Activity o) will be laid back to a 1.5:1 slope. Within this section, approximately 350 sf of planted ½-ton riprap will be installed on the bank and approximately 50 sf of ½-ton riprap will be placed at the top of bank. A 15 LF section of the channel toe immediately upstream of the pedestrian bridge will be graded and 65 sf of 1-ton rock riprap will be
installed. An 85 LF section immediately downstream of the proposed pedestrian bridge will be laid back and graded to an approximately 1.5:1 slope. A rock toe consisting of 425 sf of ½-ton riprap will be installed approximately three feet below the streambed and extend up the bank approximately five feet above the streambed. The exposed riprap will be interplanted with native riparian plants. Approximately 1,600 square feet of vegetated soil lifts (VSLs) will be installed above the rock toe. An additional downstream 50 LF section, below an existing stage (Activity p), will be graded and stabilized with an approximately 510 sf VSL;

m. Approximately 50 LF of the right bank below the existing kiosk will be graded and stabilized. This section will include approximately 10 LF of interplanted 1-ton riprap that will be installed approximately 3 feet deep and extend up to the top of the bank to provide a smooth transition from the upstream replacement retaining wall (Activity k) to natural bank. Downstream from the rock transition, VSLs will be installed on the remaining 40 LF of bank. The exposed bank riprap and vegetated soil lifts will be interplanted with native riparian plants, including willows, alders, and dogwood;

n. Install a pedestrian plaza along 100 LF of the top of the right bank and adjacent to San Anselmo Avenue. This portion of the plaza, immediately above the right bank and proposed retaining wall (Activity k), will consist of approximately 125 sf of wooden decking and a guardrail. The side of the deck closest to San Anselmo Avenue will incorporate a removable floodwall system that consist of removal floodwall inserts that can be installed on 3, 1-ft-tall concrete seat walls located at the edge of the deck;

o. At the upstream end of the site, a 60-ft-long, timber-trussed, pedestrian bridge with variable width along its length will be installed. The left bank side of the bridge will be approximately 20 ft wide, and the right bank side is approximately 28 ft wide. The right bank abutment is 45 LF and would be similar to the replacement retaining wall (Activity k) with a buried footing and approximately 33 CY of buried riprap below the channel. The 25 LF left bank abutment would be supported by a footing buried near the top of the left bank stabilization improvements (Activity l);

p. Reconstruct the existing 330 sf stage deck and maintenance path along the left bank. The stage deck and supporting piers will be removed to allow for creek access during the in-stream construction phases and will be replaced in-kind. The reconstructed maintenance access path will be 4 ft wide with timber stairs, a handrail along one side, and approximately 6 CY of rock along one side;

q. Four existing storm drains that discharge into San Anselmo Creek will be modified to accommodate the Project by replacing or realigning the outfall pipe section following removal or replacement of the bank structures; and,
One mature alder tree will be removed to accommodate this component of the Project.

II. Impacts to Waters of the State

If effective best management practices (BMPs) are not implemented during construction, waters of the state may be impacted by increased erosion and sedimentation, and/or discharging debris and other waste materials. The Project will impact a total of 1 acre (1,629 LF) of waters of the State, 0.27 (267 LF) acres of which are permanent fill impacts. Of that total, impacts to Fairfax Creek at Project Location 1 include 0.24 acres (195 LF) of permanent fill impact and 0.61 acres (1,160 LF) of temporary impacts. Impacts to San Anselmo Creek at Project Location 2 include 0.03 acres (72 LF) of permanent fill impacts and 0.13 acres (202 LF) of temporary impacts. To complete the Project, 34 existing riparian trees will be removed from the riparian corridor.

III. Mitigation

During construction, the Permittee will avoid and minimize impacts to waters of the State by implementing appropriate and effective BMPs as described in the Application and in accordance with the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009-DWQ, as amended, and as may be subsequently reissued). These include, but are not limited to, implementing the Temporary Dewatering and In-Channel Work Plan as described in the application to avoid impacts to the wetted channel during construction, implementing the invasive species prevention plan to clean equipment and ensure invasive species are not spread by the Project, native riparian vegetation will be salvaged and replanted following construction and all areas disturbed during construction will be replanted or reseeded with native vegetation under guidance of a qualified biologist.

The Project has been designed to avoid and minimize impacts to the maximum extent by incorporating aquatic habitat restoration and enhancement components. The FDS Basin at Location 1 includes the creation of 0.39 acres (323 LF) of aquatic habitat. The Bridge Building removal at Location 2 will restore 0.10 acres (90 LF) of aquatic habitat by removing the channel spanning structure and restoring the banks. All temporarily impacted areas of the Project, totaling 0.73 acres of waters of the State, will be restored and enhanced with biotechnical plantings and native revegetation. The proposed removal of 34 riparian trees will be mitigated through the installation of a minimum of 231 native riparian trees. Mitigation will be implemented in accordance with the Final Habitat Restoration and Monitoring Plan, as required by Condition 10 to be submitted no later than 60 days following the issuance of this Certification. Overall, the Project will restore 0.49 acres (413 LF) of on-site stream and riparian habitat to fully compensate for 0.27 acres (267 LF) of permanent impacts.
IV. California EcoAtlas

Regional, state, and national studies have determined that tracking of mitigation and restoration projects must be improved to better assess the performance of these projects, following monitoring periods that last several years. To effectively carry out the State’s Wetlands Conservation Policy of no net loss to wetlands, the State needs to closely track both losses and successes of mitigation and restoration projects affecting wetlands and other waters of the State. The Water Board must also track project performance in Bay Area creeks subject to routine repair and maintenance activities, such as recurring instabilities. Therefore, we adopted the digital interactive mapping tool called EcoAtlas.\(^1\) 

\(^1\)EcoAtlas is a web-based tool that integrates maps, project plans, site conditions, restoration efforts, and other elements on a project-by-project basis based on data inputs. Accordingly, we require the Permittee to upload their Project information to EcoAtlas with the Project Tracker tool at https://ptrack.ecoatlas.org. The California Wetlands Monitoring Workgroup developed EcoAtlas and maintains detailed instructions for Project Tracker on its website at https://ptrack.ecoatlas.org/instructions.

V. California Environmental Quality Act (CEQA)

On September 18, 2018, the Permittee, as lead agency, adopted a Mitigated Negative Declaration (State Clearinghouse (SCH) No. 2017042041) for the Project and filed a Notice of Determination (NOD) at the SCH on September 19, 2018. The Water Board, as a Responsible Agency under CEQA, has reviewed the project CEQA documents and finds that the Project’s significant environmental effects that are within the Water Board’s purview and jurisdiction have been identified and will be mitigated to less-than-significant levels. Specifically, significant impacts pertaining to wetland and aquatic habitat and water quality will be mitigated to less-than-significant levels through implementation of mitigation measures identified in the CEQA documents and the mitigation identified above, all of which are required to be implemented and reported on by this Certification.

VI. Conditions

The Water Board independently reviewed the Project record to analyze impacts to water quality and the environment and designated beneficial uses within the Project’s watershed. In accordance with this Order, the Permittee may proceed with the Project under the following terms and conditions:

General Conditions

1. The Project shall be constructed in conformance with the Project description provided in the Application. The Permittee shall fully comply with engineering plans, specifications, and technical reports submitted in the Application or required as part

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of this Order. Any changes to information provided in the Application must be submitted to the Water Board and receive Executive Officer approval before the changes may be implemented.

2. Disturbance or removal of vegetation shall be minimized. The site shall be stabilized through incorporation of appropriate BMPs, including the successful reestablishment of native vegetation to enhance wildlife habitat values, and to prevent and control erosion.

3. No equipment shall be operated in stream channels or other waters where there is flowing or standing water. Fueling, cleaning, or maintenance of vehicles or equipment during construction shall not take place within any areas where an accidental discharge to waters of the State may occur.

4. The Project shall implement all appropriate BMPs as described in the Application, including limiting work to the allowable dry season work window of June 15 to October 15. If construction is not completed by October 15, the Permittee shall comply with conditions 5-7 below.

5. Prior to the end of the originally certified construction work window, the Permittee shall provide a Rain Event Action Plan to the Water Board for review and approval. This shall include a list of BMPs, avoidance and minimization measures, and winterization measures that will be implemented to stabilize the site if a storm event is forecasted during the extended work period.

6. The Permittee shall submit a written request for a work period variance to the Water Board for every week construction must continue past the original work window. Variances may be requested for up to one week at a time, and work shall not continue until a variance has been approved by Water Board staff. The variance request should address the potential effects of noise, 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. The Water Board reserves the right to require additional measures as a condition for granting a variance if impacts to aquatic resources and water quality can be further avoided or minimized. At a minimum, the variance request shall:

- Describe the extent of work already completed;
- Detail the activities that remain to be completed;
- Provide a National Weather Service forecast covering the time needed, up to one week, to complete a phase or activity;
- Detail the time required to complete each of the remaining activities;
- Provide photographs of both the completed and proposed or in-process work sites; and
- Include an assessment of additional aquatic habitat and water quality impacts as a result of the work extension and describe the measures to be implemented to avoid and minimize those potential impacts.

7. Project work shall be restricted to dry weather and the Permittee shall monitor forecast precipitation. When 1/4-inch or more of precipitation is forecasted to occur, the Permittee shall stop work and implement the Rain Event Action Plan before precipitation commences. No Project activity may be started if its associated water quality control measures cannot be completed prior to the onset of precipitation, or continued if its associated water quality control measures have not been fully implemented. After any storm event, the Permittee shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sediment problems and take corrective action as needed. The 72-hour weather forecasts from the National Weather Service shall be consulted and work shall not resume until runoff ceases and there is less than a 30 percent forecast for precipitation for the following 24-hour period. Weather forecasts shall be submitted to the Water Board upon request.

8. No unauthorized construction related materials or wastes shall be allowed to enter into or be placed where they may be washed by rainfall or runoff into waters of the State. When construction is completed, any excess material shall be removed from the work area and any areas adjacent to the work area where such material may be discharged to waters of the State.

9. The Permittee shall obtain coverage for the Project under the General Permit for Discharges of Storm Water Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ (Construction General Permit), as amended, and as subsequently may be reissued.

Mitigation

10. The Permittee shall submit a Final Habitat Restoration and Monitoring Plan (Final HRMP), acceptable to the Executive Officer, no more than 60 days from the issuance of this Order. The Final HRMP will include the mitigation activities as described in the Draft Habitat Restoration and Monitoring Plan (Draft HRMP), dated August 2021, and will incorporate the following additional items needed to complete the HRMP:

a. Finalized figures referenced in the Draft HRMP as Attachments 1 & 2, shall identify the areas of proposed creation, restoration, and/or enhancement of waters of the State that will sufficiently compensate for the Project's permanent impacts at a 2:1 mitigation ratio. This shall include designs, depict the area and LF of the type of mitigation, and the mitigation location relative to the Project sites;

b. Finalized planting plan that depicts the location of the proposed 231 replacement tree plantings relative to a stream channel. Mitigation for riparian tree removals shall be implemented within riparian habitat adjacent to a stream; and,
c. Annual performance criteria (including interim years) for all plantings that are specific to the species growth characteristics to monitor revegetation success and identify when adaptive management actions are needed to ensure final performance criteria are met. All plantings shall be monitored for a minimum of 5 years and for at least 3 years following the cessation of irrigation. The irrigation approach shall be revised to reflect this. Performance criteria shall include percent survival for tree and shrub container plantings, percent cover for biotechnical live stem plantings, and percent cover of invasive species rated “high” by Cal-IPC.

11. To mitigate for 0.73 acres (1,362 LF) of temporary impacts to stream habitat, the Permittee shall restore temporarily disturbed areas by implementing post construction erosion control, installing native riparian vegetation and tree replacements, and biotechnical bank stabilization in accordance with the Final HRMP, as conditioned above. The Permittee shall restore all areas of temporary impacts to waters of the State and all upland areas temporarily impacted that could result in a discharge to waters of the State.

12. If restoration of temporary impacts to waters of the State is not completed within one year of the impacts, additional compensatory mitigation shall be required to offset temporal loss of waters of the State.

13. To mitigate for 0.27 acres (267 LF) of permanent impacts to stream and riparian habitat, the Permittee shall restore 0.10 acres (90 LF) of San Anselmo Creek through the removal of the Bridge Building and restoration of the creek banks and shall create and restore 0.39 acres (323 LF) of stream and riparian habitat within the FDS Basin and along Fairfax Creek in accordance with the Finalized HRMP, as required by condition 10 above.

14. Compensatory mitigation for permanent impacts shall be constructed within one year of authorized impacts.

Monitoring and Reporting

15. The Permittee shall input Project information to EcoAtlas within 14 days from the date of this Order, consistent with Certification Section IV. The Project information shall be added to the Project Tracker tool in EcoAtlas online at https://ptrack.ecoatlas.org. Instructions for adding information to EcoAtlas are available at https://ptrack.ecoatlas.org/instructions, or by contacting the San Francisco Estuary Institute by email at ptrackadmin@sfei.org, or the Water Board case manager listed on the cover page of this Order. The Executive Officer may grant an extension to the 14-day deadline if the Permittee submits a request in writing to the Water Board case manager listed on the cover page of this Order. The extension request may be submitted via electronic mail.

16. A Final Large Woody Debris (LWD) Management Plan, acceptable to the Executive Officer, shall be submitted to the Water Board prior to the implementation of any tree removals or vegetation maintenance that is not directly related to Project construction. A
Draft *LWD Management Plan*, dated June 2021, was included with the application to present the framework for management of LWD along a 1,500 LF reach of Fairfax Creek and Baywood Canyon Creek, extending from the diversion structure to the upstream Baywood Canyon Road culvert (LWD Management Reach), to ensure potential wood accumulation does not significantly impact the FDS Basin performance. The Final LWD Management Plan shall incorporate the following additional items:

a. A comprehensive alternative analysis, in consultation with the Water Board, of LWD management strategies that could reduce LWD removal and disturbance;

b. The *Draft LWD Management Plan* proposes to monitor LWD transport throughout the 2021-22 wet season to document existing LWD movement, hazardousness, and the corresponding flow characteristics of storm events that move them into the FDS Basin reach. The results of this monitoring shall be included in the Final LWD Management Plan, shall access the potential hazard of LWD to FDS operations, shall be incorporated into the evaluation of alternative management strategies, and shall inform future LWD management and monitoring actions;

c. A framework for mitigating impacts of the LWD management actions on riparian trees and the functions they provide for habitat and water quality. This may include tree replacement ratios, monitoring, and LWD augmentation strategies; and

d. A LWD Adaptive Management Plan shall be prepared as a “living document” to be updated annually and shall incorporate the findings of the annual LWD surveys. This shall include: 1) a LWD inventory and recommended corrective actions; 2) the technical basis for the need to implement corrective actions; 3) an assessment of riparian canopy and habitat impacts resulting from corrective actions; 4) the potential need for further actions based on recent inspections and monitoring; 5) proposed mitigation actions to compensate for riparian impacts; and 6) any proposed changes to future field surveys and adaptive management approach. Following Executive Officer approval of the Final LWD Management Plan, the Permittee shall submit the LWD Adaptive Management Plan by *June 1st* of each year if corrective actions are recommended for that year. The Permittee may implement corrective actions upon receiving written acceptance by the Executive Officer, and not before.

17. The Permittee shall submit a Commencement of Construction Report at least seven days prior to start of initial ground disturbance activities. The Report shall reference *SOC_438256_San Anselmo Flood Risk Reduction* and shall be sent via email to RB2-401Reports@waterboards.ca.gov, or by mail to the attention of 401 Certifications Reports (see address on the letterhead).

18. No later than 30 days after completing Project construction activities, the Permittee shall submit, acceptable to the Executive Officer, a Notice of Project Completion. The Notice shall include the date Project construction activities were completed, an As-Built Report, and reference *NOC_438256_San Anselmo Flood Risk Reduction*. The Notice shall be sent via email to RB2-
19. To verify that the Project is performing as intended, the Permittee shall perform geomorphic and vegetation monitoring for a minimum of 5 years in accordance with the Final HRMP as required by Condition 10. This shall include annual inspections, data collection, and photo documentation of percent survival of container plantings, percent cover of live stem plantings, and percent cover of invasive species rated “high” by Cal-IPC. Monitoring shall continue for at least three years following cessation of irrigation. The annual performance criteria shall be the following:

   Year 1: At least 90 percent survival of container plantings and live stem plantings;
   Year 2: At least 85 percent survival of container plantings and live stem plantings;
   Year 3: At least 85 percent survival of container plantings and at least 40 percent cover of live stem plantings;
   Year 4: At least 85 percent survival of container plantings and at least 50 percent cover of live stem plantings;
   Year 5: At least 80 percent survival of container plantings and at least 60 percent cover of live stem plantings;

Geomorphic monitoring shall consist of annual visual inspections and photo monitoring of any observed signs of erosion or sedimentation threatening the Project or aquatic habitat. Photographs shall be taken at the same time each year at designated photo-documentation points throughout the Project sites, and at least two photographs (one looking upstream, one looking downstream) taken every 25 feet along both Project reaches to document channel conditions. The performance criterion shall be no observed signs of significant erosion or sedimentation threatening property, essential infrastructure, or aquatic habitat.

20. The Permittee shall monitor and manage the Fairfax Creek and the FDS Basin site in accordance with the Sediment Management Plan for Fairfax Creek at the Sunnyside Passive Flood Diversion Storage (FDS) Site dated January 4, 2022. The construction of the FDS Basin site may result in changes to sediment transport characteristics of Fairfax Creek when the basin is engaged during a 5-year storm event or greater. This “living document” was developed based on site-specific bedload and sediment transport studies and modeling and may be updated annually as monitoring data is continually collected and analyzed. Following construction of the FDS Basin, the Permittee shall survey and record channel cross sections and bed profile to establish pre-Project channel topography as the “baseline” condition of the 600 LF channel adjacent to the basin and 1,600 LF downstream from the basin outfall to include both the depositional reach and transport reach. Following construction completion of the FDS Basin:
a. The Permittee shall monitor winter storm events, flow levels, and basin engagement to determine if a 5-year flood passive diversion occurred that winter.

i. If a passive diversion did NOT occur that winter, the Permittee shall perform regular geomorphic monitoring as described in Condition 19.

ii. If passive diversion did occur that winter, the Permittee shall comply with b – e below.

b. The Permittee shall re-survey and record the same channel cross sections (4 cross sections in the 600 LF depositional reach and 5 cross sections in the downstream 1,600 LF transport reach) and bed profile to document channel topography changes. A qualified fluvial geomorphologist will inspect the deposition reach and the transport reach to observe channel morphology and identify locations of aggradation or degradation or other changes in channel morphology, particularly any changes that could potentially impede fish passage or otherwise impact aquatic habitat or water quality. This re-survey and inspection shall be used to spatially map and quantify the volume of sediment aggradation or degradation along each reach.

i. If channel surveys document sediment accumulation that has elevated the channel bed along the depositional reach (600 LF of Fairfax Creek from the Basin outfall pipe to the upstream edge of the inlet weir) by an average of 0.5 ft or higher than baseline conditions, the Permittee shall notify the Water Board by June 1 that sediment removal activities will be performed that summer. This notification shall include the results of the surveys, a complete description of work and methodology, implementation timeline, and a list of all appropriate BMPs and AMMs that will be implemented to prevent impacts to habitat and water quality. Sediment removal activities shall comply with c, d, & e below;

ii. If channel surveys document sediment accumulation that has NOT elevated the channel bed along the depositional reach by an average of 0.5 ft or higher than baseline conditions, no sediment removal activities shall be implemented, and the Permittee shall only comply with e below;

c. Accumulated sediment may be removed from the depositional reach prior to October 15 to restore the baseline channel bed elevation and prevent impacts to FDS Basin performance. The volume of sediment removed shall be documented and stored on-site in the designated sediment stockpile location.

d. To minimize impacts of the FDS Basin on existing sediment transport characteristics of Fairfax Creek, removed sediment shall be passively augmented back into the creek downstream from the basin outfall pipe. At the end of the dry season following a wet season when diversion operations occurred, stockpiled sediment shall be added back to the channel downstream of the basin outlet through a series of 50 cubic yard “additions” placed on the toe of the creek bank along the designed
augmentation reach downstream. The sediment augmentation location shall be inspected periodically and when at least one third of the sediment addition has been transported downstream by storm flows, the next 50 CY addition shall be placed at the end of the next dry season. This process shall be repeated until all stockpiled sediment has been added back to the channel;

e. The Permittee shall prepare an Adaptive Management Activities Update each year when passive diversion occurs to be submitted with annual monitoring reports on January 31. Each update will document the FDS Basin’s performance that year, sediment removal and/or augmentation activities, channel surveys and field inspection results and any information generated through the adaptive management activities. Each update may propose recommended changes to any aspect of the Sediment Management Plan, with a technical basis included, for review and approval by the Executive Officer.

21. The Permittee shall submit annual monitoring reports, acceptable to the Executive Officer, by January 31 following each monitoring year. The first monitoring year commences in the calendar year after completing the Project. At the time of this Order, the Project completion is anticipated in 2022. Therefore, monitoring shall begin in 2023 and the first annual monitoring report shall be due on January 31, 2024, unless the Project is completed at a different time. Each annual report shall:

a. Identify whether a 5-year flood passive diversion occurred during the monitoring year covered by the report and triggered sediment management monitoring as required by Condition 20. If this did occur, an Adaptive Management Activities Update shall be submitted in accordance with Condition 20(e) above; and

b. Summarize each year’s monitoring results, including the need for, and implementation of, any adaptive management actions needed to help meet the performance criteria. The annual reports shall compare data to previous monitoring years and describe progress towards meeting final performance criteria. The Permittee shall implement all remedial measures upon receiving written acceptance by the Executive Officer, and not before.

22. The final monitoring report shall document if the site meets the final performance criteria. If the final criteria are not met, the Permittee shall, in consultation with the Water Board and appropriate agencies, identify remedial measures to be undertaken, including extension of the monitoring and reporting period until the criteria are met. The Permittee shall implement all remedial measures identified upon receiving written acceptance by the Executive Officer. Success of the mitigation program shall be determined by, and acceptable to, the Water Board Executive Officer. Monitoring associated with the Sediment Management Plan and the LWD Management Plan shall continue but will be incorporated into the Marin County Stream Maintenance Program.
23. Annual monitoring reports shall reference **AMR_438256_San Anselmo Flood Risk Reduction** and shall be submitted via email to [RB2-401Reports@waterboards.ca.gov](mailto:RB2-401Reports@waterboards.ca.gov), or by mail to the attention of 401 Certifications Reports (see the address on the letterhead).

24. Within 30 days of successfully establishing the Project’s compensatory mitigation, the Permittee shall submit, acceptable to the Executive Officer, a Notice of Mitigation Monitoring Completion notifying the Water Board that mitigation has been completed. The Notice shall be submitted via email to [RB2-401Reports@waterboards.ca.gov](mailto:RB2-401Reports@waterboards.ca.gov), or by mail to the attention of 401 Certifications Reports. This notification shall include the date compensatory mitigation was completed, the Project Name, and reference **NMMC_438256_San Anselmo Flood Risk Reduction**.

**Administrative**

25. The Permittee shall grant Water Board staff or an authorized representative, upon presentation of credentials and other documents as may be required by law, permission to: (1) enter upon the Project site or compensatory mitigation site(s) where a regulated facility or activity is located or conducted, or where records are kept; (2) have access to and copy any records that are kept and are relevant to the Project or the requirements of this Order; (3) inspect any facilities, equipment, practices, or operations regulated or required under this Order; and (4) sample or monitor for the purposes of assuring Order compliance.

26. A copy of this Order shall be provided to any consultants, contractors, and subcontractors working on the Project. Copies of this Order shall remain at the Project site for the duration of this Order. The Permittee shall be responsible for work conducted by its consultants, contractors, and any subcontractors.

27. The Permittee shall provide a signed and dated notification to the Water Board of any change in ownership or interest in ownership of the Project area at least 10 days prior to the transfer of ownership. The purchaser shall also submit a written request to the Water Board to be named as the permittee in an amended order. Until such time as this Order has been modified to name the purchaser as the permittee, the Permittee shall continue to be responsible for all requirements set forth in this Order.

**General Compliance**

28. The Permittee shall notify the Water Board of any event causing a violation of compliance with water quality standards as soon as practicable (ideally within 24 hours). Notification may be via telephone, email, delivered written notice, or other verifiable means.

29. Failure to implement the Project as proposed is a violation of this Order. Violation of this Order is a violation of state law and is subject to administrative civil liability pursuant to CWC section 13350. Failure to meet any condition of this Order shall constitute a violation of the Porter-Cologne Water Quality Control Act and the Clean Water Act and...
may subject you to civil liability imposed by the Water Board to a maximum of $5,000 per day of violation or $10 for each gallon of waste discharged in violation of this Order.

30. In response to a suspected violation of any condition of this Order, the Water Board may require the Permittee to furnish, under penalty of perjury, any technical or monitoring reports the Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

31. Should new information come to our attention that indicates a water quality problem with this Project, the Water Board may issue Waste Discharge Requirements pursuant to 23 CCR section 3857.

32. This Order shall continue to have full force and effect regardless of the expiration or revocation of any federal license or permit issued for the Project.

**Standard Conditions**

33. This Order is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to CWC section 13330 and 23 CCR 3867.

34. This Order is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a FERC license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to 23 CCR Subsection 3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

**Fees**

35. In accordance with 23 CCR section 2200, the Permittee shall pay an annual fee to the Water Board each fiscal year (July 1 – June 30) until Project construction activities are completed and an acceptable Notice of Project Construction Completion is received by the Water Board. If monitoring is required, the Permittee shall pay an annual fee to the Water Board until monitoring activities are completed and an acceptable Notice of Mitigation Monitoring Completion is received by the Water Board. Annual fees will be automatically invoiced to the Permittee. The Permittee must notify the Water Board at Project and/or mitigation completion with a final report in order to request to terminate annual invoicing. Notification should be sent to the staff listed at the bottom of this Order and to RB2-401Reports@waterboards.ca.gov. Water Board staff will verify conditions of the Certification have been met and may request a site visit at that time to confirm the Project’s status and compliance with this Certification.

36. This Order is conditioned upon total payment of the full fees, including annual fees, required in State regulations (23 CCR sections 2200(a)(3) and 3833(b)(3)) and owed by the Permittee. The Application fee for this Project, $17,372, was paid in full on October 28, 2021, and was calculated as Category A – Fill and Excavation Discharges with the 2019/2020 dredge and fill fee calculator.
I, Thomas Mumley, Interim Executive Officer, do hereby issue this Order certifying that any discharge from the proposed Project will comply with the applicable provisions of sections 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, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, “General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification,” which requires compliance with all conditions of this Order.

If you have any questions concerning this Order, please contact Nicole Fairley of my staff at (510) 622-2424 or nicole.fairley@waterboards.ca.gov.

Digitally signed by Keith H. Lichten, Division Chief
Date: 2022.02.07 13:17:59 -08'00'

for Thomas Mumley
Interim Executive Officer

Cc: SWRCB, DWQ, Stateboard401@waterboards.ca.gov
    Water Board, SF Bay Region, Victor Aelion, victor.aelion@waterboards.ca.gov
    U.S. EPA, Region 9, R9cwa401@epa.gov
        Jennifer Siu, siu.jennifer@epa.gov
    Corps, SF Regulatory,
        Roberta Morganstern, roberta.a.morganstern@usace.army.mil
    CDFW, Amanda Culpepper, amanda.culpepper@wildlife.ca.gov
    NMFS, Sara Azat, sara.azat@noaa.gov
    Marin County, Lisa Michl, lmichl@marincounty.org
    ESA,
        Jill Sunahara, jsunahara@wsassoc.com
        Liza Ryan, lryan@esassoc.com
Attachment 5 – USACE Permit
Regulatory Division

Subject: File Number SPN-2018-00240

Mr. Hugh Davis  
Marin County Flood Control and Water Conservation District  
3501 Civic Center Drive, Room 304  
San Rafael, California 94903  
HDavis@marincounty.org

Dear Mr. Davis:

This correspondence is in reference to your submittal of May 14, 2020, concerning Department of the Army (DA) authorization to improve stream conditions to reduce flood risk and construct habitat located at 3000 Sir Francis Drake Boulevard in Fairfax (lat/long 38.0029, -122.6108W) and 634/636 San Anselmo Avenue in San Anselmo (lat/long 37.9761, -122.5627°), Marin County, California.

Work within U.S. Army Corps of Engineers’ (Corps) jurisdiction will include placement of rock to stabilize the bank to support overflow flood flows in Fairfax Creek. Work will require the permanent discharge of 9 cubic yards of fill within 0.03 acre(s) of Fairfax Creek. This includes rock placed within 15 linear feet of Fairfax Creek at the outlet from the flood storage basin. In addition, temporary disturbance to 0.57 acre of jurisdictional features for construction access. At the second location in San Anselmo, the project will permanently discharge 80.4 cubic yards of rock and 1.5 cubic yards of concrete in 0.02 acre of San Anselmo Creek. This includes rock placed within 44 linear feet of San Anselmo Creek for rock slope protection and construction of a new maintenance road. A temporary coffer dam would place 32 cubic yards of sandbags and 19 cubic yards of cut soil into the creek which will be removed following completion of the project. All work shall be completed in accordance with the plans and drawings titled: “San Anselmo Flood Risk Reduction Passive Flood Diversion Storage Site Project, 100% Design Drawings, Stetson Engineers, Inc., 2021” and “San Anselmo Flood Risk Reduction Project, Building Bridge No. 2, 90% Design Drawings, Stetson Engineers, Inc., https://www.marinwatersheds.org/resources/projects/san-anselmo-flood-risk-reduction-safrr-project.

Section 404 of the Clean Water Act (CWA) generally regulates the discharge of dredged or fill material below the plane of ordinary high water in non-tidal waters of the United States, below the high tide line in tidal waters of the United States, and within the lateral extent of wetlands adjacent to these waters. Section 10 of the Rivers and Harbors Act (RHA) generally regulates construction of structures and work, including excavation, dredging, and discharges of dredged or fill material occurring below the plane of mean high water in tidal waters of the United States; in former diked baylands currently below mean high water; outside the limits of
mean high water but affecting the navigable capacity of tidal waters; or below the plane of ordinary high water in non-tidal waters designated as navigable waters of the United States. Navigable waters of the United States generally include all waters subject to the ebb and flow of the tide; and/or all waters presently used, or have been used in the past, or may be susceptible for future use to transport interstate or foreign commerce.

Based on a review of the information in your submittal and the current condition of the site, as verified during field investigations on June 1, 2018 and October 26, 2020, the project in Fairfax qualifies for authorization under Department of the Army Nationwide Permit (NWP 13) for Bank Stabilization and the project in San Anselmo qualifies for authorization under Department of the Army Nationwide Permit (NWP 43) for Storm Water Management Facilities (86 Fed. Reg. 73522). The projects must be in compliance with the terms of the NWPs cited on our website, general conditions of the Nationwide Permit Program, and the San Francisco District regional conditions located at [link](https://www.spn.usace.army.mil/Missions/Regulatory/Permitting/Nationwide/). You must also be in compliance with any special conditions specified in this letter for the NWP authorization to remain valid. Non-compliance with any term or condition could result in the revocation of the NWP authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps. This NWP authorization does not obviate the need to obtain other State or local approvals required by law.

This verification will remain valid until March 14, 2026, unless the NWP authorization is modified, suspended, or revoked. Activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon a NWP will remain authorized provided the activity is completed within 12 months of the date of a NWP’s expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 C.F.R. § 330.4(e) and 33 C.F.R. § 330.5(c) or (d). This verification will remain valid if, during the time period between now and March 14, 2026, the activity complies with any subsequent modification of the NWP authorization. The Chief of Engineers will periodically review NWPs and their conditions and will decide to modify, reissue, or revoke the permits. If a NWP is not modified or reissued within five years of its effective date, it automatically expires and becomes null and void. It is incumbent upon you to remain informed of any changes to the NWPs. Changes to the NWPs would be announced by Public Notice posted on our website [link](www.spn.usace.army.mil/Missions/Regulatory/Public-Notices.aspx). Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, enclosure 1, verifying that you have complied with the terms and conditions of the permit.

You shall comply with all terms and conditions set forth by the “CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER for: San Anselmo Flood Risk Reduction Project, Marin County,” issued by the San Francisco Bay Regional Water
Quality Control Board on February 7, 2022 (enclosure 2). You shall consider such conditions to be an integral part of the NWP authorization for your project.

General Condition 18 stipulates that project authorization under a NWP does not allow for the incidental take of any federally-listed species in the absence of a biological opinion with incidental take provisions. As the principal federal lead agency for this project, the Corps initiated consultation with the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) to address project related impacts to listed species, pursuant to Section 7(a) of the Endangered Species Act of 1973, as amended, 16 U.S.C. § 1531 et seq. By letter of January 6, 2020, USFWS concurred with the determination that the project was not likely to adversely affect California red-legged frog (*Rana draytonii*), northern spotted owl (*Strix occidentalis caurina*), and their designated critical habitat (Enclosure 3). By electronic message of August 12, 2021, the NOAA Restoration Center (RC) determined that the San Anselmo Flood Risk Reduction Project (2018-00240) fits within the Biological Opinion titled, “Program to fund, and/or permit restoration projects within the NOAA Restoration Center’s Central Coastal California Office jurisdictional area in California” (WCR-2015-3755), dated June 14, 2016.

In order to ensure compliance with this NWP authorization, the following special conditions shall be implemented:

1. Incidents where any individuals of *fish* listed by NOAA Fisheries under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the United States or structures or work in navigable waters of the United States authorized by this NWP shall be reported to NOAA Fisheries, Office of Protected Resources, at (301) 713-1401 and the Regulatory Office of the San Francisco District of the U.S. Army Corps of Engineers at (415) 503-6795. The finder should leave the plant or animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved, and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries, Office of Protected Resources, to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.

2. To remain exempt from the prohibitions of Section 9 of the Endangered Species Act, the non-discretionary Terms and Conditions for incidental take of federally-listed Species shall be fully implemented as stipulated in the Biological Opinion(s) titled “Program to fund, and/or permit restoration projects within the NOAA Restoration Center’s Central Coastal California Office jurisdictional area in California (WCR-2015-3755),” pages 81 & 82, dated June 14, 2016 (www.spm.usace.army.mil/Portals/68/docs/regulatory/BOs/Prog/NMFS_PBO_NOAA_RCC_2016.pdf). Project authorization under the NWP is conditional upon compliance with
the mandatory terms and conditions associated with incidental take. Failure to comply with the terms and conditions for incidental take, where a take of a federally-listed species occurs, would constitute an unauthorized take and non-compliance with the NWP authorization for your project. NMFS is, however, the authoritative federal agency for determining compliance with the incidental take statement and for initiating appropriate enforcement actions or penalties under the Endangered Species Act.

3. The USFWS concurred with the determination that the project is not likely to adversely affect listed species. This concurrence was premised, in part, on project work restrictions and the description of the proposed action outlined in enclosure 2. These work restrictions are incorporated as special conditions to this NWP authorization.

You may refer any questions on this matter to William Connor of the Regulatory staff by telephone at 415-503-6631 or by e-mail at william.m.connor@usace.army.mil. All correspondence should be addressed to the Regulatory Division North Branch referencing the file number at the head of this letter.

The San Francisco District is committed to improving service to our customers. My Regulatory staff seeks to achieve the goals of the Regulatory Program in an efficient and cooperative manner while preserving and protecting our nation’s aquatic resources. If you would like to provide comments on our Regulatory Program, please complete the Customer Service Survey Form available on our website: www.spn.usace.army.mil/Missions/Regulatory.

Sincerely,

William Connor
Chief, North Branch
Regulatory Division

Enclosures

cc:
US NOAA, Joe Pecharich, joe.pecharich@noaa.gov
CA RWQCB, Nicole Fairley, Nicole.Fairley@Waterboards.ca.gov
ESA, Leane Dunn, LDunn@esassoc.com
    Jill Sunahara, JSunahara@esassoc.com
Enclosure 1

Permittee: Marin County Flood Control and Water Conservation District

File Number: SPN-2018-00240

Certification of Compliance
for
Nationwide Permit

"I hereby certify that the work authorized by the above referenced File Number and all required mitigation have been completed in accordance with the terms and conditions of this Nationwide Permit authorization."

(Permittee)       (Date)

Return to: cespn-regulatory-info@usace.army.mil

U.S. Army, Corps of Engineers
San Francisco District
Regulatory Division, CESPN-RGN
450 Golden Gate Ave., 4th Floor
San Francisco, CA  94102-3404
In Reply Refer to:
08ESMF00-2020-I-2642

January 6, 2021

Regulatory Division Chief
Attn: Roberta Morganstern
Department of the Army
San Francisco District, Corps of Engineers
Regulatory Division
450 Golden Gate Avenue, 4th Floor, Suite 1111
San Francisco, California 94102
Roberta.a.morgenstern@usace.army.mil

Subject: Concurrence with a Not Likely to Adversely Affect Determination for the San Anselmo Flood Risk Reduction Project in Marin County, California (Corps File Number SPN 2018-00240N)

Dear Regulatory Division Chief:

This letter is in response to your July 22, 2020, request that the U.S. Fish and Wildlife Service (Service) concur with your determination that the proposed San Anselmo Flood Risk Reduction Project (project) may affect, but is not likely to adversely affect, the federally threatened California red-legged frog (*Rana draytonii*), and the federally threatened northern spotted owl (*Strix occidentalis caurina*) in accordance with the requirements of the Endangered Species Act of 1973, as amended (Act). Your letter was received in our office on July 22, 2020. The project is not within critical habitat for the California red-legged frog or the northern spotted owl.

In reviewing the potential effects of the proposed project, the Service has relied upon:


2) Other information available to the Service.

**Project Summary**

The Marin County Flood Control and Water Conservation District (Flood Control District) proposes to construct a diversion structure in Fairfax Creek to reduce the severity of ongoing and increasingly larger downstream flood flows. The project is located in at 3000 Sir Francis Drake Boulevard near the City of Fairfax, Marin County, California. The project will occur over a period of 12 months in 2021.
The project will be built and operated in two locations. The first site is at the former Sunnyside Nursery (the Nursery Basin site) in unincorporated Marin County, adjacent to the western border of the Town of Fairfax. The second location is at 634-636 San Anselmo Avenue in downtown San Anselmo along San Anselmo Creek (the downtown San Anselmo site). The Flood Control District will implement this project to reduce flood risk by (1) reducing peak discharge by attenuating flows through use of a flood diversion and storage (FDS) basin at the Nursery Basin site along Fairfax Creek, and (2) increasing creek capacity by removing existing obstructions to creek flow (a building bridge that spans San Anselmo Creek and has its foundations in the channel) and then regrading and improving the creek channel.

At the downtown San Anselmo site, the building bridge is a compound structure consisting of a base concrete “bridge and deck” spanning entirely over San Anselmo Creek with a single-story, 3,000 square foot, wood frame and masonry building comprising four commercial units constructed on top of the deck. This structure is approximately 60 feet long by 90 feet wide. Foundation structures include a smaller box culvert-shaped segment on the north side of the crossing. Similar to a bridge configuration, the decks are supported by concrete abutment walls, piers, and footings in the creek bed. There is also an additional, separate, small concrete block building situated high on the west bank of the parcel at 630 San Anselmo Ave., which will remain in place. The bank stabilization activities will be done over approximately 0.3 acre.

**Nursery Basin Site**

The Nursery Basin site is approximately 8.8 acres, located on flat and upsloping terrain, and includes an approximately 1,000-foot reach of Fairfax Creek. The site is mostly undeveloped except for a few remnant nursery-related buildings. Only 5.5 acres of this site will be disturbed through project activities.

The objective of the FDS basin facility is to reduce flood risk in Fairfax and other flood prone areas farther downstream by diverting stormwater, which would otherwise overtop creek banks, into an off-channel storage basin for temporary storage. Later, after flooding subsides, the stored water will be gradually released back to the creek channel at a rate that can be accommodated without flooding.

A 36-inch-diameter outlet pipe will connect the southeastern corner of the FDS basin to Fairfax Creek channel downstream of the diversion structure. A side diversion weir will be located along an approximately 305-linear-foot segment of the southern storage basin levee and separate the storage basin from Fairfax Creek. The weir will be located along the creek between the new diversion structure and the existing bridge. Rock slope protection will be installed along the slopes and toe of both sides of the weir to provide protection against erosion. A new 17-foot by 16-foot-wide, control building will be constructed downstream of the diversion structure at the top of the creek bank near Sir Francis Drake Boulevard, and a small parking area will be located in a new paved area adjacent to the control building. The existing bridge and the new paved road on the diversion structure will be used to access the storage basin. Two unpaved access roads will be constructed to provide maintenance access into Fairfax Creek.

Creek channel grading and bank stabilization will occur in Fairfax Creek upstream and downstream of the diversion structure. Proposed bank protection includes a combination of
planted double layer fabric, vegetated soil lifts, planted rock, and rock toe protection. Willows \((\text{Salix} \text{ sp.})\), dogwood \((\text{Cornus} \text{ sp.})\), or other appropriate native species will be planted within the biotechnical structures in areas away from the side diversion weir.

Upstream of the Diversion Structure:

An approximately 240-linear-foot segment of Fairfax Creek upstream of the diversion structure will be graded, approximately 140 linear feet will include regrading of the channel bottom, while the remaining 100 linear feet will only include regrading of the channel bank. An approximately 5-foot-deep layer of exposed rock slope protection will be placed on either side of the channel bank. Erosion control fabric and seed will be placed on portions of the bank that are not protected by rock.

Downstream of the Diversion Structure:

An approximately 300-foot segment of Fairfax Creek downstream of the diversion structure will be graded and/or stabilized. Approximately 120 feet of the channel downstream of the diversion structure will be graded. This graded area will be reconstructed with 5-foot deep rock slope protection and the channel bottom will be lined with a mix of existing salvaged and stockpiled streambed material and engineered streambed material. Planted rock slope protection will border the rock-only protected areas. Erosion control fabric and seed will be placed on areas without rock or vegetated soil lifts.

Downtown San Anselmo Site

The objective of the work at the downtown San Anselmo site is to reduce flood risk in flood prone areas farther downstream by removing the building bridge obstruction and thereby substantially increasing channel capacity. This action will reduce the frequency and severity of overbank flooding onto San Anselmo Avenue and enhance public safety and protect properties in the floodplain. Additionally, the project will improve components of the existing Creek Park at the site. These public access components are included as part of the project and will be implemented by the Town of San Anselmo.

The first phase of activity at the downtown San Anselmo site as part of the project consists of demolition and removal of the existing concrete bridge and deck structure. Bank stabilization will occur on the left bank where the abutment walls will be removed, on the left bank beneath the existing stage, and on the right bank beneath the existing art gallery kiosk. The existing Creek Park will be reconstructed to integrate with the building bridge removal and bank stabilization components. A new pedestrian plaza will be created along San Anselmo Avenue adjacent to the remaining building bridge retaining wall. A new 45-foot pedestrian bridge will be constructed over the creek at the upstream end of the building bridge site. The three existing storm drain pipes discharging into the creek channel will be modified to conform to the Creek Park improvements. Additionally, an existing storm drain inlet will be replaced with a new storm drain manhole and another new storm drain will be installed, but none of this work will occur in or immediately adjacent to the creek.
Temporary Dewatering and In-Channel Work

Fairfax Creek is typically dry in the summer and only localized dewatering and/or exclusion and containment is anticipated for construction below the creek bed. However, if the creek still has water when construction is scheduled to start April 15, a temporary coffer dam may be installed to allow creek access for work between April 15 and October 15. It is expected that a sump pit and pump will be used to remove any remaining water and seepage during construction. Dewatering of groundwater from excavations typically will involve pumping water out of the excavated area into settlement tanks and, following appropriate on-site treatment, discharging the water over land or into municipal separate sewer systems and/or creek. Water pumped from within the cofferdam could be redirected to the creek channel downstream of the work area.

San Anselmo Creek is perennial and will typically have flows throughout the summer months. Construction dewatering will be required for the project reach to bypass the creek flow around the project area for the full duration of the in-channel work. Construction vehicles will move within the channel only within the work limit, all other access will be from the top of bank.

A temporary creek diversion system, consisting of a temporary coffer dam, culverts or other means of directing flows to one side of the creek at a time or out of the work area entirely, along with cofferdams and temporary pumps, will be installed.

Debris and Excavated Soil

A Stormwater Pollution Prevention Plan (SWPPP) will be implemented on roads to protect water quality. The condition of existing roads will be documented with photos and videos prior to construction, and will be restored appropriately following construction.

The soil that is excavated from the Nursery Basin site (approximately 30,000 cubic yards) may be beneficially reused in an appropriate project, may be hauled to Redwood Landfill, located north of Novato, for disposal, or temporarily stockpiled in upland areas on property located off of Highway 37 or Gnoss Field Airport. The Highway 37 site is currently used as spray fields by the Novato Sanitary District and the Gnoss Field site was previously approved for stockpiling in 2012 and 2016 for the Novato Creek Maintenance Sediment Removal Project. Sediment fencing will be installed around stockpiles and all jurisdictional waters of the state and US will be avoided.

If soil is temporarily placed at the Novato Sanitary District site, wildlife exclusion fencing will be installed along the perimeter of the work area during hauling and disposal activities.

Alternatively, the soil may be placed in upland disturbed areas at the Novato site, to be determined.

Maintenance

At the Nursery Basin site, debris will be removed from the creek following each rainy season, and as needed after storm events from the diversion structure and diversion pool area. Deposited
sediment will be removed and the Nursery Basin site will be prepared for gravel augmentation if or as required by the Sediment Management Plan, which has yet to be finalized.

The perimeter and access road and embankment will be maintained, including grading and weed control, removing accumulated debris from the drainage ditch and storm drain along the northern side of the basin, monitoring bank erosion near the existing access bridge, and inspections of the roadway across the diversion structure.

Invasive vegetation will be routinely monitored for and removed on basin side slopes.

At the downtown San Anselmo site, maintenance includes management of invasive vegetation, removal of litter or debris, and replanting, tree-trimming, or other vegetation management actions as described in the Flood Control District’s Stream Maintenance Program.

**Revegetation Plan**

The revegetation plan is designed to establish native plant communities and habitat functions to the extent feasible on elements of the Nursery Basin and downtown San Anselmo sites disturbed by construction. If topsoil will be salvaged, this work will begin with selective grading activities to facilitate salvage of site topsoils for replacement onto surfaces of project features and restored areas to support establishment of native plant species. The rock slope protection and vegetated soil lifts will be constructed, the finished surfaces of the FDS basin, slopes, setback and buffer areas, and restored creek reaches will be seeded and planted with native plants, and a temporary irrigation system will be installed. Maintenance and monitoring of the revegetated areas will occur for a period of 5 years to insure successful establishment of native plant communities. These revegetation actions are described in further detail below.

The County intends to prepare a Habitat Restoration and Monitoring Plan, which will incorporate relevant portions of this revegetation plan along with monitoring and performance criteria, and an adaptive management plan that addresses protocols applicable if success criteria are not being met.

In order to provide conditions favorable to the establishment of restoration plantings, selected topsoils from the revegetation areas may be salvaged and relocated to a temporary stockpile area or directly to the revegetation areas, where feasible. If topsoils are not salvaged and stockpiled, then soils may be amended prior to planting.

If immediate transport and application of salvaged soils is not feasible, the retained soils may be stored for as long as 2 months, but will be stored as briefly as possible to prevent anaerobic conditions from developing.

Soil tests will be performed at the time of stockpiling and again at the time of redistribution over the revegetation areas if the soils have been stored. These tests will serve to determine whether any adverse changes (such as changes in pH levels) have occurred during storage and recommended soil amendments or other measures. Measures will be taken to remedy any adverse changes in soil chemistry.
Planting

If topsoils are salvaged at the Nursery Basin site, planting and seeding will commence once relocation of topsoils and any soil amendments required to correct post grading soil conditions have been performed. At the downtown San Anselmo site, planting will be performed in concert with placement of biotechnical bank protection treatments, followed by seeding of all areas disturbed by construction activities. Seed mixes will provide immediate erosion protection in addition to establishment of native herbaceous species components of the target plant communities.

All planting on the project site will be supervised by a restoration ecologist having demonstrated knowledge and experience in native plant revegetation. To the extent feasible, planting will be performed during the cooler, wetter months between November 15 and April 15; preferably immediately following a rainfall of one to one and one-half inches. If seasonal rainfall is low or does not coincide with the desired planting dates, both the plant materials and the receiving ground surfaces will be thoroughly irrigated prior to planting.


To preserve genetic integrity, all plants to be installed in the restoration areas will be propagated from local sources collected within the Corte Madera Creek watershed. To the extent feasible, cuttings of native alders within the downtown San Anselmo site will be collected prior to removal of those trees and grown for later installation on the project site. In general, collections will be made between April and November.

All plant materials will be stored and grown under phytosanitary conditions and tested as remaining free from disease in the nursery or other growing facility. Planting stock will be protected from potential contamination from the point that it leaves the production nursery or collection site until planting.

The planting plan and plant species palettes for the Nursery Basin site are based upon plant community distribution and plant species composition observed in Fairfax Creek and adjacent open space areas exhibiting the most similar conditions to those which will result from the reconfiguration of the project site. Planting palettes will differ within three main planting areas, In-Basin, Setback/Buffer Areas, and the Fairfax Creek Restoration Area.

The planting plan and plant species palettes at the downtown San Anselmo site are based upon plant distribution and species composition observed in San Anselmo Creek and less disturbed tributaries in the vicinity. The creek banks at the downtown San Anselmo site will be planted in riparian tree, shrub, and herbaceous species, in accordance with their physical requirements.
Temporary irrigation will be provided for approximately five years at the Nursery Basin site and three years at the downtown San Anselmo site to ensure successful establishment of the native seeded areas and plantings utilizing an existing connection to the municipal supply.

*Monitoring and Maintenance*

Periodic maintenance will be required during the establishment of the revegetated area. Maintenance will be performed by qualified personnel having demonstrated experience in maintenance of natural habitat areas and of native revegetation projects. At a minimum, maintenance visits will consist of a thorough walk-through of the entire site, inspection of the condition of all plantings and seeded areas, irrigation system function checks and checks for proper irrigation coverage, weed control, and resetting or replanting, as necessary. Maintenance personnel will communicate directly with the project monitor to ensure prompt and appropriate response to any problems or unanticipated conditions encountered.

Any unsuccessful plantings will be replaced as needed to bring the revegetation areas of the site into compliance with the minimum success criteria established in project permits given by the Corps, the California Department of Fish and Wildlife, and the Regional Water Quality Control Board. The species planted within the project area will not be fertilized or pruned unless such pruning is required in case of emergency.

Maintenance visits will be performed following revegetation on a schedule to be determined in coordination with a maintenance contractor and depending on rainfall and other climate factors.

Construction and site modifications will create open areas that are prime sites for opportunistic weedy exotics. In order to re-establish a native plant community on the project site, exotics will be completely removed prior to the planting phase of construction. Exotic weeds may then be kept in check with periodic maintenance throughout the establishment period. Native plants within the restoration area will be protected during weed eradication efforts.

*Conservation Measures*

The following are the conservation measures that will be implemented as part of the proposed project that will help avoid or minimize effects to the California red-legged frog and the northern spotted owl:

*General*

1. All work performed in-water will be completed in a manner that meets the water quality objectives to ensure the protection of beneficial uses as specified in the Basin Plan.

2. All dewatering and diversion methods will be installed such that natural flow is maintained upstream and downstream of the project area.

3. Any temporary dams or diversion will be installed such that the diversion does not cause sedimentation, siltation, or erosion upstream or downstream of the project area.
4. Cofferdams will remain in place and functional throughout the in-stream construction or maintenance periods.

5. Disturbance of protected riparian vegetation will be limited or avoided entirely.

6. No discharge of pollutants from vehicle and equipment cleaning is allowed into any storm drains or watercourses.

7. Spill containment kits will be maintained onsite at all times during construction operations and/or staging or fueling of equipment.

8. Graded areas will be protected from erosion using a combination of silt fences, fiber rolls, etc. along top of slope or along edges of designated staging areas, and erosion control netting (such as jute or coir) as appropriate on sloped areas.

9. A speed limit of 24 kmph (15 mph) in the project footprint in unpaved areas will be enforced to reduce dust and excessive soil disturbance.

10. All food and food-related trash items will be enclosed in sealed trash containers and properly disposed of off-site.

11. Pets will not be allowed within the work area.

12. A Spill Response Plan will be prepared. Hazardous materials such as fuels, oils, solvents, etc. will be stored in sealable containers in a designated location that is at least 15 m (50 ft) from hydrologic features.

13. The name(s) and credentials of the qualified biologist(s) to act as construction monitors will be submitted to the Service for approval at least 15 days before construction work begins.

14. All construction personnel will attend an environmental education program delivered by the approved biologist. The training will include an explanation as how to best avoid the accidental take of California red-legged frog and other special-status species. The training session will be mandatory for contractors and all construction personnel. The field meeting will include topics on species identification, descriptions, habitat requirements and required minimization and avoidance measures.

15. If a special-status species is present within the work area during construction, work will cease in the vicinity of the animal, and the animal will be allowed to relocate of its own volition.

16. At the beginning of each workday that includes initial ground disturbance, including grading, excavation, and vegetation-removal activities, an approved biologist will conduct on-site monitoring for the presence of these species in the area where ground disturbance or vegetation removal is planned.
17. All observations of California red-legged frogs, northern spotted owls and salt marsh harvest mice will be reported to the CNDDB using standard field survey forms.

**California red-legged frogs**

18. No more than 24 hours before initial ground disturbance activities, including grading and excavation, an approved biologist will conduct onsite monitoring for the presence of California red-legged frog in the area where ground disturbance or vegetation removal will occur. Areas of dense vegetation may be mowed or trimmed to 18 inches in height, in order to more effectively survey for frogs. Once cleared, these areas may then be cut to ground level.

19. All excavated or deep-walled holes or trenches greater than 8 inches deep will be covered at the end of each workday using plywood, steel plates, or similar materials. Before such holes are filled, they will be thoroughly inspected for trapped animals.

20. Although California red-legged frogs are unlikely to be encountered, project personnel will immediately report any harm, injury, or mortality of a California red-legged frog during construction (including entrapment) to the construction foreman or biological monitor, and the construction foreman or monitor will immediately notify the Service.

21. Erosion control blankets, mats, or fiber rolls bound with synthetic monofilament netting will not be used within the project area. This includes products that use photodegradable or biodegradable synthetic netting, which can take several months to decompose. Acceptable materials include natural fibers such as jute, coconut, twine or other similar fibers.

**Northern Spotted Owls**

22. If activities have the potential to exceed 101 decibels (dB) (extreme levels), this work will be conducted to the extent feasible outside the nesting season (August 1 through January 31) to avoid disrupting nesting northern spotted owls adjacent to the action area. Work generating extreme sound levels during the nesting season will require protocol-level surveys to determine northern spotted owl nesting status and location and consultation with the Service and California Department of Fish and Wildlife (CDFW).

23. If work within the action area generating extreme sound levels (101 dB or higher) must occur during the northern spotted owl's nesting season (February 1 through July 31), protocol-level surveys in accordance with the Service's "Protocol for Surveying Proposed Management Activities that may Impact Northern Spotted Owls" (Service 2012) will be conducted. For "disturbance only" projects (i.e., projects that will not impact northern spotted owl habitat directly but will generate acoustic and/ or visible disturbances potentially leading to nest abandonment), six surveys will be required during the nesting season in the action area and the surrounding 0.25-mile area (survey area).

24. If protocol-level surveys indicate that northern spotted owls are nesting within the potential acoustic impact distance to be determined in consultation with the Service,
project work may not commence until the end of the nesting season, i.e., August 1, or be limited to work, within certain acoustic levels based upon distance from the nest and in consultation with the Service. The County will have at least a 0.25 mile buffer from disturbance point-sources to where nesting northern spotted owls have been documented to avoid acoustic impacts to any active northern spotted owl nest.

25. If protocol-level surveys determine that northern spotted owls are not nesting or not nesting within the potential acoustic impact zone during the year of the surveys, project work may commence after non-nesting is determined, or after nesting is confirmed outside of the potential impact zone and other habitat within impact zone has been excluded from further requirements (i.e. because of proximity to a known nest). Non-nesting can be determined by late April, when a female is observed roosting not on a nest, for 1 hour, two times in April, with the 2 visits separated by 3 weeks.

26. If project work begins in the non-nesting season and is to continue into the nesting season, project work generating extreme levels of noise (101 dB or higher) will cease January 31 and will not recommence until protocol-level surveys as described above determine the nesting status of the survey area. Work generating noise levels below 100 dB ("Very High" or lower levels of disturbance) may continue into the nesting season.

27. Prior to construction any identified spotted owl nesting areas or activity centers will be flagged and avoided with a buffer of 0.25 mile during the active nesting season. Flood Control District biologists or their biological consultant will conduct northern spotted owl surveys in accordance with the Service’s protocol.

28. Marin County Parks conducts annual northern spotted owl surveys on Park lands close to the Nursery Basin site. The Flood Control District will request surveys of the work area vicinity in 2021. The findings of these surveys will indicate the distance of northern spotted owl activity centers to the work area. No work will be done within 0.25 mile of nesting areas or activity centers.

Habitats and Occurrence

California Red-legged Frogs

California red-legged frogs have not been detected during pre-construction surveys in the Corte Madera Creek Watershed, including San Anselmo Creek and its tributaries and Fairfax Creek. These creeks are not anticipated to support California red-legged frog breeding due to high winter flows. These drainages could support aquatic non-breeding habitat if other breeding habitat were available in the near-project vicinity. However, there are no known breeding habitats within 5 miles of the project area. California red-legged frogs have been detected elsewhere in Marin County, and are considered to have a generally low potential to disperse through the project sites. The closest documented occurrences of California red-legged frogs to the project site are outside the watershed, approximately 5 miles west of the Nursery Basin site (CDFW 2020). A pre-construction survey was done in 2020 for California red-legged frogs, with no individuals of the species found.
California red-legged frogs are not expected at the Novato Sanitary site, which is regularly treated and located across major highways from the nearest known aquatic habitat for this species.

**Northern Spotted Owls**

The National Park Service, Marin Municipal Water District and Marin County Parks have monitored northern spotted owl populations in Marin since 1998 and the population appears stable, with high reproductive success and minimal impact from barred owls (NPS 2017). Spotted owl activity centers include their nest territory and nearby foraging habitat, during nesting season (February 1 to August 31). The nearest spotted owl activity centers to the action area are just over 0.25-mile west and over 0.25 northwest of the Nursery Basin site (Point Blue 2019). While the project sites are too disturbed and fragmented to provide suitable nesting habitat, they are close enough to nesting habitat to potentially disturb nesting owls. The northern spotted owl may also use the action area for foraging or dispersal from nearby territories.

**Conclusion**

The Service concurs that the project, as described here and in project documents submitted to the Service, may affect, but is not likely to adversely affect the California red-legged frog, or the northern spotted owl because project effects are likely to be discountable based on the following:

1. Habitat will return to being available to the species once the project is completed.

2. The likelihood of encountering California red-legged frogs is low due to the distance from the project site to known occurrences, the dispersal distance of California red-legged frogs, and the absence of frogs during pre-construction surveys.

3. The likelihood of encountering northern spotted owls is low due to project sites being unsuitable nesting habitat, and conservation measures that limit encounters, such as avoiding nests by 0.25 mile.

4. The proposed conservation measures, such as the instruction to stop all work if any listed species are encountered, and to prevent auditory disturbance to nesting owls by conducting protocol-level surveys and avoiding nests by 0.25 mile will help ensure that there are no adverse effects to the species.

Therefore, unless new information reveals effects of the project that may affect federally listed species or critical habitat in a manner not identified to date, or if a new species is listed or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act is necessary for the proposed San Anselmo Flood Risk Reduction Project.

This concludes the Service's review of the proposed San Anselmo Flood Risk Reduction Project. No further coordination with the Service under the Act is necessary at this time. However, please note, this letter does not authorize take of listed species. As provided in 50 CFR §402.14, initiation of formal consultation is required where there is discretionary federal involvement or control over the action (or is authorized by law) and if: 1) new information reveals the effects of the agency action that may affect listed species or critical habitat in a
manner or to an extent not considered in this review; 2) 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 review; or 3) a new species is listed or critical habitat designated that may be affected by the action.

If you have any questions regarding this letter, please contact Cassandra Schlosser, Biologist (cassandra_schlosser@fws.gov), (916) 414-6620 or Ryan Olah, Coast Bay Division Chief (ryan_olah@fws.gov) at the letterhead address or telephone (916) 414-6623.

Sincerely,

Ryan Olah
Chief, Coast Bay Division

Sahrye Cohen, U.S. Army Corp of Engineers, San Francisco, CA
U.S. Army Corp of Engineers, San Francisco, CA
Michelle Giolli, ESA, Sacramento, CA
LITERATURE CITED


Point Blue Conservation Science. 2019. Email communication from Renee Cormier to Even Holmboe (ESA) showing the location of northern spotted owl pairs near the SAFFR project site. August 12, 2019.

Dear Mr. Davis:

This correspondence is in reference to your submittal of May 14, 2020, concerning Department of the Army (DA) authorization to improve stream conditions to reduce flood risk and construct habitat located at 3000 Sir Francis Drake Boulevard in Fairfax (lat/long 38.0029, -122.6108W) and 634/636 San Anselmo Avenue in San Anselmo (lat/long 37.9761, -122.5627°), Marin County, California.

Work within U.S. Army Corps of Engineers’ (Corps) jurisdiction will include placement of rock to stabilize the bank to support overflow flood flows in Fairfax Creek. Work will require the permanent discharge of 9 cubic yards of fill within 0.03 acre(s) of Fairfax Creek. This includes rock placed within 15 linear feet of Fairfax Creek at the outlet from the flood storage basin. In addition, temporary disturbance to 0.57 acre of jurisdictional features for construction access. At the second location in San Anselmo, the project will permanently discharge 80.4 cubic yards of rock and 1.5 cubic yards of concrete in 0.02 acre of San Anselmo Creek. This includes rock placed within 44 linear feet of San Anselmo Creek for rock slope protection and construction of a new maintenance road. A temporary coffer dam would place 32 cubic yards of sandbags and 19 cubic yards of cut soil into the creek which will be removed following completion of the project. All work shall be completed in accordance with the plans and drawings titled: “San Anselmo Flood Risk Reduction Passive Flood Diversion Storage Site Project, 100% Design Drawings, Stetson Engineers, Inc., 2021” and “San Anselmo Flood Risk Reduction Project, Building Bridge No. 2, 90% Design Drawings, Stetson Engineers, Inc., https://www.marinwatersheds.org/resources/projects/san-anselmo-flood-risk-reduction-safrr-project.

Section 404 of the Clean Water Act (CWA) generally regulates the discharge of dredged or fill material below the plane of ordinary high water in non-tidal waters of the United States, below the high tide line in tidal waters of the United States, and within the lateral extent of wetlands adjacent to these waters. Section 10 of the Rivers and Harbors Act (RHA) generally regulates construction of structures and work, including excavation, dredging, and discharges of dredged or fill material occurring below the plane of mean high water in tidal waters of the United States; in former diked baylands currently below mean high water; outside the limits of
mean high water but affecting the navigable capacity of tidal waters; or below the plane of ordinary high water in non-tidal waters designated as navigable waters of the United States. Navigable waters of the United States generally include all waters subject to the ebb and flow of the tide; and/or all waters presently used, or have been used in the past, or may be susceptible for future use to transport interstate or foreign commerce.

Based on a review of the information in your submittal and the current condition of the site, as verified during field investigations on June 1, 2018 and October 26, 2020, the project in Fairfax qualifies for authorization under Department of the Army Nationwide Permit (NWP 13) for Bank Stabilization and the project in San Anselmo qualifies for authorization under Department of the Army Nationwide Permit (NWP 43) for Storm Water Management Facilities (86 Fed. Reg. 73522). The projects must be in compliance with the terms of the NWPs cited on our website, general conditions of the Nationwide Permit Program, and the San Francisco District regional conditions located at (https://www.spn.usace.army.mil/Missions/Regulatory/Permitting/Nationwide/). You must also be in compliance with any special conditions specified in this letter for the NWP authorization to remain valid. Non-compliance with any term or condition could result in the revocation of the NWP authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps. This NWP authorization does not obviate the need to obtain other State or local approvals required by law.

This verification will remain valid until March 14, 2026, unless the NWP authorization is modified, suspended, or revoked. Activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon a NWP will remain authorized provided the activity is completed within 12 months of the date of a NWP’s expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 C.F.R. § 330.4(e) and 33 C.F.R. § 330.5(c) or (d). This verification will remain valid if, during the time period between now and March 14, 2026, the activity complies with any subsequent modification of the NWP authorization. The Chief of Engineers will periodically review NWPs and their conditions and will decide to modify, reissue, or revoke the permits. If a NWP is not modified or reissued within five years of its effective date, it automatically expires and becomes null and void. It is incumbent upon you to remain informed of any changes to the NWPs. Changes to the NWPs would be announced by Public Notice posted on our website (www.spn.usace.army.mil/Missions/Regulatory/Public-Notices.aspx). Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, enclosure 1, verifying that you have complied with the terms and conditions of the permit.

You shall comply with all terms and conditions set forth by the “CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER for: San Anselmo Flood Risk Reduction Project, Marin County,” issued by the San Francisco Bay Regional Water
Quality Control Board on February 7, 2022 (enclosure 2). You shall consider such conditions to be an integral part of the NWP authorization for your project.

General Condition 18 stipulates that project authorization under a NWP does not allow for the incidental take of any federally-listed species in the absence of a biological opinion with incidental take provisions. As the principal federal lead agency for this project, the Corps initiated consultation with the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) to address project related impacts to listed species, pursuant to Section 7(a) of the Endangered Species Act of 1973, as amended, 16 U.S.C. § 1531 et seq. By letter of January 6, 2020, USFWS concurred with the determination that the project was not likely to adversely affect California red-legged frog (*Rana draytonii*), northern spotted owl (*Strix occidentalis caurina*), and their designated critical habitat (Enclosure 3). By electronic message of August 12, 2021, the NOAA Restoration Center (RC) determined that the San Anselmo Flood Risk Reduction Project (2018-00240) fits within the Biological Opinion titled, “Program to fund, and/or permit restoration projects within the NOAA Restoration Center’s Central Coastal California Office jurisdictional area in California” (WCR-2015-3755), dated June 14, 2016.

In order to ensure compliance with this NWP authorization, the following special conditions shall be implemented:

1. Incidents where any individuals of *fish* listed by NOAA Fisheries under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the United States or structures or work in navigable waters of the United States authorized by this NWP shall be reported to NOAA Fisheries, Office of Protected Resources, at (301) 713-1401 and the Regulatory Office of the San Francisco District of the U.S. Army Corps of Engineers at (415) 503-6795. The finder should leave the plant or animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved, and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries, Office of Protected Resources, to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.

2. To remain exempt from the prohibitions of Section 9 of the Endangered Species Act, the non-discretionary Terms and Conditions for incidental take of federally-listed Species shall be fully implemented as stipulated in the Biological Opinion(s) titled “Program to fund, and/or permit restoration projects within the NOAA Restoration Center’s Central Coastal California Office jurisdictional area in California (WCR-2015-3755),” pages 81 & 82, dated June 14, 2016 ([www.spn.usace.army.mil/Portals/68/docs/regulatory/BOs/Prog/NMFS_PBO_NOAA_RC_2016.pdf](http://www.spn.usace.army.mil/Portals/68/docs/regulatory/BOs/Prog/NMFS_PBO_NOAA_RC_2016.pdf)). Project authorization under the NWP is conditional upon compliance with
the mandatory terms and conditions associated with incidental take. Failure to comply with the terms and conditions for incidental take, where a take of a federally-listed species occurs, would constitute an unauthorized take and non-compliance with the NWP authorization for your project. NMFS is, however, the authoritative federal agency for determining compliance with the incidental take statement and for initiating appropriate enforcement actions or penalties under the Endangered Species Act.

3. The USFWS concurred with the determination that the project is not likely to adversely affect listed species. This concurrence was premised, in part, on project work restrictions and the description of the proposed action outlined in enclosure 2. These work restrictions are incorporated as special conditions to this NWP authorization.

You may refer any questions on this matter to William Connor of the Regulatory staff by telephone at 415-503-6631 or by e-mail at william.m.connor@usace.army.mil. All correspondence should be addressed to the Regulatory Division North Branch referencing the file number at the head of this letter.

The San Francisco District is committed to improving service to our customers. My Regulatory staff seeks to achieve the goals of the Regulatory Program in an efficient and cooperative manner while preserving and protecting our nation’s aquatic resources. If you would like to provide comments on our Regulatory Program, please complete the Customer Service Survey Form available on our website: www.spn.usace.army.mil/Missions/Regulatory.

Sincerely,

William Connor
Chief, North Branch
Regulatory Division

Enclosures

cc:
US NOAA, Joe Pecharich, joe.pecharich@noaa.gov
CA RWQCB, Nicole Fairley, Nicole.Fairley@Waterboards.ca.gov
ESA, Leane Dunn, LDunn@esassoc.com
Jill Sunahara, JSunahara@esassoc.com
Roberta,

The NOAA Restoration Center (RC) has reviewed Marin County Flood Control and Water Conservation District’s application documents to the NOAA RC’s Santa Rosa Office Programmatic Approach (Program) and has determined that the San Anselmo Flood Risk Reduction Project (2018-00240) fits within the scope of the Program. NOAA RC and the United States Army Corps of Engineers' (USACE) completed programmatic consultation with NMFS under section 7(a)(2) of the ESA for the NOAA RC's Program on June 14, 2016. Thus, no further ESA consultation with NMFS is required for this project at this time. If ANY modifications are made to the design or construction plans of this project, please contact me to ensure the project remains within the scope and criteria of NOAA RC's Program.

Please e-mail a copy of the 404 at your convenience when it is completed.

Thank you,
Joe

Joe Pecharich
Fish Biologist/Habitat Specialist
NOAA Restoration Center
777 Sonoma Ave., Suite 325
Santa Rosa, CA 95404-6515
(707) 575-6095 - office
(707) 583-3189 – cell
Enclosure 1

Permittee: Marin County Flood Control and Water Conservation District

File Number: SPN-2018-00240

Certification of Compliance
for
Nationwide Permit

"I hereby certify that the work authorized by the above referenced File Number and all required mitigation have been completed in accordance with the terms and conditions of this Nationwide Permit authorization."

(Permittee)       (Date)

Return to: cespn-regulatory-info@usace.army.mil

U.S. Army, Corps of Engineers
San Francisco District
Regulatory Division, CESPN-RGN
450 Golden Gate Ave., 4th Floor
San Francisco, CA  94102-3404
Dear Regulatory Division Chief:

This letter is in response to your July 22, 2020, request that the U.S. Fish and Wildlife Service (Service) concur with your determination that the proposed San Anselmo Flood Risk Reduction Project (project) may affect, but is not likely to adversely affect, the federally threatened California red-legged frog (*Rana draytonii*), and the federally threatened northern spotted owl (*Strix occidentalis caurina*) in accordance with the requirements of the Endangered Species Act of 1973, as amended (Act). Your letter was received in our office on July 22, 2020. The project is not within critical habitat for the California red-legged frog or the northern spotted owl.

In reviewing the potential effects of the proposed project, the Service has relied upon:


2) Other information available to the Service.

**Project Summary**

The Marin County Flood Control and Water Conservation District (Flood Control District) proposes to construct a diversion structure in Fairfax Creek to reduce the severity of ongoing and increasingly larger downstream flood flows. The project is located in at 3000 Sir Francis Drake Boulevard near the City of Fairfax, Marin County, California. The project will occur over a period of 12 months in 2021.
The project will be built and operated in two locations. The first site is at the former Sunnyside Nursery (the Nursery Basin site) in unincorporated Marin County, adjacent to the western border of the Town of Fairfax. The second location is at 634-636 San Anselmo Avenue in downtown San Anselmo along San Anselmo Creek (the downtown San Anselmo site). The Flood Control District will implement this project to reduce flood risk by (1) reducing peak discharge by attenuating flows through use of a flood diversion and storage (FDS) basin at the Nursery Basin site along Fairfax Creek, and (2) increasing creek capacity by removing existing obstructions to creek flow (a building bridge that spans San Anselmo Creek and has its foundations in the channel) and then regrading and improving the creek channel.

At the downtown San Anselmo site, the building bridge is a compound structure consisting of a base concrete “bridge and deck” spanning entirely over San Anselmo Creek with a single-story, 3,000 square foot, wood frame and masonry building comprising four commercial units constructed on top of the deck. This structure is approximately 60 feet long by 90 feet wide. Foundation structures include a smaller box culvert-shaped segment on the north side of the crossing. Similar to a bridge configuration, the decks are supported by concrete abutment walls, piers, and footings in the creek bed. There is also an additional, separate, small concrete block building situated high on the west bank of the parcel at 630 San Anselmo Ave., which will remain in place. The bank stabilization activities will be done over approximately 0.3 acre.

**Nursery Basin Site**

The Nursery Basin site is approximately 8.8 acres, located on flat and upsloping terrain, and includes an approximately 1,000-foot reach of Fairfax Creek. The site is mostly undeveloped except for a few remnant nursery-related buildings. Only 5.5 acres of this site will be disturbed through project activities.

The objective of the FDS basin facility is to reduce flood risk in Fairfax and other flood prone areas farther downstream by diverting stormwater, which would otherwise overtop creek banks, into an off-channel storage basin for temporary storage. Later, after flooding subsides, the stored water will be gradually released back to the creek channel at a rate that can be accommodated without flooding.

A 36-inch-diameter outlet pipe will connect the southeastern corner of the FDS basin to Fairfax Creek channel downstream of the diversion structure. A side diversion weir will be located along an approximately 305-linear-foot segment of the southern storage basin levee and separate the storage basin from Fairfax Creek. The weir will be located along the creek between the new diversion structure and the existing bridge. Rock slope protection will be installed along the slopes and toe of both sides of the weir to provide protection against erosion. A new 17-foot by 16-foot-wide, control building will be constructed downstream of the diversion structure at the top of the creek bank near Sir Francis Drake Boulevard, and a small parking area will be located in a new paved area adjacent to the control building. The existing bridge and the new paved road on the diversion structure will be used to access the storage basin. Two unpaved access roads will be constructed to provide maintenance access into Fairfax Creek.

Creek channel grading and bank stabilization will occur in Fairfax Creek upstream and downstream of the diversion structure. Proposed bank protection includes a combination of
planted double layer fabric, vegetated soil lifts, planted rock, and rock toe protection. Willows (*Salix* sp.), dogwood (*Cornus* sp.), or other appropriate native species will be planted within the biotechnical structures in areas away from the side diversion weir.

Upstream of the Diversion Structure:

An approximately 240-linear-foot segment of Fairfax Creek upstream of the diversion structure will be graded, approximately 140 linear feet will include regrading of the channel bottom, while the remaining 100 linear feet will only include regrading of the channel bank. An approximately 5-foot-deep layer of exposed rock slope protection will be placed on either side of the channel bank. Erosion control fabric and seed will be placed on portions of the bank that are not protected by rock.

Downstream of the Diversion Structure:

An approximately 300-foot segment of Fairfax Creek downstream of the diversion structure will be graded and/or stabilized. Approximately 120 feet of the channel downstream of the diversion structure will be graded. This graded area will be reconstructed with 5-foot deep rock slope protection and the channel bottom will be lined with a mix of existing salvaged and stockpiled streambed material and engineered streambed material. Planted rock slope protection will border the rock-only protected areas. Erosion control fabric and seed will be placed on areas without rock or vegetated soil lifts.

**Downtown San Anselmo Site**

The objective of the work at the downtown San Anselmo site is to reduce flood risk in flood prone areas farther downstream by removing the building bridge obstruction and thereby substantially increasing channel capacity. This action will reduce the frequency and severity of overbank flooding onto San Anselmo Avenue and enhance public safety and protect properties in the floodplain. Additionally, the project will improve components of the existing Creek Park at the site. These public access components are included as part of the project and will be implemented by the Town of San Anselmo.

The first phase of activity at the downtown San Anselmo site as part of the project consists of demolition and removal of the existing concrete bridge and deck structure. Bank stabilization will occur on the left bank where the abutment walls will be removed, on the left bank beneath the existing stage, and on the right bank beneath the existing art gallery kiosk. The existing Creek Park will be reconstructed to integrate with the building bridge removal and bank stabilization components. A new pedestrian plaza will be created along San Anselmo Avenue adjacent to the remaining building bridge retaining wall. A new 45-foot pedestrian bridge will be constructed over the creek at the upstream end of the building bridge site. The three existing storm drain pipes discharging into the creek channel will be modified to conform to the Creek Park improvements. Additionally, an existing storm drain inlet will be replaced with a new storm drain manhole and another new storm drain will be installed, but none of this work will occur in or immediately adjacent to the creek.
Temporary Dewatering and In-Channel Work

Fairfax Creek is typically dry in the summer and only localized dewatering and/or exclusion and containment is anticipated for construction below the creek bed. However, if the creek still has water when construction is scheduled to start April 15, a temporary coffer dam may be installed to allow creek access for work between April 15 and October 15. It is expected that a sump pit and pump will be used to remove any remaining water and seepage during construction. Dewatering of groundwater from excavations typically will involve pumping water out of the excavated area into settlement tanks and, following appropriate on-site treatment, discharging the water over land or into municipal separate sewer systems and/or creek. Water pumped from within the cofferdam could be redirected to the creek channel downstream of the work area.

San Anselmo Creek is perennial and will typically have flows throughout the summer months. Construction dewatering will be required for the project reach to bypass the creek flow around the project area for the full duration of the in-channel work. Construction vehicles will move within the channel only within the work limit, all other access will be from the top of bank.

A temporary creek diversion system, consisting of a temporary coffer dam, culverts or other means of directing flows to one side of the creek at a time or out of the work area entirely, along with cofferdams and temporary pumps, will be installed.

Debris and Excavated Soil

A Stormwater Pollution Prevention Plan (SWPPP) will be implemented on roads to protect water quality. The condition of existing roads will be documented with photos and videos prior to construction, and will be restored appropriately following construction.

The soil that is excavated from the Nursery Basin site (approximately 30,000 cubic yards) may be beneficially reused in an appropriate project, may be hauled to Redwood Landfill, located north of Novato, for disposal, or temporarily stockpiled in upland areas on property located off of Highway 37 or Gnoss Field Airport. The Highway 37 site is currently used as spray fields by the Novato Sanitary District and the Gnoss Field site was previously approved for stockpiling in 2012 and 2016 for the Novato Creek Maintenance Sediment Removal Project. Sediment fencing will be installed around stockpiles and all jurisdictional waters of the state and US will be avoided.

If soil is temporarily placed at the Novato Sanitary District site, wildlife exclusion fencing will be installed along the perimeter of the work area during hauling and disposal activities.

Alternatively, the soil may be placed in upland disturbed areas at the Novato site, to be determined.

Maintenance

At the Nursery Basin site, debris will be removed from the creek following each rainy season, and as needed after storm events from the diversion structure and diversion pool area. Deposited
Regulatory Division Chief

sediment will be removed and the Nursery Basin site will be prepared for gravel augmentation if or as required by the Sediment Management Plan, which has yet to be finalized.

The perimeter and access road and embankment will be maintained, including grading and weed control, removing accumulated debris from the drainage ditch and storm drain along the northern side of the basin, monitoring bank erosion near the existing access bridge, and inspections of the roadway across the diversion structure.

Invasive vegetation will be routinely monitored for and removed on basin side slopes.

At the downtown San Anselmo site, maintenance includes management of invasive vegetation, removal of litter or debris, and replanting, tree-trimming, or other vegetation management actions as described in the Flood Control District’s Stream Maintenance Program.

Revegetation Plan

The revegetation plan is designed to establish native plant communities and habitat functions to the extent feasible on elements of the Nursery Basin and downtown San Anselmo sites disturbed by construction. If topsoil will be salvaged, this work will begin with selective grading activities to facilitate salvage of site topsoils for replacement onto surfaces of project features and restored areas to support establishment of native plant species. The rock slope protection and vegetated soil lifts will be constructed, the finished surfaces of the FDS basin, slopes, setback and buffer areas, and restored creek reaches will be seeded and planted with native plants, and a temporary irrigation system will be installed. Maintenance and monitoring of the revegetated areas will occur for a period of 5 years to insure successful establishment of native plant communities. These revegetation actions are described in further detail below.

The County intends to prepare a Habitat Restoration and Monitoring Plan, which will incorporate relevant portions of this revegetation plan along with monitoring and performance criteria, and an adaptive management plan that addresses protocols applicable if success criteria are not being met.

In order to provide conditions favorable to the establishment of restoration plantings, selected topsoils from the revegetation areas may be salvaged and relocated to a temporary stockpile area or directly to the revegetation areas, where feasible. If topsoils are not salvaged and stockpiled, then soils may be amended prior to planting.

If immediate transport and application of salvaged soils is not feasible, the retained soils may be stored for as long as 2 months, but will be stored as briefly as possible to prevent anaerobic conditions from developing.

Soil tests will be performed at the time of stockpiling and again at the time of redistribution over the revegetation areas if the soils have been stored. These tests will serve to determine whether any adverse changes (such as changes in pH levels) have occurred during storage and recommended soil amendments or other measures. Measures will be taken to remedy any adverse changes in soil chemistry.
Planting

If topsoils are salvaged at the Nursery Basin site, planting and seeding will commence once relocation of topsoils and any soil amendments required to correct post grading soil conditions have been performed. At the downtown San Anselmo site, planting will be performed in concert with placement of biotechnical bank protection treatments, followed by seeding of all areas disturbed by construction activities. Seed mixes will provide immediate erosion protection in addition to establishment of native herbaceous species components of the target plant communities.

All planting on the project site will be supervised by a restoration ecologist having demonstrated knowledge and experience in native plant revegetation. To the extent feasible, planting will be performed during the cooler, wetter months between November 15 and April 15; preferably immediately following a rainfall of one to one and one-half inches. If seasonal rainfall is low or does not coincide with the desired planting dates, both the plant materials and the receiving ground surfaces will be thoroughly irrigated prior to planting.


To preserve genetic integrity, all plants to be installed in the restoration areas will be propagated from local sources collected within the Corte Madera Creek watershed. To the extent feasible, cuttings of native alders within the downtown San Anselmo site will be collected prior to removal of those trees and grown for later installation on the project site. In general, collections will be made between April and November.

All plant materials will be stored and grown under phytosanitary conditions and tested as remaining free from disease in the nursery or other growing facility. Planting stock will be protected from potential contamination from the point that it leaves the production nursery or collection site until planting.

The planting plan and plant species palettes for the Nursery Basin site are based upon plant community distribution and plant species composition observed in Fairfax Creek and adjacent open space areas exhibiting the most similar conditions to those which will result from the reconfiguration of the project site. Planting palettes will differ within three main planting areas, In-Basin, Setback/Buffer Areas, and the Fairfax Creek Restoration Area.

The planting plan and plant species palettes at the downtown San Anselmo site are based upon plant distribution and species composition observed in San Anselmo Creek and less disturbed tributaries in the vicinity. The creek banks at the downtown San Anselmo site will be planted in riparian tree, shrub, and herbaceous species, in accordance with their physical requirements.
Temporary irrigation will be provided for approximately five years at the Nursery Basin site and three years at the downtown San Anselmo site to ensure successful establishment of the native seeded areas and plantings utilizing an existing connection to the municipal supply.

**Monitoring and Maintenance**

Periodic maintenance will be required during the establishment of the revegetated area. Maintenance will be performed by qualified personnel having demonstrated experience in maintenance of natural habitat areas and of native revegetation projects. At a minimum, maintenance visits will consist of a thorough walk-through of the entire site, inspection of the condition of all plantings and seeded areas, irrigation system function checks and checks for proper irrigation coverage, weed control, and resetting or replanting, as necessary. Maintenance personnel will communicate directly with the project monitor to ensure prompt and appropriate response to any problems or unanticipated conditions encountered.

Any unsuccessful plantings will be replaced as needed to bring the revegetation areas of the site into compliance with the minimum success criteria established in project permits given by the Corps, the California Department of Fish and Wildlife, and the Regional Water Quality Control Board. The species planted within the project area will not be fertilized or pruned unless such pruning is required in case of emergency.

Maintenance visits will be performed following revegetation on a schedule to be determined in coordination with a maintenance contractor and depending on rainfall and other climate factors.

Construction and site modifications will create open areas that are prime sites for opportunistic weedy exotics. In order to re-establish a native plant community on the project site, exotics will be completely removed prior to the planting phase of construction. Exotic weeds may then be kept in check with periodic maintenance throughout the establishment period. Native plants within the restoration area will be protected during weed eradication efforts.

**Conservation Measures**

The following are the conservation measures that will be implemented as part of the proposed project that will help avoid or minimize effects to the California red-legged frog and the northern spotted owl:

**General**

1. All work performed in-water will be completed in a manner that meets the water quality objectives to ensure the protection of beneficial uses as specified in the Basin Plan.

2. All dewatering and diversion methods will be installed such that natural flow is maintained upstream and downstream of the project area.

3. Any temporary dams or diversion will be installed such that the diversion does not cause sedimentation, siltation, or erosion upstream or downstream of the project area.
4. Cofferdams will remain in place and functional throughout the in-stream construction or maintenance periods.

5. Disturbance of protected riparian vegetation will be limited or avoided entirely.

6. No discharge of pollutants from vehicle and equipment cleaning is allowed into any storm drains or watercourses.

7. Spill containment kits will be maintained onsite at all times during construction operations and/or staging or fueling of equipment.

8. Graded areas will be protected from erosion using a combination of silt fences, fiber rolls, etc. along top of slope or along edges of designated staging areas, and erosion control netting (such as jute or coir) as appropriate on sloped areas.

9. A speed limit of 24 kmph (15 mph) in the project footprint in unpaved areas will be enforced to reduce dust and excessive soil disturbance.

10. All food and food-related trash items will be enclosed in sealed trash containers and properly disposed of off-site.

11. Pets will not be allowed within the work area.

12. A Spill Response Plan will be prepared. Hazardous materials such as fuels, oils, solvents, etc. will be stored in sealable containers in a designated location that is at least 15 m (50 ft) from hydrologic features.

13. The name(s) and credentials of the qualified biologist(s) to act as construction monitors will be submitted to the Service for approval at least 15 days before construction work begins.

14. All construction personnel will attend an environmental education program delivered by the approved biologist. The training will include an explanation as how to best avoid the accidental take of California red-legged frog and other special-status species. The training session will be mandatory for contractors and all construction personnel. The field meeting will include topics on species identification, descriptions, habitat requirements and required minimization and avoidance measures.

15. If a special-status species is present within the work area during construction, work will cease in the vicinity of the animal, and the animal will be allowed to relocate of its own volition.

16. At the beginning of each workday that includes initial ground disturbance, including grading, excavation, and vegetation-removal activities, an approved biologist will conduct on-site monitoring for the presence of these species in the area where ground disturbance or vegetation removal is planned.
17. All observations of California red-legged frogs, northern spotted owls and salt marsh harvest mice will be reported to the CNDDB using standard field survey forms.

**California red-legged frogs**

18. No more than 24 hours before initial ground disturbance activities, including grading and excavation, an approved biologist will conduct onsite monitoring for the presence of California red-legged frog in the area where ground disturbance or vegetation removal will occur. Areas of dense vegetation may be mowed or trimmed to 18 inches in height, in order to more effectively survey for frogs. Once cleared, these areas may then be cut to ground level.

19. All excavated or deep-walled holes or trenches greater than 8 inches deep will be covered at the end of each workday using plywood, steel plates, or similar materials. Before such holes are filled, they will be thoroughly inspected for trapped animals.

20. Although California red-legged frogs are unlikely to be encountered, project personnel will immediately report any harm, injury, or mortality of a California red-legged frog during construction (including entrapment) to the construction foreman or biological monitor, and the construction foreman or monitor will immediately notify the Service.

21. Erosion control blankets, mats, or fiber rolls bound with synthetic monofilament netting will not be used within the project area. This includes products that use photodegradable or biodegradable synthetic netting, which can take several months to decompose. Acceptable materials include natural fibers such as jute, coconut, twine or other similar fibers.

**Northern Spotted Owls**

22. If activities have the potential to exceed 101 decibels (dB) (extreme levels), this work will be conducted to the extent feasible outside the nesting season (August 1 through January 31) to avoid disrupting nesting northern spotted owls adjacent to the action area. Work generating extreme sound levels during the nesting season will require protocol-level surveys to determine northern spotted owl nesting status and location and consultation with the Service and California Department of Fish and Wildlife (CDFW).

23. If work within the action area generating extreme sound levels (101 dB or higher) must occur during the northern spotted owl's nesting season (February 1 through July 31), protocol-level surveys in accordance with the Service's "Protocol for Surveying Proposed Management Activities that may Impact Northern Spotted Owls" (Service 2012) will be conducted. For "disturbance only" projects (i.e., projects that will not impact northern spotted owl habitat directly but will generate acoustic and/or visible disturbances potentially leading to nest abandonment), six surveys will be required during the nesting season in the action area and the surrounding 0.25-mile area (survey area).

24. If protocol-level surveys indicate that northern spotted owls are nesting within the potential acoustic impact distance to be determined in consultation with the Service,
project work may not commence until the end of the nesting season, i.e., August 1, or be limited to work, within certain acoustic levels based upon distance from the nest and in consultation with the Service. The County will have at least a 0.25 mile buffer from disturbance point-sources to where nesting northern spotted owls have been documented to avoid acoustic impacts to any active northern spotted owl nest.

25. If protocol-level surveys determine that northern spotted owls are not nesting or not nesting within the potential acoustic impact zone during the year of the surveys, project work may commence after non-nesting is determined, or after nesting is confirmed outside of the potential impact zone and other habitat within impact zone has been excluded from further requirements (i.e. because of proximity to a known nest). Non-nesting can be determined by late April, when a female is observed roosting not on a nest, for 1 hour, two times in April, with the 2 visits separated by 3 weeks.

26. If project work begins in the non-nesting season and is to continue into the nesting season, project work generating extreme levels of noise (101 dB or higher) will cease January 31 and will not recommence until protocol-level surveys as described above determine the nesting status of the survey area. Work generating noise levels below 100 dB ("Very High" or lower levels of disturbance) may continue into the nesting season.

27. Prior to construction any identified spotted owl nesting areas or activity centers will be flagged and avoided with a buffer of 0.25 mile during the active nesting season. Flood Control District biologists or their biological consultant will conduct northern spotted owl surveys in accordance with the Service’s protocol.

28. Marin County Parks conducts annual northern spotted owl surveys on Park lands close to the Nursery Basin site. The Flood Control District will request surveys of the work area vicinity in 2021. The findings of these surveys will indicate the distance of northern spotted owl activity centers to the work area. No work will be done within 0.25 mile of nesting areas or activity centers.

**Habitats and Occurrence**

**California Red-legged Frogs**

California red-legged frogs have not been detected during pre-construction surveys in the Corte Madera Creek Watershed, including San Anselmo Creek and its tributaries and Fairfax Creek. These creeks are not anticipated to support California red-legged frog breeding due to high winter flows. These drainages could support aquatic non-breeding habitat if other breeding habitat were available in the near-project vicinity. However, there are no known breeding habitats within 5 miles of the project area. California red-legged frogs have been detected elsewhere in Marin County, and are considered to have a generally low potential to disperse through the project sites. The closest documented occurrences of California red-legged frogs to the project site are outside the watershed, approximately 5 miles west of the Nursery Basin site (CDFW 2020). A pre-construction survey was done in 2020 for California red-legged frogs, with no individuals of the species found.
California red-legged frogs are not expected at the Novato Sanitary site, which is regularly treated and located across major highways from the nearest known aquatic habitat for this species.

**Northern Spotted Owls**

The National Park Service, Marin Municipal Water District and Marin County Parks have monitored northern spotted owl populations in Marin since 1998 and the population appears stable, with high reproductive success and minimal impact from barred owls (NPS 2017). Spotted owl activity centers include their nest territory and nearby foraging habitat, during nesting season (February 1 to August 31). The nearest spotted owl activity centers to the action area are just over 0.25-mile west and over 0.25 northwest of the Nursery Basin site (Point Blue 2019). While the project sites are too disturbed and fragmented to provide suitable nesting habitat, they are close enough to nesting habitat to potentially disturb nesting owls. The northern spotted owl may also use the action area for foraging or dispersal from nearby territories.

**Conclusion**

The Service concurs that the project, as described here and in project documents submitted to the Service, may affect, but is not likely to adversely affect the California red-legged frog, or the northern spotted owl because project effects are likely to be discountable based on the following:

1. Habitat will return to being available to the species once the project is completed.

2. The likelihood of encountering California red-legged frogs is low due to the distance from the project site to known occurrences, the dispersal distance of California red-legged frogs, and the absence of frogs during pre-construction surveys.

3. The likelihood of encountering northern spotted owls is low due to project sites being unsuitable nesting habitat, and conservation measures that limit encounters, such as avoiding nests by 0.25 mile.

4. The proposed conservation measures, such as the instruction to stop all work if any listed species are encountered, and to prevent auditory disturbance to nesting owls by conducting protocol-level surveys and avoiding nests by 0.25 mile will help ensure that there are no adverse effects to the species.

Therefore, unless new information reveals effects of the project that may affect federally listed species or critical habitat in a manner not identified to date, or if a new species is listed or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act is necessary for the proposed San Anselmo Flood Risk Reduction Project.

This concludes the Service's review of the proposed San Anselmo Flood Risk Reduction Project. No further coordination with the Service under the Act is necessary at this time. However, please note, this letter does not authorize take of listed species. As provided in 50 CFR §402.14, initiation of formal consultation is required where there is discretionary federal involvement or control over the action (or is authorized by law) and if: 1) new information reveals the effects of the agency action that may affect listed species or critical habitat in a
manner or to an extent not considered in this review; 2) 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 review; or 3) a new species is listed or critical habitat designated that may be affected by the action.

If you have any questions regarding this letter, please contact Cassandra Schlosser, Biologist (cassandra_schlosser@fws.gov), (916) 414-6620 or Ryan Olah, Coast Bay Division Chief (ryan_olah@fws.gov) at the letterhead address or telephone (916) 414-6623.

Sincerely,

Ryan Olah
Chief, Coast Bay Division

ec
Sahrye Cohen, U.S. Army Corp of Engineers, San Francisco, CA
U.S. Army Corp of Engineers, San Francisco, CA
Michelle Giolli, ESA, Sacramento, CA
LITERATURE CITED


Point Blue Conservation Science. 2019. Email communication from Renee Cormier to Even Holmboe (ESA) showing the location of northern spotted owl pairs near the SAFFR project site. August 12, 2019.

Regulatory Division

Subject: File Number SPN-2018-00240

Mr. Hugh Davis
Marin County Flood Control and Water Conservation District
3501 Civic Center Drive, Room 304
San Rafael, California 94903
HDavis@marincounty.org

Dear Mr. Davis:

This correspondence is in reference to your submittal of May 14, 2020, concerning Department of the Army (DA) authorization to improve stream conditions to reduce flood risk and construct habitat located at 3000 Sir Francis Drake Boulevard in Fairfax (lat/long 38.0029, -122.6108W) and 634/636 San Anselmo Avenue in San Anselmo (lat/long 37.9761, -122.5627°), Marin County, California.

Work within U.S. Army Corps of Engineers’ (Corps) jurisdiction will include placement of rock to stabilize the bank to support overflow flood flows in Fairfax Creek. Work will require the permanent discharge of 9 cubic yards of fill within 0.03 acre(s) of Fairfax Creek. This includes rock placed within 15 linear feet of Fairfax Creek at the outlet from the flood storage basin. In addition, temporary disturbance to 0.57 acre of jurisdicitional features for construction access. At the second location in San Anselmo, the project will permanently discharge 80.4 cubic yards of rock and 1.5 cubic yards of concrete in 0.02 acre of San Anselmo Creek. This includes rock placed within 44 linear feet of San Anselmo Creek for rock slope protection and construction of a new maintenance road. A temporary coffer dam would place 32 cubic yards of sandbags and 19 cubic yards of cut soil into the creek which will be removed following completion of the project. All work shall be completed in accordance with the plans and drawings titled: “San Anselmo Flood Risk Reduction Passive Flood Diversion Storage Site Project, 100% Design Drawings, Stetson Engineers, Inc., 2021” and “San Anselmo Flood Risk Reduction Project, Building Bridge No. 2, 90% Design Drawings, Stetson Engineers, Inc., https://www.marinwatersheds.org/resources/projects/san-anselmo-flood-risk-reduction-safrr-project.

Section 404 of the Clean Water Act (CWA) generally regulates the discharge of dredged or fill material below the plane of ordinary high water in non-tidal waters of the United States, below the high tide line in tidal waters of the United States, and within the lateral extent of wetlands adjacent to these waters. Section 10 of the Rivers and Harbors Act (RHA) generally regulates construction of structures and work, including excavation, dredging, and discharges of dredged or fill material occurring below the plane of mean high water in tidal waters of the United States; in former diked baylands currently below mean high water; outside the limits of...
mean high water but affecting the navigable capacity of tidal waters; or below the plane of ordinary high water in non-tidal waters designated as navigable waters of the United States. Navigable waters of the United States generally include all waters subject to the ebb and flow of the tide; and/or all waters presently used, or have been used in the past, or may be susceptible for future use to transport interstate or foreign commerce.

Based on a review of the information in your submittal and the current condition of the site, as verified during field investigations on June 1, 2018 and October 26, 2020, the project in Fairfax qualifies for authorization under Department of the Army Nationwide Permit (NWP 13) for Bank Stabilization and the project in San Anselmo qualifies for authorization under Department of the Army Nationwide Permit (NWP 43) for Storm Water Management Facilities (86 Fed. Reg. 73522). The projects must be in compliance with the terms of the NWPs cited on our website, general conditions of the Nationwide Permit Program, and the San Francisco District regional conditions located at (https://www.spn.usace.army.mil/Missions/Regulatory/Permitting/Nationwide/). You must also be in compliance with any special conditions specified in this letter for the NWP authorization to remain valid. Non-compliance with any term or condition could result in the revocation of the NWP authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps. This NWP authorization does not obviate the need to obtain other State or local approvals required by law.

This verification will remain valid until March 14, 2026, unless the NWP authorization is modified, suspended, or revoked. Activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon a NWP will remain authorized provided the activity is completed within 12 months of the date of a NWP’s expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 C.F.R. § 330.4(e) and 33 C.F.R. § 330.5(c) or (d). This verification will remain valid if, during the time period between now and March 14, 2026, the activity complies with any subsequent modification of the NWP authorization. The Chief of Engineers will periodically review NWPs and their conditions and will decide to modify, reissue, or revoke the permits. If a NWP is not modified or reissued within five years of its effective date, it automatically expires and becomes null and void. It is incumbent upon you to remain informed of any changes to the NWPs. Changes to the NWPs would be announced by Public Notice posted on our website (www.spn.usace.army.mil/Missions/Regulatory/Public-Notices.aspx). Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, enclosure 1, verifying that you have complied with the terms and conditions of the permit.

You shall comply with all terms and conditions set forth by the “CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER for: San Anselmo Flood Risk Reduction Project, Marin County,” issued by the San Francisco Bay Regional Water
Quality Control Board on February 7, 2022 (enclosure 2). You shall consider such conditions to be an integral part of the NWP authorization for your project.

General Condition 18 stipulates that project authorization under a NWP does not allow for the incidental take of any federally-listed species in the absence of a biological opinion with incidental take provisions. As the principal federal lead agency for this project, the Corps initiated consultation with the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) to address project related impacts to listed species, pursuant to Section 7(a) of the Endangered Species Act of 1973, as amended, 16 U.S.C. § 1531 et seq. By letter of January 6, 2020, USFWS concurred with the determination that the project was not likely to adversely affect California red-legged frog (Rana draytonii), northern spotted owl (Strix occidentalis caurina), and their designated critical habitat (Enclosure 3). By electronic message of August 12, 2021, the NOAA Restoration Center (RC) determined that the San Anselmo Flood Risk Reduction Project (2018-00240) fits within the Biological Opinion titled, “Program to fund, and/or permit restoration projects within the NOAA Restoration Center’s Central Coastal California Office jurisdictional area in California” (WCR-2015-3755), dated June 14, 2016.

In order to ensure compliance with this NWP authorization, the following special conditions shall be implemented:

1. Incidents where any individuals of *fish* listed by NOAA Fisheries under the Endangered Species Act appear to be injured or killed as a result of discharges of dredged or fill material into waters of the United States or structures or work in navigable waters of the United States authorized by this NWP shall be reported to NOAA Fisheries, Office of Protected Resources, at (301) 713-1401 and the Regulatory Office of the San Francisco District of the U.S. Army Corps of Engineers at (415) 503-6795. The finder should leave the plant or animal alone, make note of any circumstances likely causing the death or injury, note the location and number of individuals involved, and, if possible, take photographs. Adult animals should not be disturbed unless circumstances arise where they are obviously injured or killed by discharge exposure or some unnatural cause. The finder may be asked to carry out instructions provided by NOAA Fisheries, Office of Protected Resources, to collect specimens or take other measures to ensure that evidence intrinsic to the specimen is preserved.

2. To remain exempt from the prohibitions of Section 9 of the Endangered Species Act, the non-discretionary Terms and Conditions for incidental take of federally-listed Species shall be fully implemented as stipulated in the Biological Opinion(s) titled “Program to fund, and/or permit restoration projects within the NOAA Restoration Center’s Central Coastal California Office jurisdictional area in California (WCR-2015-3755),” pages 81 & 82, dated June 14, 2016 (www.spn.usace.army.mil/Portals/68/docs/regulatory/BOs/Prog/NMFS_PBO_NOAA_RCC_2016.pdf). Project authorization under the NWP is conditional upon compliance with
the mandatory terms and conditions associated with incidental take. Failure to comply with the terms and conditions for incidental take, where a take of a federally-listed species occurs, would constitute an unauthorized take and non-compliance with the NWP authorization for your project. NMFS is, however, the authoritative federal agency for determining compliance with the incidental take statement and for initiating appropriate enforcement actions or penalties under the Endangered Species Act.

3. The USFWS concurred with the determination that the project is not likely to adversely affect listed species. This concurrence was premised, in part, on project work restrictions and the description of the proposed action outlined in enclosure 2. These work restrictions are incorporated as special conditions to this NWP authorization.

You may refer any questions on this matter to William Connor of the Regulatory staff by telephone at 415-503-6631 or by e-mail at william.m.connor@usace.army.mil. All correspondence should be addressed to the Regulatory Division North Branch referencing the file number at the head of this letter.

The San Francisco District is committed to improving service to our customers. My Regulatory staff seeks to achieve the goals of the Regulatory Program in an efficient and cooperative manner while preserving and protecting our nation’s aquatic resources. If you would like to provide comments on our Regulatory Program, please complete the Customer Service Survey Form available on our website: www.spn.usace.army.mil/Missions/Regulatory.

Sincerely,

[Signature]

William Connor
Chief, North Branch
Regulatory Division

Enclosures

cc:
US NOAA, Joe Pecharich, joe.pecharich@noaa.gov
CA RWQCB, Nicole Fairley, Nicole.Fairley@Waterboards.ca.gov
ESA, Leane Dunn, LDunn@esassoc.com
Jill Sunahara, JSunahara@esassoc.com
Attachment 6 – USFWS NLAA Concurrence Letter
In Reply Refer to:
08ESMF00-2020-I-2642

January 6, 2021

Regulatory Division Chief
Attn: Roberta Morganstern
Department of the Army
San Francisco District, Corps of Engineers
Regulatory Division
450 Golden Gate Avenue, 4th Floor, Suite 1111
San Francisco, California 94102
Roberta.a.morgenstern@usace.army.mil

Subject: Concurrence with a Not Likely to Adversely Affect Determination for the San Anselmo Flood Risk Reduction Project in Marin County, California (Corps File Number SPN 2018-00240N)

Dear Regulatory Division Chief:

This letter is in response to your July 22, 2020, request that the U.S. Fish and Wildlife Service (Service) concur with your determination that the proposed San Anselmo Flood Risk Reduction Project (project) may affect, but is not likely to adversely affect, the federally threatened California red-legged frog (*Rana draytonii*), and the federally threatened northern spotted owl (*Strix occidentalis caurina*) in accordance with the requirements of the Endangered Species Act of 1973, as amended (Act). Your letter was received in our office on July 22, 2020. The project is not within critical habitat for the California red-legged frog or the northern spotted owl.

In reviewing the potential effects of the proposed project, the Service has relied upon:


2) Other information available to the Service.

**Project Summary**

The Marin County Flood Control and Water Conservation District (Flood Control District) proposes to construct a diversion structure in Fairfax Creek to reduce the severity of ongoing and increasingly larger downstream flood flows. The project is located in at 3000 Sir Francis Drake Boulevard near the City of Fairfax, Marin County, California. The project will occur over a period of 12 months in 2021.
The project will be built and operated in two locations. The first site is at the former Sunnyside Nursery (the Nursery Basin site) in unincorporated Marin County, adjacent to the western border of the Town of Fairfax. The second location is at 634-636 San Anselmo Avenue in downtown San Anselmo along San Anselmo Creek (the downtown San Anselmo site). The Flood Control District will implement this project to reduce flood risk by (1) reducing peak discharge by attenuating flows through use of a flood diversion and storage (FDS) basin at the Nursery Basin site along Fairfax Creek, and (2) increasing creek capacity by removing existing obstructions to creek flow (a building bridge that spans San Anselmo Creek and has its foundations in the channel) and then regrading and improving the creek channel.

At the downtown San Anselmo site, the building bridge is a compound structure consisting of a base concrete “bridge and deck” spanning entirely over San Anselmo Creek with a single-story, 3,000 square foot, wood frame and masonry building comprising four commercial units constructed on top of the deck. This structure is approximately 60 feet long by 90 feet wide. Foundation structures include a smaller box culvert-shaped segment on the north side of the crossing. Similar to a bridge configuration, the decks are supported by concrete abutment walls, piers, and footings in the creek bed. There is also an additional, separate, small concrete block building situated high on the west bank of the parcel at 630 San Anselmo Ave., which will remain in place. The bank stabilization activities will be done over approximately 0.3 acre.

Nursery Basin Site

The Nursery Basin site is approximately 8.8 acres, located on flat and upsloping terrain, and includes an approximately 1,000-foot reach of Fairfax Creek. The site is mostly undeveloped except for a few remnant nursery-related buildings. Only 5.5 acres of this site will be disturbed through project activities.

The objective of the FDS basin facility is to reduce flood risk in Fairfax and other flood prone areas farther downstream by diverting stormwater, which would otherwise overtop creek banks, into an off-channel storage basin for temporary storage. Later, after flooding subsides, the stored water will be gradually released back to the creek channel at a rate that can be accommodated without flooding.

A 36-inch-diameter outlet pipe will connect the southeastern corner of the FDS basin to Fairfax Creek channel downstream of the diversion structure. A side diversion weir will be located along an approximately 305-linear-foot segment of the southern storage basin levee and separate the storage basin from Fairfax Creek. The weir will be located along the creek between the new diversion structure and the existing bridge. Rock slope protection will be installed along the slopes and toe of both sides of the weir to provide protection against erosion. A new 17-foot by 16-foot-wide, control building will be constructed downstream of the diversion structure at the top of the creek bank near Sir Francis Drake Boulevard, and a small parking area will be located in a new paved area adjacent to the control building. The existing bridge and the new paved road on the diversion structure will be used to access the storage basin. Two unpaved access roads will be constructed to provide maintenance access into Fairfax Creek.

Creek channel grading and bank stabilization will occur in Fairfax Creek upstream and downstream of the diversion structure. Proposed bank protection includes a combination of
planted double layer fabric, vegetated soil lifts, planted rock, and rock toe protection. Willows (*Salix* sp.), dogwood (*Cornus* sp.), or other appropriate native species will be planted within the biotechnical structures in areas away from the side diversion weir.

Upstream of the Diversion Structure:

An approximately 240-linear-foot segment of Fairfax Creek upstream of the diversion structure will be graded, approximately 140 linear feet will include regrading of the channel bottom, while the remaining 100 linear feet will only include regrading of the channel bank. An approximately 5-foot-deep layer of exposed rock slope protection will be placed on either side of the channel bank. Erosion control fabric and seed will be placed on portions of the bank that are not protected by rock.

Downstream of the Diversion Structure:

An approximately 300-foot segment of Fairfax Creek downstream of the diversion structure will be graded and/or stabilized. Approximately 120 feet of the channel downstream of the diversion structure will be graded. This graded area will be reconstructed with 5-foot deep rock slope protection and the channel bottom will be lined with a mix of existing salvaged and stockpiled streambed material and engineered streambed material. Planted rock slope protection will border the rock-only protected areas. Erosion control fabric and seed will be placed on areas without rock or vegetated soil lifts.

Downtown San Anselmo Site

The objective of the work at the downtown San Anselmo site is to reduce flood risk in flood prone areas farther downstream by removing the building bridge obstruction and thereby substantially increasing channel capacity. This action will reduce the frequency and severity of overbank flooding onto San Anselmo Avenue and enhance public safety and protect properties in the floodplain. Additionally, the project will improve components of the existing Creek Park at the site. These public access components are included as part of the project and will be implemented by the Town of San Anselmo.

The first phase of activity at the downtown San Anselmo site as part of the project consists of demolition and removal of the existing concrete bridge and deck structure. Bank stabilization will occur on the left bank where the abutment walls will be removed, on the left bank beneath the existing stage, and on the right bank beneath the existing art gallery kiosk. The existing Creek Park will be reconstructed to integrate with the building bridge removal and bank stabilization components. A new pedestrian plaza will be created along San Anselmo Avenue adjacent to the remaining building bridge retaining wall. A new 45-foot pedestrian bridge will be constructed over the creek at the upstream end of the building bridge site. The three existing storm drain pipes discharging into the creek channel will be modified to conform to the Creek Park improvements. Additionally, an existing storm drain inlet will be replaced with a new storm drain manhole and another new storm drain will be installed, but none of this work will occur in or immediately adjacent to the creek.
**Temporary Dewatering and In-Channel Work**

Fairfax Creek is typically dry in the summer and only localized dewatering and/or exclusion and containment is anticipated for construction below the creek bed. However, if the creek still has water when construction is scheduled to start April 15, a temporary coffer dam may be installed to allow creek access for work between April 15 and October 15. It is expected that a sump pit and pump will be used to remove any remaining water and seepage during construction. Dewatering of groundwater from excavations typically will involve pumping water out of the excavated area into settlement tanks and, following appropriate on-site treatment, discharging the water over land or into municipal separate sewer systems and/or creek. Water pumped from within the cofferdam could be redirected to the creek channel downstream of the work area.

San Anselmo Creek is perennial and will typically have flows throughout the summer months. Construction dewatering will be required for the project reach to bypass the creek flow around the project area for the full duration of the in-channel work. Construction vehicles will move within the channel only within the work limit, all other access will be from the top of bank.

A temporary creek diversion system, consisting of a temporary coffer dam, culverts or other means of directing flows to one side of the creek at a time or out of the work area entirely, along with cofferdams and temporary pumps, will be installed.

**Debris and Excavated Soil**

A Stormwater Pollution Prevention Plan (SWPPP) will be implemented on roads to protect water quality. The condition of existing roads will be documented with photos and videos prior to construction, and will be restored appropriately following construction.

The soil that is excavated from the Nursery Basin site (approximately 30,000 cubic yards) may be beneficially reused in an appropriate project, may be hauled to Redwood Landfill, located north of Novato, for disposal, or temporarily stockpiled in upland areas on property located off of Highway 37 or Gnoss Field Airport. The Highway 37 site is currently used as spray fields by the Novato Sanitary District and the Gnoss Field site was previously approved for stockpiling in 2012 and 2016 for the Novato Creek Maintenance Sediment Removal Project. Sediment fencing will be installed around stockpiles and all jurisdictional waters of the state and US will be avoided.

If soil is temporarily placed at the Novato Sanitary District site, wildlife exclusion fencing will be installed along the perimeter of the work area during hauling and disposal activities.

Alternatively, the soil may be placed in upland disturbed areas at the Novato site, to be determined.

**Maintenance**

At the Nursery Basin site, debris will be removed from the creek following each rainy season, and as needed after storm events from the diversion structure and diversion pool area. Deposited
sediment will be removed and the Nursery Basin site will be prepared for gravel augmentation if or as required by the Sediment Management Plan, which has yet to be finalized.

The perimeter and access road and embankment will be maintained, including grading and weed control, removing accumulated debris from the drainage ditch and storm drain along the northern side of the basin, monitoring bank erosion near the existing access bridge, and inspections of the roadway across the diversion structure.

Invasive vegetation will be routinely monitored for and removed on basin side slopes.

At the downtown San Anselmo site, maintenance includes management of invasive vegetation, removal of litter or debris, and replanting, tree-trimming, or other vegetation management actions as described in the Flood Control District’s Stream Maintenance Program.

**Revegetation Plan**

The revegetation plan is designed to establish native plant communities and habitat functions to the extent feasible on elements of the Nursery Basin and downtown San Anselmo sites disturbed by construction. If topsoil will be salvaged, this work will begin with selective grading activities to facilitate salvage of site topsoils for replacement onto surfaces of project features and restored areas to support establishment of native plant species. The rock slope protection and vegetated soil lifts will be constructed, the finished surfaces of the FDS basin, slopes, setback and buffer areas, and restored creek reaches will be seeded and planted with native plants, and a temporary irrigation system will be installed. Maintenance and monitoring of the revegetated areas will occur for a period of 5 years to insure successful establishment of native plant communities. These revegetation actions are described in further detail below.

The County intends to prepare a Habitat Restoration and Monitoring Plan, which will incorporate relevant portions of this revegetation plan along with monitoring and performance criteria, and an adaptive management plan that addresses protocols applicable if success criteria are not being met.

In order to provide conditions favorable to the establishment of restoration plantings, selected topsoils from the revegetation areas may be salvaged and relocated to a temporary stockpile area or directly to the revegetation areas, where feasible. If topsoils are not salvaged and stockpiled, then soils may be amended prior to planting.

If immediate transport and application of salvaged soils is not feasible, the retained soils may be stored for as long as 2 months, but will be stored as briefly as possible to prevent anaerobic conditions from developing.

Soil tests will be performed at the time of stockpiling and again at the time of redistribution over the revegetation areas if the soils have been stored. These tests will serve to determine whether any adverse changes (such as changes in pH levels) have occurred during storage and recommended soil amendments or other measures. Measures will be taken to remedy any adverse changes in soil chemistry.
Planting

If topsoils are salvaged at the Nursery Basin site, planting and seeding will commence once relocation of topsoils and any soil amendments required to correct post grading soil conditions have been performed. At the downtown San Anselmo site, planting will be performed in concert with placement of biotechnical bank protection treatments, followed by seeding of all areas disturbed by construction activities. Seed mixes will provide immediate erosion protection in addition to establishment of native herbaceous species components of the target plant communities.

All planting on the project site will be supervised by a restoration ecologist having demonstrated knowledge and experience in native plant revegetation. To the extent feasible, planting will be performed during the cooler, wetter months between November 15 and April 15; preferably immediately following a rainfall of one to one and one-half inches. If seasonal rainfall is low or does not coincide with the desired planting dates, both the plant materials and the receiving ground surfaces will be thoroughly irrigated prior to planting.


To preserve genetic integrity, all plants to be installed in the restoration areas will be propagated from local sources collected within the Corte Madera Creek watershed. To the extent feasible, cuttings of native alders within the downtown San Anselmo site will be collected prior to removal of those trees and grown for later installation on the project site. In general, collections will be made between April and November.

All plant materials will be stored and grown under phytosanitary conditions and tested as remaining free from disease in the nursery or other growing facility. Planting stock will be protected from potential contamination from the point that it leaves the production nursery or collection site until planting.

The planting plan and plant species palettes for the Nursery Basin site are based upon plant community distribution and plant species composition observed in Fairfax Creek and adjacent open space areas exhibiting the most similar conditions to those which will result from the reconfiguration of the project site. Planting palettes will differ within three main planting areas, In-Basin, Setback/Buffer Areas, and the Fairfax Creek Restoration Area.

The planting plan and plant species palettes at the downtown San Anselmo site are based upon plant distribution and species composition observed in San Anselmo Creek and less disturbed tributaries in the vicinity. The creek banks at the downtown San Anselmo site will be planted in riparian tree, shrub, and herbaceous species, in accordance with their physical requirements.
Temporary irrigation will be provided for approximately five years at the Nursery Basin site and three years at the downtown San Anselmo site to ensure successful establishment of the native seeded areas and plantings utilizing an existing connection to the municipal supply.

**Monitoring and Maintenance**

Periodic maintenance will be required during the establishment of the revegetated area. Maintenance will be performed by qualified personnel having demonstrated experience in maintenance of natural habitat areas and of native revegetation projects. At a minimum, maintenance visits will consist of a thorough walk-through of the entire site, inspection of the condition of all plantings and seeded areas, irrigation system function checks and checks for proper irrigation coverage, weed control, and resetting or replanting, as necessary. Maintenance personnel will communicate directly with the project monitor to ensure prompt and appropriate response to any problems or unanticipated conditions encountered.

Any unsuccessful plantings will be replaced as needed to bring the revegetation areas of the site into compliance with the minimum success criteria established in project permits given by the Corps, the California Department of Fish and Wildlife, and the Regional Water Quality Control Board. The species planted within the project area will not be fertilized or pruned unless such pruning is required in case of emergency.

Maintenance visits will be performed following revegetation on a schedule to be determined in coordination with a maintenance contractor and depending on rainfall and other climate factors.

Construction and site modifications will create open areas that are prime sites for opportunistic weedy exotics. In order to re-establish a native plant community on the project site, exotics will be completely removed prior to the planting phase of construction. Exotic weeds may then be kept in check with periodic maintenance throughout the establishment period. Native plants within the restoration area will be protected during weed eradication efforts.

**Conservation Measures**

The following are the conservation measures that will be implemented as part of the proposed project that will help avoid or minimize effects to the California red-legged frog and the northern spotted owl:

**General**

1. All work performed in-water will be completed in a manner that meets the water quality objectives to ensure the protection of beneficial uses as specified in the Basin Plan.

2. All dewatering and diversion methods will be installed such that natural flow is maintained upstream and downstream of the project area.

3. Any temporary dams or diversion will be installed such that the diversion does not cause sedimentation, siltation, or erosion upstream or downstream of the project area.
4. Cofferdams will remain in place and functional throughout the in-stream construction or maintenance periods.

5. Disturbance of protected riparian vegetation will be limited or avoided entirely.

6. No discharge of pollutants from vehicle and equipment cleaning is allowed into any storm drains or watercourses.

7. Spill containment kits will be maintained onsite at all times during construction operations and/or staging or fueling of equipment.

8. Graded areas will be protected from erosion using a combination of silt fences, fiber rolls, etc. along top of slope or along edges of designated staging areas, and erosion control netting (such as jute or coir) as appropriate on sloped areas.

9. A speed limit of 24 kmph (15 mph) in the project footprint in unpaved areas will be enforced to reduce dust and excessive soil disturbance.

10. All food and food-related trash items will be enclosed in sealed trash containers and properly disposed of off-site.

11. Pets will not be allowed within the work area.

12. A Spill Response Plan will be prepared. Hazardous materials such as fuels, oils, solvents, etc. will be stored in sealable containers in a designated location that is at least 15 m (50 ft) from hydrologic features.

13. The name(s) and credentials of the qualified biologist(s) to act as construction monitors will be submitted to the Service for approval at least 15 days before construction work begins.

14. All construction personnel will attend an environmental education program delivered by the approved biologist. The training will include an explanation as how to best avoid the accidental take of California red-legged frog and other special-status species. The training session will be mandatory for contractors and all construction personnel. The field meeting will include topics on species identification, descriptions, habitat requirements and required minimization and avoidance measures.

15. If a special-status species is present within the work area during construction, work will cease in the vicinity of the animal, and the animal will be allowed to relocate of its own volition.

16. At the beginning of each workday that includes initial ground disturbance, including grading, excavation, and vegetation-removal activities, an approved biologist will conduct on-site monitoring for the presence of these species in the area where ground disturbance or vegetation removal is planned.
17. All observations of California red-legged frogs, northern spotted owls and salt marsh harvest mice will be reported to the CNDDB using standard field survey forms.

California red-legged frogs

18. No more than 24 hours before initial ground disturbance activities, including grading and excavation, an approved biologist will conduct onsite monitoring for the presence of California red-legged frog in the area where ground disturbance or vegetation removal will occur. Areas of dense vegetation may be mowed or trimmed to 18 inches in height, in order to more effectively survey for frogs. Once cleared, these areas may then be cut to ground level.

19. All excavated or deep-walled holes or trenches greater than 8 inches deep will be covered at the end of each workday using plywood, steel plates, or similar materials. Before such holes are filled, they will be thoroughly inspected for trapped animals.

20. Although California red-legged frogs are unlikely to be encountered, project personnel will immediately report any harm, injury, or mortality of a California red-legged frog during construction (including entrapment) to the construction foreman or biological monitor, and the construction foreman or monitor will immediately notify the Service.

21. Erosion control blankets, mats, or fiber rolls bound with synthetic monofilament netting will not be used within the project area. This includes products that use photodegradable or biodegradable synthetic netting, which can take several months to decompose. Acceptable materials include natural fibers such as jute, coconut, twine or other similar fibers.

Northern Spotted Owls

22. If activities have the potential to exceed 101 decibels (dB) (extreme levels), this work will be conducted to the extent feasible outside the nesting season (August 1 through January 31) to avoid disrupting nesting northern spotted owls adjacent to the action area. Work generating extreme sound levels during the nesting season will require protocol-level surveys to determine northern spotted owl nesting status and location and consultation with the Service and California Department of Fish and Wildlife (CDFW).

23. If work within the action area generating extreme sound levels (101 dB or higher) must occur during the northern spotted owl's nesting season (February 1 through July 31), protocol-level surveys in accordance with the Service's "Protocol for Surveying Proposed Management Activities that may Impact Northern Spotted Owls" (Service 2012) will be conducted. For "disturbance only" projects (i.e., projects that will not impact northern spotted owl habitat directly but will generate acoustic and/ or visible disturbances potentially leading to nest abandonment), six surveys will be required during the nesting season in the action area and the surrounding 0.25-mile area (survey area).

24. If protocol-level surveys indicate that northern spotted owls are nesting within the potential acoustic impact distance to be determined in consultation with the Service,
project work may not commence until the end of the nesting season, i.e., August 1, or be limited to work, within certain acoustic levels based upon distance from the nest and in consultation with the Service. The County will have at least a 0.25 mile buffer from disturbance point-sources to where nesting northern spotted owls have been documented to avoid acoustic impacts to any active northern spotted owl nest.

25. If protocol-level surveys determine that northern spotted owls are not nesting or not nesting within the potential acoustic impact zone during the year of the surveys, project work may commence after non-nesting is determined, or after nesting is confirmed outside of the potential impact zone and other habitat within impact zone has been excluded from further requirements (i.e. because of proximity to a known nest). Non-nesting can be determined by late April, when a female is observed roosting not on a nest, for 1 hour, two times in April, with the 2 visits separated by 3 weeks.

26. If project work begins in the non-nesting season and is to continue into the nesting season, project work generating extreme levels of noise (101 dB or higher) will cease January 31 and will not recommence until protocol-level surveys as described above determine the nesting status of the survey area. Work generating noise levels below 100 dB ("Very High" or lower levels of disturbance) may continue into the nesting season.

27. Prior to construction any identified spotted owl nesting areas or activity centers will be flagged and avoided with a buffer of 0.25 mile during the active nesting season. Flood Control District biologists or their biological consultant will conduct northern spotted owl surveys in accordance with the Service’s protocol.

28. Marin County Parks conducts annual northern spotted owl surveys on Park lands close to the Nursery Basin site. The Flood Control District will request surveys of the work area vicinity in 2021. The findings of these surveys will indicate the distance of northern spotted owl activity centers to the work area. No work will be done within 0.25 mile of nesting areas or activity centers.

Habits and Occurrence

California Red-legged Frogs

California red-legged frogs have not been detected during pre-construction surveys in the Corte Madera Creek Watershed, including San Anselmo Creek and its tributaries and Fairfax Creek. These creeks are not anticipated to support California red-legged frog breeding due to high winter flows. These drainages could support aquatic non-breeding habitat if other breeding habitat were available in the near-project vicinity. However, there are no known breeding habitats within 5 miles of the project area. California red-legged frogs have been detected elsewhere in Marin County, and are considered to have a generally low potential to disperse through the project sites. The closest documented occurrences of California red-legged frogs to the project site are outside the watershed, approximately 5 miles west of the Nursery Basin site (CDFW 2020). A pre-construction survey was done in 2020 for California red-legged frogs, with no individuals of the species found.
California red-legged frogs are not expected at the Novato Sanitary site, which is regularly treated and located across major highways from the nearest known aquatic habitat for this species.

**Northern Spotted Owls**

The National Park Service, Marin Municipal Water District and Marin County Parks have monitored northern spotted owl populations in Marin since 1998 and the population appears stable, with high reproductive success and minimal impact from barred owls (NPS 2017). Spotted owl activity centers include their nest territory and nearby foraging habitat, during nesting season (February 1 to August 31). The nearest spotted owl activity centers to the action area are just over 0.25-mile west and over 0.25 northwest of the Nursery Basin site (Point Blue 2019). While the project sites are too disturbed and fragmented to provide suitable nesting habitat, they are close enough to nesting habitat to potentially disturb nesting owls. The northern spotted owl may also use the action area for foraging or dispersal from nearby territories.

**Conclusion**

The Service concurs that the project, as described here and in project documents submitted to the Service, may affect, but is not likely to adversely affect the California red-legged frog, or the northern spotted owl because project effects are likely to be discountable based on the following:

1. Habitat will return to being available to the species once the project is completed.

2. The likelihood of encountering California red-legged frogs is low due to the distance from the project site to known occurrences, the dispersal distance of California red-legged frogs, and the absence of frogs during pre-construction surveys

3. The likelihood of encountering northern spotted owls is low due to project sites being unsuitable nesting habitat, and conservation measures that limit encounters, such as avoiding nests by 0.25 mile.

4. The proposed conservation measures, such as the instruction to stop all work if any listed species are encountered, and to prevent auditory disturbance to nesting owls by conducting protocol-level surveys and avoiding nests by 0.25 mile will help ensure that there are no adverse effects to the species.

Therefore, unless new information reveals effects of the project that may affect federally listed species or critical habitat in a manner not identified to date, or if a new species is listed or critical habitat is designated that may be affected by the proposed action, no further action pursuant to the Act is necessary for the proposed San Anselmo Flood Risk Reduction Project.

This concludes the Service's review of the proposed San Anselmo Flood Risk Reduction Project. No further coordination with the Service under the Act is necessary at this time. However, please note, this letter does not authorize take of listed species. As provided in 50 CFR §402.14, initiation of formal consultation is required where there is discretionary federal involvement or control over the action (or is authorized by law) and if: 1) new information reveals the effects of the agency action that may affect listed species or critical habitat in a
manner or to an extent not considered in this review; 2) 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 review; or 3) a new species is listed or critical habitat designated that may be affected by the action.

If you have any questions regarding this letter, please contact Cassandra Schlosser, Biologist (cassandra_schlosser@fws.gov), (916) 414-6620 or Ryan Olah, Coast Bay Division Chief (ryan_olah@fws.gov) at the letterhead address or telephone (916) 414-6623.

Sincerely,

Ryan Olah
Chief, Coast Bay Division

ec
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LITERATURE CITED


Point Blue Conservation Science. 2019. Email communication from Renee Cormier to Even Holmboe (ESA) showing the location of northern spotted owl pairs near the SAFFR project site. August 12, 2019.

Attachment 7 – SAFRR Restoration Monitoring Plan
SAN ANSELMO FLOOD RISK REDUCTION PROJECT
Habitat Restoration and Monitoring Plan

Prepared for
Marin County Flood Control and Water Conservation District

March 2022
SAN ANSELMO FLOOD RISK REDUCTION PROJECT
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SECTION 1
Introduction

1.1 Background

The Marin Flood Control District (Flood Control District) seeks to substantially reduce the frequency and severity of flooding within portions of the San Anselmo Creek and Fairfax Creek subwatersheds in the Ross Valley. The Flood Control District would meet this goal by increasing creek capacity through the removal of existing obstructions to flow and reducing peak discharge and flows through the use of a new Flood Diversion and Storage (FDS) Basin. By implementing the San Anselmo Flood Risk Reduction Project (SAFRR; Project), the existing flood risk in portions of Ross Valley – including downtown San Anselmo and Fairfax – would be substantially reduced. The Project includes two main elements: the creation of a FDS basin at the former Sunnyside Nursery site, and creek capacity improvements made by removing a flow-constraining bridge building in downtown San Anselmo.

This Habitat Restoration and Monitoring Plan describes treatments and methods to be implemented to restore areas impacted by the Project and provides success criteria and monitoring methods to describe and quantify post restoration and revegetation conditions at the project site in order to address federal and state permit mitigation requirements. This plan identifies reporting requirements for the project and contingency measures (i.e., adaptive management) that would be implemented if monitoring identifies the need for adjustments to management strategy to meet the success criteria.

1.2 Project Location

There are two main locations associated with this Project: the Flood Diversion and Storage (FDS) Basin site and the downtown San Anselmo site (also referred to as Building Bridge 2 or BB2). Fairfax Creek runs through the FDS Basin Site, while San Anselmo Creek runs through the downtown San Anselmo site. They are part of the larger Corte Madera Creek Watershed, which is also referred to as the Ross Valley Watershed, or Ross Valley. This area is in central eastern Marin County, California, approximately 12 miles north of San Francisco, with Mount Tamalpais to the west, the City of San Rafael to the east and San Pablo Bay and San Francisco Bay to the south. The Project region is shown in Figure 1-1, and the Project topography for the two main sites (FDS Basin site and the downtown San Anselmo sites) is shown in Figures 1-2 and 1-3.
Figure 1-1
SAFRR Project Locations

San Anselmo Flood Risk Reduction Project. D181075.01

SOURCE: ESA, 2020; ESRI (Imagery) 2019

Study Area

0 0.6 Miles

FDS Basin Site

Downtown San Anselmo Site

Marin County

Project Location

SOURCE: ESA, 2020; ESRI (Imagery) 2019

Figure 1-1
SAFRR Project Locations
San Anselmo Flood Risk Reduction Project

Downtown San Anselmo Site

Figure 1-3

SOURCE: ESA, 2020; USGS, 2020
1.2.1 FDS Detention Basin Site

The FDS Basin Facility site is situated on the former Sunnyside Nursery located at 3000 Sir Francis Drake Boulevard in unincorporated Marin County just outside of the northern city limits of the Town of Fairfax. The site is approximately 8.8 acres, which includes an approximately 1,000-foot reach of Fairfax Creek. The FDS Basin site corresponds to the Novato, CA U.S. Geological Survey (USGS) 7.5 Minute topographic quadrangle map and is in a portion of Township 2 North, Range 6 and 7 West. Elevation within the site ranges from 225 feet above mean sea level (North American Vertical Datum of 1988; NAVD 88) within the creek bed up to 235 feet in the upland areas. The approximate centroid of the FDS Basin site is 38° 0' 8.23” North, 122° 36’ 37.22” West.

1.2.2 Downtown San Anselmo Site

Removal of an existing building substructure (Building Bridge 2 [BB2]) to increase creek capacity and creek restoration would occur at 634-636 San Anselmo Avenue (an area of approximately 0.25 acre) in downtown San Anselmo along San Anselmo Creek. The substructure consists of concrete foundations, abutments and a stem wall that all support a flat concrete deck that spans the concrete. The wood framed and concrete buildings that stood on the substructure were all removed in 2020. There is also an additional, separate, small concrete block building situated high on the west bank of the parcel (small art gallery kiosk at 630 San Anselmo Avenue) which would remain in place.

The downtown San Anselmo site corresponds to the San Rafael, CA U.S. Geological Survey (USGS) 7.5 Minute topographic quadrangle map and is in a portion of Township 2 North, Ranges 6 and 7 West. The downtown San Anselmo site ranges in elevation from approximately 50 feet above sea level (NAVD 88) in upland areas to 30 feet at the creek bed of San Anselmo Creek. The approximate centroid of the downtown San Anselmo Site is 37° 58’ 33.99” North, 122° 33’ 44.65” West.

1.3 Project Description

1.3.1 FDS Detention Basin Site

At the FDS Basin site, the Project will create an approximately 550-foot long, 350-foot wide, and 13-foot deep off-channel detention basin (FDS Basin) and associated system that diverts water from Fairfax Creek into the FDS Basin during 5-year or greater storm events to prevent downstream community flooding (Exhibits B and C). The FDS Basin will be located at a former plant nursery. Associated infrastructure with the plant nursery was removed previously. Details plans are provided in Attachment 1. This work includes the following:

- Excavating sediment in the floodplain/riparian habitat of Fairfax Creek to create the FDS Basin for an approximate storage volume of 35 acre-feet. The basin bottom will have a 0.5% slope toward the outlet at the southeast corner and will be vegetated with native species. The FDS Basin will be surrounded by an approximately 2 to 15-foot-tall perimeter levee with fencing.
1. Introduction

- Constructing an approximately 1,000-foot-long low-flow channel with multiple branches at the bottom of the FDS Basin, allowing for fish passage through the basin and back to Fairfax Creek. The trapezoidal channel will be approximately 6 feet wide at the top-of-bank, 3 feet wide at the base, and approximately 0.5 feet deep. The low-flow channel will connect to the culvert at the southeast corner of the FDS Basin, directing flow back to Fairfax Creek.

- Installing a 140-foot-long, 100-foot-wide side weir along Fairfax Creek and the southern perimeter of the FDS Basin, between an existing vehicle maintenance access bridge and 16 Deer Creek Court. The weir will be covered in articulated concrete block and seeded with a locally sourced native seed mix. The weir crest height will be approximately 8 feet lower than the rest of the FDS Basin perimeter levee to allow stormwater to passively flow into the FDS Basin during high flows. ½-ton rock slope protection will be placed along the base of the side weir along approximately 150 linear feet of Fairfax Creek.

- Installing an approximately 250-foot-long, 15-foot-wide articulated concrete block auxiliary weir outside the floodplain of Fairfax Creek and the southern perimeter of the FDS Basin, between an existing upstream vehicle maintenance access bridge and proposed outfall pipes. The weir crest height will be approximately 3 feet lower than the rest of the FDS Basin perimeter levee so excess water in the basin will flow back into the creek and maintain the freeboard needed adjacent to neighboring properties.

- Installing two FDS Basin outlet pipes with associated steel trash rack and concrete inlet, and rocked outfall that that outfalls into Fairfax Creek downstream of the auxiliary weir. One approximately 50-foot-long, 18-inch diameter reinforced concrete pipe (RCP) would always be open and allow the basin to passively fill during a flood event and also to slowly drain the basin after flood event. One approximately 200-foot-long, 36-inch diameter RCP would be usually closed with a slide gate at the intermediate vault to allow the basin to hold water and if needed to drain the basin more quickly, the pipe would be opened to allow water to flow from the basin to the creek. There will be flap gates at the upstream end of the outlet pipes to prevent flows backing up into the basin during creek flows. Upstream of the pipe inlet, the Project will install an approximately 5-foot-tall, 15-foot-wide fabricated steel trash rack to prevent the pipe from clogging with debris. The trash rack will be installed with approximately 5-foot-tall concrete walls that attach to the concrete base of the pipe inlet at the southeast corner of the FDS Basin (Exhibit B). The 36-inch pipe will have a slide gate connected by a stem with a handwheel for manual opening and closing and that will be located at an intermediate concrete vault. The slide gate will remain in the closed position except when the basin needs to be drained more quickly than the 18-inch pipe allows. 1/2 ton and 2-ton rock will be installed within a 1,200-square-foot area at the outlet of the 36-inch outlet pipe.

- Installing one creek access ramp from the left bank floodplain/riparian habitat of Fairfax Creek near auxiliary weir downstream of the existing access bridge. This ramp will allow vehicular access to Fairfax Creek for ongoing maintenance associated with the FDS Basin system. The ramp will be approximately 15 feet wide and 40 feet long. The ramp will have an approximately 15% slope and an articulated concrete block surface. Access to the creek for any maintenance upstream of the access bridge will be over the side weir.

- Installing an approximately 750-foot-long interceptor channel V-ditch that follows the northern and eastern perimeter of the FDS Basin. The V-ditch will connect to an existing earthen swale on the east side of the site and discharge into Fairfax Creek downstream of the diversion basin. The V-ditch will be earthen and vegetated with native species, except for an approximately 40-foot-long segment in the northeast corner that will be lined with 150-pound rock riprap. The outfall at Fairfax Creek will be graded and rocked to match the elevation and...
material of Fairfax Creek. Additional 1/2-ton rock riprap will be placed in the ditch and along the bank of the ditch where it meets Fairfax Creek.

- Installing an approximately 480-foot-long fence along Sir Francis Drake Boulevard within the floodplain/riparian habitat of Fairfax Creek.
- Removing trees from the floodplain/riparian area of Fairfax Creek.
- Maintaining the FDS Basin system for two years through large woody debris and sediment management. Annually, the 1,500-foot-long segment of Fairfax Creek and Baywood Canyon Creek upstream of the FDS Basin diversion system will be monitored for large woody debris (LWD) that could accumulate on the side weir or possibly in the storage basin itself. Annual monitoring will be conducted during both the summer and the wet season/high-flow in order to inventory LWD, determine highest priority point sources, and rationale for corrective actions. Monitoring will also occur during high flows to report and assess potential hazards of LWD to FDS operations. Monitoring and reporting will be performed by professionals possessing appropriate qualifications. Any LWD that is preventing flood diversion into the basin or otherwise diminishing performance during operations will be removed and may be added back to the channel downstream of the FDS diversion structure, with consideration given to potential risk of flooding and other unintended adverse impacts. Sediment accumulation is expected in the “deposition reach” of Fairfax Creek when flows are higher than the 5-year flood. Aggraded sediment will be removed from the “deposition reach” when the channel bed has raised an average of 0.3 ft or higher, equivalent to approximately 120 cubic yards of sediment. Sediment will be removed during the dry season, stockpiled on-site in the FDS Basin and passively returned to Fairfax Creek downstream of the basin outlet pipe discharge.

### 1.3.2 Downtown San Anselmo Site

The Downtown San Anselmo site activities, intended in part to mitigate impacts from the FDS Basin, include removing an existing bridge-building substructure spanning San Anselmo Creek, restoring the stream bank, and constructing a new approximately 60-foot-long free-spanning bridge across San Anselmo Creek. The substructure consists of concrete foundations, abutments and a stem wall that all support a flat concrete deck that spans the concrete. The wood framed and concrete buildings that stood on the substructure were all removed in 2020. The bridge would be approximately 20 feet wide on the west (left) bank and 28 feet wide on the east (right) bank. Detailed plans are provided in Attachment 2. This work includes the following Activities A through J:

A. Removing the bridge-building from San Anselmo Creek, including the approximately 6,100-square-foot concrete deck and two approximately 100-foot-long concrete abutment walls on the left bank.

B. Replacing the right bank approximately 100-foot-long concrete abutment wall with an approximately 75-foot-long, 20-foot-tall concrete cantilevered retaining wall to support the pedestrian plaza adjacent to San Anselmo Avenue; and constructing an approximately 11-foot-wide concrete footing approximately three feet below the streambed of San Anselmo Creek. Filter fabric wrapped riprap would be buried below the channel bed along the buried footing for the retaining wall and return wall.

C. Grading and stabilizing approximately 170 linear feet of the left bank. An approximately 20-foot-long section beneath the proposed pedestrian bridge will be laid back and graded to an approximately 1.5:1 slope. Within this 20-foot-long section, planted ½ ton rock riprap will be installed on 350 square feet of bank up to 3 feet in depth and ½-ton riprap will be placed within 50 square feet at the top of bank up to 3 feet in depth. An approximately 15-foot-long
section of the channel toe immediately upstream of the pedestrian bridge will be graded and 1-ton rock riprap will be installed within a 65 square foot area. An approximately 85-foot-long section immediately downstream of the proposed pedestrian bridge will be laid back and graded to an approximately 1.5:1 slope. A rock toe consisting of ½-ton rock riprap will be installed approximately three feet below the streambed and extend up the bank approximately five feet above the streambed. The exposed rock riprap will be interplanted with native riparian plants. Approximately 1,600 square feet of vegetated soil lifts (VSLs) will be installed above the rock toe. An additional downstream 50-foot-long section, below an existing stage, will be graded and stabilized with an approximately 510 square-foot VSL.

D. Grading and stabilizing approximately 50 linear feet of the right bank below the existing kiosk. The 50 linear feet will include approximately 10 linear feet of 1-ton-rock riprap that will be installed approximately 3 feet deep and extend up to the top of the bank. The remaining 40 linear feet will include vegetated soil lifts installed along the bank. The exposed bank rock riprap and vegetated soil lifts will be interplanted with native riparian plants, including willows, alders, and dogwood.

E. Installing an approximately 100-foot-long pedestrian plaza along the top of the right bank and adjacent to San Anselmo Avenue. The portion of the plaza immediately above the right bank and retaining wall will consist of approximately 125 square feet of wooden decking and a guardrail. The approximately 3-foot-wide section of wooden decking closest to San Anselmo Creek will be approximately 1.5 feet lower than the rest of the deck. The side of the deck closest to San Anselmo Avenue will incorporate a removable floodwall system. The rest of the pedestrian plaza consists of a 16-foot-8-inch-wide concrete sidewalk immediately adjacent to San Anselmo Avenue.

F. Installing a removable floodwall barrier along the top of the right bank within the pedestrian plaza. Three approximately 1-foot-tall, 10-foot-long, 5-foot-wide concrete seat walls will be permanently installed at the edge of the wooden deck and cement portion of the pedestrian plaza. Each of the seat walls will be approximately 10 feet apart to allow for removable floodwall inserts to be placed during high flow events, creating a floodwall.

G. Installing an approximately 60-foot-long timber-trussed, pedestrian bridge at the upstream end of the Downtown San Anselmo site. The bridge width varies along its length and is widest on the right bank where it meets the pedestrian plaza. The left bank side of the bridge will be approximately 20 feet wide and the right bank side is approximately 28 feet wide. The upstream side of the bridge is adjacent to another existing bridge-building that will remain on site, although a narrow gap will remain between the bridge and remaining bridge-building. The right bank abutment would be approximately 45 feet wide and the left bank abutment would be approximately 25 feet wide. The right bank abutment would be similar to the replacement retaining wall with a buried footing and buried riprap below the channel. The left bank abutment would be supported by a footing buried near the top of the left bank stabilization improvements.

H. Reconstructing the existing approximately 330-square-foot stage deck and maintenance path along the left bank. The stage deck and supporting piers will be removed to allow for creek access during the in-stream construction phases and will be replaced in-kind. The reconstructed maintenance access path will be 4-feet wide with timber stairs, a handrail along one side, and rock along one side.

I. Modifying four existing storm drains that discharge into San Anselmo Creek:

   i. An existing 22-foot-long, 24-inch diameter RCP, on the left bank of San Anselmo Creek at the site of the new pedestrian bridge, will be replaced in-kind and slightly realigned so that the pipe outfall will discharge beneath the bridge.
ii. A 10-foot segment of an existing 24-inch RCP on the right bank near the building-bridge to remain would be replaced where it extends through the new pedestrian bridge abutment. The storm drain will discharge onto the buried footing and buried riprap.

ii. A 10-foot segment of an existing 12-inch diameter RCP on the right bank of San Anselmo Creek will be replaced where it extends through the replacement retaining wall. The storm drain will discharge onto the buried footing and buried riprap.

iii. An existing 12-foot-long, 12-inch diameter RCP on the left bank beneath the existing stage would be replaced with a new 25-foot long, 12-inch diameter RCP. The storm drain will outlet into existing rock riprap beneath the stage.

J. Removing one riparian tree.

1.4 Project Impacts and Mitigation

1.4.1 Project Impacts and Mitigation

The project would result in temporary and permanent impacts to waters of the U.S. and wetlands of the state (including riparian areas); additionally, there are impacts to oak woodland. Permanent impacts to waters of the U.S. include areas where permanent concrete or shotcrete structures would be placed in the channel and where unvegetated rock slope protection (RSP) would be placed along the banks.

Temporary impacts to waters of the U.S. include areas that would be temporarily filled, dewatered, or accessed during construction. Temporary impacts also include areas where new permanent fill would be placed, but the overall functions and services of the water of the U.S. would not be lost. This includes the biotechnical slope stabilization areas, which consist of RSP with vegetated soil lifts (VSL) and riparian plantings, and the active channel upstream and downstream of the new concrete-lined diversion and spillway structure where a mix of existing salvaged, stockpiled and engineered streambed material would be installed.

Permanent impacts to wetlands and waters of the U.S., which total 0.27 acre and 267 linear feet, require 0.76 acre and 756 linear feet of mitigation. The project will restore and enhance San Anselmo Creek open water and riparian habitat through the removal of the 0.10 acre and 90-linear foot bridge-building and associated bank restoration. The Project will restore and enhance 0.49 acre and 413 linear feet at the FDS Basin Facility site. This means that a small amount of mitigation riparian area, 0.17 acre and 253 linear feet, will need to be created off site. The amount of off-site mitigation is outlined in the Table 1-1A and 1-1B below, and the off-site planting area is included in Attachment 3.

<table>
<thead>
<tr>
<th>Project Location</th>
<th>Temporary Impacts (acre)</th>
<th>Permanent Impacts (acre)</th>
<th>Mitigation Area Required (acre)</th>
<th>Mitigation Area Created by the Project</th>
<th>Off-Site Planting Area Required to Mitigate Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDS Basin Facility Site</td>
<td>0.61</td>
<td>0.24</td>
<td>-</td>
<td>0.39</td>
<td>-</td>
</tr>
<tr>
<td>Downtown San Anselmo Site</td>
<td>0.13</td>
<td>0.03</td>
<td>-</td>
<td>0.10</td>
<td>-</td>
</tr>
</tbody>
</table>
Riparian trees will be removed within these impact areas which are outline in Table 1-2 below. In addition to mitigating impacts to riparian trees, this Project will also mitigate impacts to upland trees including oak woodland through on-site plantings at a 1:1 ratio, as well as non-oak woodland trees that will be mitigated using the Marin County Community Development Agency’s Protected and Heritage Tree ratios, all of which are outlined in Table 1-3 below. Species composition will represent what was removed from the site but will not be the same ratio as was removed. Tree species chosen will promote diversity and fit the appropriate habitat. Overall, 386 trees are required to be planted for mitigation, and 415 trees will be planted as part of the project.
## Table 1-2
Riparian Trees to Be Removed by the Project and Required Mitigation

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Oaks</th>
<th>Other</th>
<th>Total Riparian Trees to be Removed</th>
<th>Riparian Trees Required for Mitigation*</th>
<th>Riparian Trees to be Planted by the Project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>DBH 5-10 (inches)</td>
<td>DBH 10-15 (inches)</td>
<td>DBH &gt;15 (inches)</td>
<td>DBH &lt;10 (inches)</td>
<td>DBH &gt;10 (inches)</td>
</tr>
<tr>
<td>Fraxinus latifolia</td>
<td>Oregon ash</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Acer macrophyllum</td>
<td>Big Leaf Maple</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Umbellularia californica</td>
<td>California bay</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Quercus agrifolia</td>
<td>Coast live oak</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aesculus californica</td>
<td>California buckeye</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Salix lasiolepis</td>
<td>Arroyo willow</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cornus sericea</td>
<td>Creek dogwood</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Alnus rhombifolia</td>
<td>White alder</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>0</strong></td>
<td><strong>10</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

**NOTES:**
*Any trees that were within the channel or riparian zone removed or impacted from the Project shall be replaced pursuant to the below ratios, unless otherwise approved in writing by a regulatory agency.

1:1 replacement for non-native trees
3:1 replacement for native trees up to 10-inch DBH
6:1 replacement for native trees greater than 10-inch DBH
### Table 1-3
**Upland Trees to be Removed by the Project and Required Mitigation**

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Native or Non-Native</th>
<th>DBH 5-10 (inches)</th>
<th>DBH 10-25 (inches)</th>
<th>DBH &gt;25 (inches)</th>
<th>Total Oak Woodland Trees Removed</th>
<th>Oak Woodland Trees Required for Mitigation</th>
<th>Oak Woodland Trees to be Planted by Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acer macrophyllum</td>
<td>Big leaf maple</td>
<td>Native</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Umbellularia californica</td>
<td>California bay</td>
<td>Native</td>
<td>13</td>
<td>43</td>
<td>8</td>
<td>64</td>
<td>166</td>
<td>37</td>
</tr>
<tr>
<td>Quercus agrifolia</td>
<td>Coast live oak</td>
<td>Native</td>
<td>0</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>Gleditsia triacanthos</td>
<td>Honey locust</td>
<td>Non-Native</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Quercus semprevirens</td>
<td>Redwood</td>
<td>Native</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Pinus radiata</td>
<td>Monterey pine</td>
<td>Non-native</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Ligustrum sp.</td>
<td>Privet</td>
<td>Non-native</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Quercus lobata</td>
<td>Valley oak</td>
<td>Native</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Betula sp.</td>
<td>Birch</td>
<td>Non-native</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Picea sp.</td>
<td>Spruce</td>
<td>Non-native</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Heteromeles arbutifolia</td>
<td>Toyon</td>
<td>Native</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>37</td>
</tr>
<tr>
<td>Aesculus californica</td>
<td>California buckeye</td>
<td>Native</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>43</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>17</strong></td>
<td><strong>54</strong></td>
<td><strong>12</strong></td>
<td><strong>86</strong></td>
<td><strong>214</strong></td>
<td><strong>164</strong></td>
</tr>
</tbody>
</table>
SECTION 2
Restoration Design and Methods

2.1 Overview

The revegetation concept is designed to establish native plant communities and habitat functions to the extent feasible. Selective grading activities will first facilitate the salvage of site topsoils for replacement onto surfaces of project features and restored areas to support establishment of native plant species. Following grading and relocation of topsoils, the finished surfaces of the FDS basin, slopes, setback and buffer areas, and restored creek reach will be seeded and planted with locally native plants, and a temporary irrigation system will be installed. Maintenance and monitoring of the planting areas will be required for a minimum of 3 years after cessation of irrigation (irrigation will cease by the end of year 2) and will incorporate adaptive management techniques to insure successful establishment of native plant communities. The planned revegetation actions are described in further detail below.

2.2 Planting Plan

Topsoils will be salvaged at the FDS Basin Facility site and planting and seeding will commence once relocation of topsoils and any soil amendments required to correct post grading soil conditions have been performed. At the downtown San Anselmo site, planting would be performed in concert with placement of biotechnical bank protection treatments, followed by seeding of all areas disturbed by construction activities.

All planting on the project site would be supervised by a restoration ecologist having demonstrated knowledge and experience in native plant revegetation. To the extent feasible, planting would be performed during the cooler, wetter months between November 15 and April 15; preferably immediately following a rainfall event. If seasonal rainfall is low or does not coincide with the desired planting dates, both the plant materials and the receiving ground surfaces would be thoroughly irrigated prior to planting.

2.2.1 Native Plant Propagation

To preserve local genetic integrity, all plants to be installed in the restoration areas would be propagated from local sources collected within Marin County. To the extent feasible, cuttings of native alders within the downtown San Anselmo site would be collected prior to removal of those trees and grown for later installation on the Project site. Seed collection would be made at the appropriate time for each targeted species. No seeds, propagules or plant material would be...
purchased from commercial suppliers without prior express authorization by the project restoration ecologist.

Plant materials would be stored and grown under phytosanitary conditions and tested as remaining free from disease in the nursery or other growing facility. Planting stock should then be protected from potential contamination from the point that it leaves the production nursery or collection site until planting.

2.2.2 FDS Revegetation Areas

FDS Basin – Riparian and Oak Woodland Restoration

The planting plan and plant species palettes for the FDS Basin Facility site are based upon plant community distribution and plant species composition observed in Fairfax Creek and adjacent open spaces areas exhibiting the most similar conditions to those which would result from the reconfiguration of the project site. The revegetation areas at the FDS Basin Facility site would be planted with oak-bay woodland, native grassland/seasonally wet meadow, and riparian species, in accordance with their physical requirements. Planting palettes will differ within the following three main planting areas: In-Basin, Setback/Buffer Areas, and the Fairfax Creek Restoration Area. These areas are outlined below and detail planting specs can be found within Attachment 1.

In-Basin and Riparian Slopes

The interior basin slopes and bottom would be seeded in local native grasses and forbs. Basin slopes would be seeded primarily in grass species to provide cover and prevent erosion. Articulated concrete block-protected slopes will also be seeded. In addition, maple (Acer macrophyllum) and arroyo willow (Salix lasiolepis) riparian plantings will be planted within the basin that will function as riparian habitat. Detailed planting specs can be found within Attachment 1.

Setback/ Buffer Areas

Setback and buffer areas surrounding the basin will be planted with oak-bay woodland plantings, including California buckeye (Aesculus californica) and coast live oak (Quercus agrifolia), along the outer toe of the engineered levee on the east side of the basin, and in setback and buffer areas outside the engineered and compacted footprint of the levee. These areas will also be seeded with a native seed mix. Detailed planting specs can be found within Attachment 1.

2.2.3 Downtown San Anselmo Revegetation Areas

The planting plan and plant species palettes at the downtown San Anselmo site are based upon plant distribution and species composition observed in San Anselmo Creek and less disturbed tributaries in the vicinity. The creek banks at the downtown San Anselmo site will be planted with riparian tree, shrub, and herbaceous species, in accordance with their physical requirements. In addition, these areas will also be seeded with a native seed mix. Alders will be installed within the bank stabilization areas and arroyo willow and dogwood (Cornus sericea) will be installed in the bank stabilization areas. More details can be found within Attachment 2.
2.2.4 Off-Site Mitigation Area

An offsite mitigation area has been identified for mitigation impacts not mitigated directly from this project. The off-site mitigation area can also be used as an alternative location to compensate for unintended delays to construction and/or restoration activities. Attachment 3 depicts this area. It is important to note that this area encompasses a larger area than required for mitigation, and that the planting area will be further refined in the future. An amendment to this plan will be submitted upon finalization of the planting plan for the offsite mitigation area.

2.2.5 Irrigation

Temporary irrigation would be provided for approximately two years at both the FDS Basin Facility site and the downtown San Anselmo site to ensure successful establishment of the native seeded areas and plantings utilizing an existing connection to the municipal supply.

During the first two years of the establishment period, irrigation would be gradually curtailed so that vegetation may adapt to a natural watering regime. If drought stress is detected in the plantings or in areas of the project site following this "weaning" process, irrigation would be continued to affected portions of the site for an additional year. All irrigation materials should be removed from the site after the establishment period.

2.2.6 Pathogen and Weed Minimization

To minimize the introduction pathogens (e.g., Phytophthora spp.) and weeds, contractors will arrive to the Project site with clean equipment, vehicles, tools and boots. To minimize the exportation of pathogens and weeds, contractors will also clean all equipment, vehicles, tools and boots prior to leaving the site. This will be done by scrubbing, blowing, and picking off any soil debris, followed by an application of a water or sanitizing solution if necessary. When water is used, contractors will ensure that no erosion occurs, and waterways are not contaminated. Vehicles that only travel and park on paved public roads do not require cleaning, and all vehicles should avoid off road surfaces when such roads are wet enough that soil will stick to vehicle tires and undercarriages.

To avoid contamination of revegetation sites with exotic pathogenic Phytophthora species or other plant pathogens, all planting and related activities shall follow the guidance provided in the “Guidance to Minimize Phytophthora Contamination in Restoration Projects” (Working Group for Phytophthoras in Native Habitats 2016). All imported plant materials (i.e., plugs, seed mixes, mulch, soil amendments) will be kept free of pathogens and weeds and examined prior to delivery.

2.2.7 Additional Mitigation Options

As an alternative to tree planting for current or future tree removal, additional compensatory mitigation may include the removal of invasive species for habitat restoration. Invasive species removal would occur at the FDS Basin site between the bridge and outfall structure, currently

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labeled “ENVIRONMENTAL RESOURCE EXCLUSION ZONE” on the design plans. The District would remove English ivy (*Hedera helix*; currently choking out native trees) and non-native broom species (mostly French broom, *Genista monspessulana*). After English ivy is removed from the tree canopy, ivy will also be removed from the ground around the tree. Both broom and ivy will be monitored in Year 3 and Year 5 to determine if either species has grown back to 20% cover of the area. If cover exceeds 20%, then the species will be removed. The following invasive species removal to tree replacement ratios are proposed:

- Removal of English ivy on 1 tree with 50% ivy cover or more = 1 replacement tree
- Removal of broom in 5 square feet with 50% broom cover or more = 1 replacement tree
SECTION 3
Success Criteria and Restoration and Monitoring Methods

3.1 Success Criteria

3.1.1 Tree and Willow Monitoring

Monitoring will take place for an overall 5-year period to evaluate whether the Project’s impacts are successfully mitigated, and monitoring will be conducted at the Project site. Survivorship will be the primary metric used to determine success of riparian and oak woodland trees and shrubs, following installation. However, in later years (years 3-5) a vegetation cover metric will be applied to willow plantings. Achieving a dense canopy is beneficial for channel shading and wildlife habitat. The success criteria for plantings for each year are summarized in Table 3-1, below.

<table>
<thead>
<tr>
<th>Year</th>
<th>FDS Basin Site</th>
<th>Downtown San Anselmo Site</th>
<th>Off-Site Mitigation Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trees</td>
<td>Willows</td>
<td>Trees</td>
</tr>
<tr>
<td>1</td>
<td>90% survival</td>
<td>90% survival</td>
<td>90% survival</td>
</tr>
<tr>
<td>2</td>
<td>85% survival</td>
<td>85% survival</td>
<td>85% survival</td>
</tr>
<tr>
<td>3</td>
<td>85% survival</td>
<td>40% cover of planting area</td>
<td>85% survival</td>
</tr>
<tr>
<td>4</td>
<td>85% survival</td>
<td>50% cover of planting area</td>
<td>85% survival</td>
</tr>
<tr>
<td>5</td>
<td>80% survival</td>
<td>60% cover of planting area</td>
<td>80% survival</td>
</tr>
</tbody>
</table>

SOURCE: ESA, 2021

If replacement plantings are needed, they must be made within one year of survival rates failing to meet the specified success criteria. Replacement shrubs will be monitored for five years from the date of replanting and replacement trees will be monitored for five years from the date of replanting. Replacement plants are subject to the same success criteria as the initial plantings. However, due to the nature of willow growth, replacement willow plantings will meet their success criteria upon meeting the minimum cover metric for year 5, regardless of the year they were planted. Naturally colonizing native plant species (i.e., volunteers) should be counted towards the site success and can replace container plants that have died.
As previously stated, temporary irrigation will be provided for approximately two years at both the FDS Basin Facility site and the downtown San Anselmo site to ensure successful establishment of the native seeded areas and plantings. Per the request of the RWCQB, monitoring shall continue for at least three years following the cessation of irrigation, so the final monitoring period is expected to extend into year 5 at both sites. If the qualified restoration monitor determines that cessation of irrigation can occur earlier than the planned timelines, then the plantings will then enter their three-year final monitoring period. For example, if irrigation ends in year 1, the monitoring period will extend to year 4.

### 3.1.2 Hydroseed Monitoring

In addition to monitoring planted plants, hydroseeded areas will be monitored to ensure herbaceous plant establishment, and to also monitor and adaptively manage invasive plant encroachment. The following success criteria will apply to hydroseeded areas:

<table>
<thead>
<tr>
<th>Year</th>
<th>Bare Hydroseeded Areas</th>
<th>Articulated Concrete Block-Protected Slopes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20% cover</td>
<td>5% cover</td>
</tr>
<tr>
<td>2</td>
<td>40% cover</td>
<td>10% cover</td>
</tr>
<tr>
<td>3</td>
<td>50% cover</td>
<td>14% cover</td>
</tr>
<tr>
<td>4</td>
<td>60% cover</td>
<td>16% cover</td>
</tr>
<tr>
<td>5</td>
<td>70% cover</td>
<td>18% cover</td>
</tr>
</tbody>
</table>

**SOURCE:** ESA, 2021

All vegetation will be included in the percent cover estimates within the hydroseeded areas. There will be no more than a 5% yearly increase in invasive plant cover within hydroseeded areas. Invasive plants will be defined as those species rated as “high” by the California Invasive Plant Council.

### 3.1.3 Geomorphic Monitoring

To ensure geomorphic stability of the sites, annual geomorphic monitoring will be conducted. The performance criterion shall be that no signs of significant erosion or sedimentation threaten the property, essential infrastructure or aquatic habitat.

### 3.2 Restoration Monitor

A qualified botanist, biologist, ecologist, environmental scientist, or person with at least three years of experience implementing restoration plans will oversee and monitor implementation of this plan. The Restoration Monitor will be responsible for:
• Conducting annual monitoring;
• Preparing annual reports for the regulatory agencies;
• Providing guidance and instruction to the Flood Control District for ongoing maintenance to ensure the long-term successful establishment of the plantings and reseeded areas;
• Guiding remedial actions as needed, so that success criteria and permit conditions are met; and
• If necessary, training maintenance crews in the methods represented in this plan including, but not limited to, proper techniques and best management practices for weed control.

3.3 Monitoring

3.3.1 Schedule

Monitoring will take place pre-project, immediately following construction (as-built), and for a minimum of a 5-year period post-construction to evaluate whether the Project’s impacts are successfully mitigated. Monitoring will be conducted annually during monitoring years 1 to 5. The monitoring period is subject to additional years of monitoring if replacement plantings are installed. Monitoring will also continue for at least three years following the end of irrigation.

3.3.2 Pre-Project Conditions

Prior to the start of construction, photodocumentation points will be established within the entire Project site. The direction and coordinates of the photo points will be documented and mapped with a global positioning system (GPS) unit. These photographs will document the Project’s pre- and post-construction conditions, capturing the sites’ progression.

3.3.3 As-Built Conditions

Within 60 days after completing the Project construction activities, including revegetation, an as-built report will be submitted to the regulatory agencies. This report will include a description of the areas of actual disturbance during Project construction and the photographs and map specified in section 3.3.7. This report will clearly identify and illustrate the Project site, the locations of permanent and temporary impacts, and the quantities of the planted species at each planting location. The as-built report shall include the 100 percent construction plans marked with the contractor’s field notes that clearly depict any deviations from the design set made during construction.

3.3.4 Percent Survival

Tree and shrub container plants will be tagged either during planting or as-built monitoring to identify individuals across monitoring years. Tags will be adjusted during each monitoring year if the tag is interfering with plant growth and will be removed at the end of the monitoring period.

Tree and large shrub container plants will be counted during each monitoring year. Trees can either be physically tagged or recorded with a high-accuracy GPS unit for relocating plantings.
during monitoring efforts. Survival of trees and large shrubs container plants will be documented and assessed as a percentage of the total trees and large shrubs planted in the restoration area.

### 3.3.5 Health and Vigor

General health and vigor of plantings will be qualitatively assessed and recorded during monitoring, including:

- Evidence of stress from excessive or inadequate water;
- Evidence of disease;
- Evidence of browsing or burrowing that is causing loss of plants;
- Evidence of erosion of topsoil or exposure of roots.

### 3.3.6 Herbaceous Cover Monitoring

Quadrat sampling method will be used to monitor percent cover, depending on site conditions. The transect location, orientation, and coordinates will be documented and mapped with a GPS unit. The fixed transect and quadrat locations will be re-established during each monitoring event and utilized to document and compare annual absolute and relative cover of native, non-native, and invasive plant species. Transects will also include overall species richness and diversity. It is important to note that on-site conditions can change such that the initial set transect will no longer be appropriate. The Restoration Monitor will assess this during each monitoring event and adjust if needed and accordingly.

Based on the total length of the transect, between two and five quadrats will be sampled along each transect. Each quadrat is one meter by one meter (1m$^2$) and the location and orientation of the quadrat along the transect will be randomly generated. All plant species observed within the quadrat will be recorded, along with their absolute cover (i.e., the percent area of the quadrat occupied by a plant species).

### 3.3.7 Photodocumentation

Prior to construction, permanent photodocumentation points will be established and will be reoccupied during each monitoring event during the 5-year monitoring period. The points will be used to track the Project’s construction impacts, the creeks’ post construction condition, revegetation success, and the Project success. The photos can be compared to qualitatively assess changes in general site conditions as well as revegetation progress. Photo monitoring should be conducted at the same time of year each monitoring year. Photos should be taken from the same location and orientation across years. This can be done using a combination of GPS data and/or photodocumentation mobile applications which display coordinates and orientation.

### 3.3.8 Geomorphic Monitoring

Visual inspections will also take place to observe any potential signs of erosion or deposition threatening the Project or aquatic habitat, and such instances will be mapped. Photographs will be
taken at the same time each year at designated photodocumentation points spaced 25 feet apart throughout the stream reaches within the Project site. At each photodocumentation point two photographs (one looking upstream and the other looking downstream) will be taken.

### 3.4 Reporting

Annual Reports will be submitted by January 31 following each monitoring event to the San Francisco Bay Regional Water Quality Control Board and California Department of Fish and Wildlife. These reports will be submitted annually throughout the five-year monitoring period. The first monitoring year commences in the calendar year after any mitigation plantings have been installed. The first year’s report will summarize the baseline information as well as the first-year monitoring results. Baseline information must include the results from pre-construction monitoring as well as “as-built” plans, drawings, or maps, that accurately depict what was planted and where. Annual monitoring reports shall include photographs from the photo documentation points. Each annual report shall summarize the previous monitoring results in addition to the current year’s monitoring results, including the need for, and implementation of, any remedial actions or adaptive management. The annual reports shall compare data to previous monitoring years and describe the effects of the Project and environmental drivers (e.g. weather/climate) on site conditions. If monitoring indicates that beneficial uses have been adversely affected or have the potential to be adversely affected, remedial actions shall be identified, including compensatory mitigation and extension of the monitoring and reporting period until the criteria are met.

All annual reports will include, at the minimum, the following information:

- Summary description of the monitoring methods, including data collection and analysis;
- A summary of the previous monitoring results in addition to the current year’s monitoring results in order to analyze any trends, including the need for, and implementation of, any remedial actions or adaptive management.
- A discussion of the possible effects of the Project and environmental drivers (e.g. weather/climate) on site conditions in relation to the success criteria;
- Analysis of success in relation to the success criteria;
- Color photographs from the photodocumentation points;
- A map of the area with relevant features and photopoints, and;
- A discussion of any remedial measures needed or undertaken (including invasive weed control, replanting, or erosion/sediment control measures).
- Any wildlife or signs of wildlife observed on the site.

### 3.5 Responsible Parties

The Marin County Flood Control and Water Conservation District is responsible for ensuring this Plan is implemented and that revegetation meets the performance standards outlined in this
document. The District will be responsible for informing their internal operations and maintenance departments and local management and utilities agencies of the mitigation purpose of the restored areas to prevent accidental damages.

Hugh Davis, Associate Civil Engineer
Marin County Flood Control and Water Conservation District
Department of Public Works
3501 Civic Center Drive, Suite 304
San Rafael, CA 94903
(415) 473-4232
hdavis@marincounty.org

3.6 Agency Confirmation

The Marin County Flood Control and Water Conservation District will be considered released from any further responsibilities for mitigation provided that the conditions of the project site meet or exceed agreed-upon the success criteria and that all required annual reports (up to that point) have been submitted, no unresolved concerns have been raised by the agencies, and the regulatory agencies have released the project from permit conditions. Early release may be possible if performance standards are met early and the resource agencies agree with the level of establishment. Removal of the irrigation system, any temporary fencing, and signage would occur prior to final sign-off.

Following receipt of the notification of completion, the permitting agencies may visit the site to confirm the completion of the mitigation effort and will issue formal letters of success prior to acceptance. If the performance criteria are not fully met by the final monitoring years (i.e., some component of the project is unsuccessful), negotiation with the agencies will be initiated to determine the need for further monitoring and/or remedial actions.
SECTION 4
Maintenance and Adaptive Management

If general site assessments or annual monitoring indicates that site maintenance is needed or success criteria (outlined in section 3.1) are not being met, corrective measures will be implemented. Corrective measures will also be implemented if the Restoration Monitor determines it is necessary due to the poor health and vigor of the plants. Contingency measures will be directed by the Restoration Monitor and may include:

- irrigation maintenance and repair(s) (described in more detail below);
- weed control (described in more detail below);
- supplemental seeding or planting;
- trash and litter control;
- repair or installation of erosion/sediment controls;
- control of disease or pests;
- and/or any other actions necessary to successfully establish the Project site to meet the success criteria.

4.1 Irrigation

Watering of the installed plants with an irrigation system will take place as necessary to maintain the plants in a healthy and vigorous condition throughout the duration of the monitoring period. The frequency and duration of watering operations should depend on current weather patterns and site-specific soil moisture conditions, and approval from the District for any modifications to the watering methods or application rates will be received prior to modifications.

Irrigation should provide an adequate supply of moisture within the root zone of each plant during the normal growth period of the plant. The moisture content in all planted areas should be sufficient to ensure healthy plants and vigorous growth. This can be accomplished by means of visual observation of plant material and the surrounding surface and subsurface soil conditions. Observed deficiencies or excesses in the irrigation program will be corrected immediately by the adjustment of controllers, as needed. Controllers should be programmed to water deeply without runoff. Irrigation will be controlled, and individual system components adjusted to prevent runoff or damage to existing or naturally colonizing vegetation.

After two weeks of operation, lines will be flushed and particles removed from system. Adjustments and filter cleaning should take place bi-monthly, and a seasonal winterization and system start-up should take place as well. Irrigation will take place during the first two years as
defined above in Section 2.3.4, Irrigation. Any replacement plants will be watered for a minimum of two years and as required by the RWQCB monitoring. Upon all planting success criteria being met, all irrigation components should be removed, except for quick couplers, mainline, and necessary components of the mainline to allow for continued usage of the quick couplers. Lateral lines should be removed from mainline and provide watertight cap at stub. All removed irrigation components should be disposed of off-site.

4.2 Weed Management

The most likely biotic factor deleterious to native plant establishment and vegetative cover is the presence of non-native, invasive plant species. An overview of acceptable, and most likely appropriate, weed management practices include:

- Container plant watering basin weed management: Weed management should include periodic hand pulling removal of all competing vegetation within the watering basin around each container plant. At a minimum, this activity will occur two times: once between mid-March and the end of June and again between August 1 and September 15 of the year. No herbicides will be used within the plant watering basins.

- Mowing weeds with power equipment is acceptable provided that fire restrictive controls are adhered to for both the equipment and its use. Mowing or string trimming maintenance events shall occur on or about April 15th, May 15th, and July 1.

- Hand weeding / Mechanical removal

- No herbicides, insecticides, rodenticides or fungicides will be used.
SECTION 5

References


Attachment 1
Amended FDS Basin 100% Design Plans
COASTLIVE OAK TREE
(Quercus agrifolia)

CALIFORNIA BAY TREE
(Umbellularia californica)
TYP. OF 22

CALIFORNIA BUCKEYE TREE
(Aesculus californica)
TYP. OF 21

COYOTE BUSH SHRUB
(Baccharis pilularis ssp. consanguinea)
TYP. OF 28

TOYON SHRUB
(Heteromeles arbutifolia)
TYP. OF 23

EDGE OF 15' PLANTING BUFFER, TYP.

BERM TOE

NEW SWALE
CONNECTING TO (E) SWALE, SEE GRADING PLANS

MINIMUM ROOT PROTECTION ZONE, TYP.
ESTIMATED MINIMUM (E) TREE CANOPY EXTENT, TYP.

ACCESS ROADS
(ACCESS ROADWAYS)

MATCHLINE - SEE SHEET L-2

MATCHLINE - SEE SHEET L-3

NOTES
1. SEE SHEET L-4 FOR DETAILED PLANT LEGENDS AND OTHER INFORMATION.

2. NO TREES OR SHRUBS SHALL BE PLANTED WITHIN 15 FEET OF THE INBOARD OR OUTBOARD BERM TOE OF THE BASIN.

3. ALL WORK AROUND EXISTING TREES IS TO BE DONE CAREFULLY TO AVOID DAMAGE TO THE TRUNK, BRANCHES AND ROOTS AS DIRECTED. ADJUST NEW PLANTING LOCATIONS AS NEEDED TO AVOID CONFLICTS, SUBJECT TO DISTRICT APPROVAL.
OAK-BAY WOODLAND AREA, TO RECEIVE SEEDING AND CONTAINING, TYP. SEE PLANT LEGEND

EROSION CONTROL SEED AREA, TYP.

BERM TOE

EDGE OF 15' PLANTING BUFFER, TYP.

CALIFORNIA BAY TREE
(Umbellularia californica)

CALIFORNIA BUCKEYE TREE
(Aesculus californica)

COYOTE BRUSH SHRUB
(Baccharis pilularis ssp. consanguinea)

TOYON SHRUB
(Heteromeles arbutifolia)

EXISTING TREE TO REMAIN, TYP.

MINIMUM ROOT PROTECTION ZONE, TYP.

ESTIMATED CANOPY EXTENT, TYP.

OAK-BAY WOODLAND AREA TO RECEIVE SEEDING AND CONTAINING, TYP. SEE PLANT LEGEND

NOTES

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EXISTING TREE TO REMAIN, TYP.

FAIRFAX CREEK L. 50.00

FAIRFAX CREEK

BUCKEYE TREE (Aesculus californica)

TYP. OF 3

COYOTE BRUSH SHRUB (Baccharis pilularis ssp. consanguinea)

TYP. OF 3

OAK-BAY WOODLAND AREA TO RECEIVE SEEDING AND CONTAINER PLANTINGS, TYP.

SEE PLANT LEGEND

CALIFORNIA BAY TREE (Umbellularia californica)

TYP. OF 1

MATCHLINE - SEE SHEET L-1

MATCHLINE - SEE SHEET L-2

BASIN SEED MIX, TYP.

MATCHLINE - SEE SHEET L-2

LEGEND

NOTES

1. SEE SHEET L-4 FOR DETAILED PLANT LEGENDS AND OTHER INFORMATION.

2. NO TREES OR SHRUBS SHALL BE PLANTED WITHIN 15 FEET OF THE INBOARD OR OUTBOARD BERM TOE OF THE BASIN.

3. ALL WORK AROUND EXISTING TREES IS TO BE DONE CAREFULLY TO AVOID DAMAGE TO THE TRUNK, BRANCHES AND ROOTS AS DIRECTED. ADJUST NEW PLANTING LOCATIONS AS NEEDED TO AVOID CONFLICTS, SUBJECT TO DISTRICT APPROVAL.
CONTAINER PLANTINGS: OAK-BAY WOODLAND

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Size</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Buckeye</td>
<td>Aesculus californica</td>
<td>4-gal TP</td>
<td></td>
</tr>
<tr>
<td>Coast Live Oak</td>
<td>Quercus agrifolia</td>
<td>4-gal TP</td>
<td></td>
</tr>
<tr>
<td>California Bay Laurel</td>
<td>Umbellularia californica</td>
<td>T40</td>
<td></td>
</tr>
<tr>
<td>Coyote Brush</td>
<td>Garrya elliptica</td>
<td>D40</td>
<td></td>
</tr>
<tr>
<td>Toyon</td>
<td>Heteromeles arbutifolia</td>
<td>TB4</td>
<td></td>
</tr>
</tbody>
</table>

In addition, another tree species was added to the oak-bay woodland area:

2 Quercus lobata

CONTAINER PLANTINGS: OAK-BAY WOODLAND

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Size</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pink Honeysuckle</td>
<td>Conocarpus fruticosus</td>
<td>D40</td>
<td>57</td>
</tr>
<tr>
<td>Sticky Monkey Flower</td>
<td>Arctostaphylos uva-ursina</td>
<td>D40</td>
<td>57</td>
</tr>
<tr>
<td>California Blackberry</td>
<td>Rubus ursinus</td>
<td>D16</td>
<td>68</td>
</tr>
<tr>
<td>Coyote Mint</td>
<td>Arctostaphylos uva-ursina</td>
<td>D16</td>
<td>40</td>
</tr>
<tr>
<td>Hedge Nettle</td>
<td>Arctostaphylos uva-ursina</td>
<td>D16</td>
<td>42</td>
</tr>
</tbody>
</table>

In addition, more herbaceous plants were added to increase diversity:

- 60 Acalypha wilkesiana
- 40 Achillea millefolium
- 44 Dianthus latifolius
- 12 Helianthus maximus
- 40 Juncus effusus

-TREE TIE, TWIST IN FIGURE EIGHT PATTERN, LOCATED AT APPROXIMATELY 2/3 HEIGHT OF TREE, REMOVE NURSERY STAKE AND TIES IF PRESENT.

- 2" DIA. LODGEPOLE PINE ROOTBALL
- ORGANIC MULCH PER SPECIFICATIONS
- 2" x 4" HIGH WATERTIGHT BERM AROUND EDGE OF ROOTBALL

CONTAINER PLANTINGS: IN BASIN (TOTAL AREA: 17,062 S.F.)

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Size</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Leaf Maple</td>
<td>Acer macrophyllum</td>
<td>6-gal TP</td>
<td>60</td>
</tr>
<tr>
<td>Arroyo Willow</td>
<td>Ribes angustifolium</td>
<td>D40</td>
<td>57</td>
</tr>
<tr>
<td>Blue Elderberry</td>
<td>Sambucus nigra ssp. canadensis</td>
<td>D40</td>
<td>57</td>
</tr>
</tbody>
</table>

4-gal TP (California buckeye) will also be planted in the Basin.
Attachment 2
Downtown San Anselmo 90%
Design Plans
Attachment 3
Offsite Mitigation Area
NOTES:
1. All mitigation planting areas to be approved by TPL.
2. Potential mitigation planting areas were identified and defined by ESA based on consultation with TPL and Marin County. Mitigation planting areas may be refined through further coordination.
3. Maintenance access routes and water tank locations are suggested based on ESA’s understanding of the site, future anticipated restoration activities and potential requirements to monitor and maintain mitigation areas. Actual requirements and alignments for these facilities/improvements are to be determined.
4. Marin County will be responsible for consultation with TPL and other stakeholders including the Graton Rancheria to develop specifications for planting, irrigation and maintenance.

<table>
<thead>
<tr>
<th>Mitigation Area</th>
<th>Acres</th>
<th>Linear Feet</th>
</tr>
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<tbody>
<tr>
<td>Riparian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>0.12</td>
<td>138</td>
</tr>
<tr>
<td>B</td>
<td>0.09</td>
<td>75</td>
</tr>
<tr>
<td>C</td>
<td>0.19</td>
<td>317</td>
</tr>
<tr>
<td>Totals</td>
<td>0.4</td>
<td>530</td>
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<tr>
<td>Oak-Grassland</td>
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<td></td>
</tr>
<tr>
<td>A</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>0.67</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>0.71</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>1.85</td>
<td></td>
</tr>
</tbody>
</table>

SAFRR Mitigation
Mitigation Planting Areas - DRAFT
San Geronimo Meadow Parcel
September 2021 December 2021
Attachment 8 – Off-Site Mitigation Planting Plan
MARIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
SAN ANSELMO FLOOD RISK REDUCTION (SAFRR) PROJECT
OFFSITE MITIGATION PLANTING PLAN
OCTOBER 19, 2023

DRAWING INDEX
Sheet Number  Sheet Title
G-1  TITLE SHEET
L-1  PLANTING PLAN
L-2  PLANT SCHEDULE AND NOTES
L-3  PLANTING DETAILS
L-4  SPECIFICATIONS

VICITY MAP

LOCATION MAP

N

SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")
100% DESIGN

PLOT DATE: 10/19/2023 6:23:56 PM
PLOTTED BY: KARI TSUBOTA
NOTES

1. SEE "SAN GERONIMO CREEK RESTORATION PROJECT PLANS" DATED APR 13, 2020 FOR REFERENCE TO WORK COMPLETED NORTH OF THE MITIGATION PLANTING SITES.

2. CULTURAL RESOURCE MONITORING FOR THIS SITE WAS PERFORMED DURING THE SAN GERONIMO CREEK RESTORATION PROJECT AND IS NOT NEEDED IN THIS PHASE OF WORK. SITE SOILS WERE PREVIOUSLY DISTURBED AND REPAIRED DURING PREVIOUS PHASES OF WORK.

3. SITE SOILS ARE A MIX OF EXISTING COMPACTED SOILS AND WELL-MIXED ALLUVIAL AND GRAVEL FILL FROM THE CREEK CHANNEL. SOME AREAS MAY BE HEAVILY COMPACTED. ADJUST PLANTING LOCATIONS ACCORDINGLY.

4. DO NOT DRIVE VEHICLES OVER OR OTHERWISE DISTURB SOILS OUTSIDE OF INDICATED PATHWAYS.

5. CONTRACTOR SHALL CONFIRM LOCATION AND EXTENTS OF STAGING AREA WITH OWNERS REPRESENTATIVE PRIOR TO SITE PREPARATION OR USE.

6. ALL CONSTRUCTION ACCESS, STAGING AND WORK SHALL REMAIN OUTSIDE OF EXISTING TREE CANOPY AREA AND SHALL NOT ENCROACH ON ROOT ZONES.

7. BMP MEASURES AND TEMPORARY FENCING SHALL FRAME THE STAGING AREA TO PREVENT THE DISRUPTION OF SURROUNDING NATURAL SPACE.

8. EXISTING SITE IRRIGATION SYSTEM IS OWNED AND OPERATED BY SPAWN. ALL IRRIGATION DESIGN FOR THE MITIGATION PLANTING SHALL BE TIE INTO THE EXISTING IRRIGATION SYSTEM AND BE COORDINATED WITH SPAWN.

9. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN AND CONSTRUCTION OF A FULLY OPERATIONAL TEMPORARY POINT-SOURCE IRRIGATION SYSTEM. THE SYSTEM WILL CONNECT TO SPAWN'S EXISTING MAINLINE AND BE SUPPLEMENTED BY A SHARED 5,000-GALLON WATER TANK.

10. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE FULLY REPAIRED, DECOMPACTED AND RESEeded WITH UPLAND SEED MIX.

11. NEW PLANTING AT SITE 2 SHALL STAY MINIMUM 30 FEET CLEAR OF OVERHEAD WIRES TO PREVENT UNNECESSARY PRUNING AND MAINTENANCE OF MATURE TREE CANOPY.

12. SEE PLANT SCHEDULE ON SHEET L-2 FOR PLANT SPECIES AND QUANTITIES.

13. TREE PLANTING SHALL REMAIN CLEAR OF OVERHEAD WIRES TO PREVENT UNNECESSARY PRUNING AND MAINTENANCE OF MATURE TREE CANOPY.

14. CONTRACTOR SHALL CONFIRM LOCATION AND EXTENTS OF STAGING AREA PRIOR TO SITE PREPARATION OR USE.

15. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE FULLY REPAIRED, DECOMPACTED AND RESEeded WITH UPLAND SEED MIX.

16. TREE PLANTING SHALL REMAIN CLEAR OF OVERHEAD WIRES TO PREVENT UNNECESSARY PRUNING AND MAINTENANCE OF MATURE TREE CANOPY.

17. CONTRACTOR SHALL CONFIRM LOCATION AND EXTENTS OF STAGING AREA PRIOR TO SITE PREPARATION OR USE.

18. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE FULLY REPAIRED, DECOMPACTED AND RESEeded WITH UPLAND SEED MIX.
### PLANT SCHEDULE

#### Riparian Planting - Group A

<table>
<thead>
<tr>
<th>Plant Type</th>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Site 1 Qty</th>
<th>Site 2 Qty</th>
<th>Total Qty</th>
<th>Container Size</th>
<th>Plant Specking</th>
<th>Group Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tree</td>
<td>Quercus agrifolia</td>
<td>Coast Live Oak</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>4 pcf TP</td>
<td>07</td>
<td>1 to 3</td>
</tr>
<tr>
<td>Grasses</td>
<td>Carex testacea</td>
<td>Beaked sedge</td>
<td>82</td>
<td>78</td>
<td>160</td>
<td>1 gfd</td>
<td>3</td>
<td>15 to 30</td>
</tr>
<tr>
<td>Forbs</td>
<td>Vicia sativa</td>
<td>Red vetch</td>
<td>135</td>
<td>120</td>
<td>255</td>
<td>1 gfd</td>
<td>2</td>
<td>15 to 30</td>
</tr>
<tr>
<td>Forbs</td>
<td>Pedicularis palustris</td>
<td>Wild Blue Raisin</td>
<td>42</td>
<td>35</td>
<td>77</td>
<td>1 gfd</td>
<td>2</td>
<td>15 to 30</td>
</tr>
<tr>
<td>Perennials</td>
<td>Anchusa officinalis</td>
<td>Panicum</td>
<td>Total Plants: 309</td>
<td>253</td>
<td>562</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Oak Knoll (non riparian)

<table>
<thead>
<tr>
<th>Plant Type</th>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Site 1 Qty</th>
<th>Site 2 Qty</th>
<th>Total Qty</th>
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<td>253</td>
<td>562</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PLANTING NOTES

1. **ALL PLANTS ARE BEING CONTRACT-GROWN AND SHALL BE DELIVERED BY THE WATERED NURSERY IN RICHMOND, CALIFORNIA.**
2. **ALL PLANTS AND SEED SHALL BE SOURCED FROM LOCAL WATERSHED. PLANTS WITH GENETICS SOURCED FROM REGION MAY BE CONSIDERED ACCEPTABLE IF ALREADY PLANTED IN THE ADJACENT "ROY'S POOLS" PROJECT.**
3. **PLANTS SHALL BE SOD FREE, OR FROM A NURSERY THAT PRACTICES TECHNIQUES THAT LIMIT SOD.**
4. **SHRUBS, PERENNIALS AND VINES IN "RIPARIAN PLANTING - GROUP C" SHALL HAVE SHADE CLOTH TO PREVENT SUN DAMAGE DURING PLANT ESTABLISHMENT.**
5. **PLANTS SHALL BE THOROUGHLY WATERED IN IMMEDIATELY AFTER INSTALLATION TO MINIMIZE EFFECTS OF TRANSPLANT SHOCK.**
6. **TEMPORARY DRIP IRRIGATION SHALL BE PROVIDED FOR ALL PLANTINGS. SEE IRRIGATION SPECIFICATIONS ON SHEET L-4.**
7. **CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN AND CONSTRUCTION OF A FULLY OPERATIONAL IRRIGATION SYSTEM WITH STORAGE TANK TO PROVIDE TEMPORARY IRRIGATION FOR PLANT ESTABLISHMENT AS SPECIFIED.**
PIT DEPTH SHALL BE MIN 2X CONTAINER DEPTH

TRIANGULAR SPACING

PLANTING ROWS PERPENDICULAR TO SLOPE OF BANK.
SEE PLANT SCHEDULE FOR EACH PLANT'S APPROPRIATE O.C. SPACING.

BURY TRIPLET POST 2' AWAY FROM PLANT CENTER.

1. WHEN PLANTING IN SOIL ROCK MIX WITHOUT TOPSOIL LAYER, PLACE PLANTS IN SOIL POCKETS BETWEEN ROCKS WHERE SOIL DEPTHS ARE ADEQUATE. ADJUST SPACING IF NEEDED TO ACCOMMODATE THE NUMBER OF PLANTS INDICATED.

2. INSTALL ROOTBALL CROWN 1" ABOVE FINISH GRADE
MULCH, KEEP 6' AWAY FROM TRUNK
WATERING BASIN 3" HIGH
FINISH GRADE
BACKFILL MIN
ROOTBALL - CUT AND REMOVE ALL BINDING FROM THE TOP AND SIDES OF THE ROOTBALL BEFORE BACKFILLING

3. PLACE ROOT COLLAR HIGHER THAN SURROUNDING GRADE
PLANT WITH OBSTRUCTION OR METAL BAR OF A DIAMETER SLIGHTLY LARGER THAN ROOT MASS OF PROPAGULE FOR DIGGING HOLE UNDISTURBED SOIL

4. SUPPORT STAKES SHALL BE METAL T-POST A MINIMUM OF 5-FEET LONG.
WIRE EDGE AT TOP OF CYLINDER SHALL BE THE MANUFACTURED FINISHED EDGE.
NON-CORROSIVE WIRE TIES. POSTS WITH MIN. (4)
ATTACH WIRE MESH TO FRAME

5. EXTEND WIRE MESH GREEN STUDDED STEEL T-POST
WELDED WIRE MESH CYLINDER
STAKE SUPPORT 4 PLACES WELDED FASTENERS SHALL BE UV-RESISTANT HEAVY-DUTY ZIP TIES.

6. SPACE POSTS MIN 6' AWAY FROM ENCLOSED PLANTS
GREEN, STUDDED STEEL T-POST
WELDED WIRE MESH 4' TALL

7. TIES
NOTE: 1. ATTACH WIRE MESH TO POSTS WITH MIN. 14" NON-CORROSIVE WIRE TIES.

8. ABOVE GROUND WATER TANK
- 5000 GAL., BLACK, WITH 2" THREADED LD, 15" INLET AND 2" DRAIN WITH 3" CAP
- SEE NOTE 3

9. IRRIGATION FITTINGS
COMPACTED 3/4-INCH CLEAN CRUSHED DRAIN ROCK
4" MIN DEPTH, LEVEL SURFACE
4" PRESSURE TREATED LUMBER FRAME
3/8" REBAR, 18" ON CENTER

10. EXISTING GRADE
3'-0" REBAR, 18" ON CENTER
PLANTING

1. THE CONTRACTOR SHALL INSTALL PLANTING AND MAINTENANCE PATHS AS SHOWN ON THE PLAN.

2. PLANT INSTALLATION SHALL COORDINATE WITH THE COUNTY TO REMOVE LIMITED QUANTITY OF NON-NATIVE PLANT SPECIES PRIOR TO PLANTING.

3. WHEN INSTALLING PLANT SPECIES, THE CONTRACTOR SHALL REMOVE ALL EXISTING SPECIES BY THE CONTRACTOR AND APPROVED BY THE OWNER PRIOR TO PLANT INSTALLATION.

4. KEEP WOODY PLANTS 10 FEET FROM PADDED PATHWAYS.

5. PLANTS TO BE INSTALLED WITH HIGH ROOT-TO-SHOOT RATIOS TO ASSIST RAPID PLANT ESTABLISHMENT.

6. CONTAINER PLANT HOLES WILL BE EXCAVATED AND AMENDED PER THE SPECIFICATIONS AND DETAILS. EACH WOODY PLANT SHALL BE PLACED IN A SHALLOW WATER RETENTION BASIN 36" IN DIAMETER.

7. CONTAINER PLANT HOLES (PITS) ARE TO BE DUG TO AT LEAST TWICE THE DEPTH AND TWICE THE WIDTH OF THE CONTAINER. THE PLANTING HOLE TO ELIMINATE SMOOTH SURFACES (ALLOWING FOR ROOT PERSURFICATION) PRIOR TO PLANT INSTALLATION.

8. BACKFILL THE PLANTING HOLE (PIT) WITH BACKFILL TO SUCH A DEPTH THAT WHEN THE BACKFILL IS TAMPERED DOWN THE PLANT PLANT WILL BE PLANTED AT THE SAME ELEVATION AS THE SURROUNDING SOIL.

9. PLANTING BACKFILL SHALL BE A THOROUGHLY MIXED BLEND OF EXISTING SITE SOIL AND SOIL AMENDMENTS AT THE FOLLOWING MIXTURE RATIO:

PER CUBIC YARD:

- 60% SITE SOIL
- 20% BLACK ORGANIC COMPOST
- 10% (3:1) TRIC HUMATE PLUS

10. THE PLANT HOLES (PITS) SHALL BE BACKFILLED AND IRREGULAR TO ENSURE THE PLANT CAN SETTLE FREE OF THE ROOTBALL. ALL PLANTS ARE SET IN SET IN.

11. CONTAINER PLANT PLUMES AND IN CENTER OF THE PLANTING HOLE. THE BASKET HOLES MUST BE CLOSED AND CHECKED TO PREVENT ROOT BINDING. PLACE ALL PLANTS SO THAT THE CENTER OF THE BASKET HOLES ARE EVEN WITH OR ABOVE THE SURROUNDING GRADE.

12. BACKFILL IS APPROXIMATELY 1-1/2 TIMES THE PLANTING HOLE IN PLACE. THREE TABLETOPS OF MUCROBRIAN IN GRAYWAVE FORMULA SHALL BE SUFFICIENT TO COMPLETE THE PLANTING. BACKFILL HAS BEEN ADDED TO MAKE THE PIT READY TO ACCEPT THE PLANT.


14. THE PLANT SHALL BE WATERED TWO TIMES, THOROUGHLY, BY HAND IMMEDIATELY AFTER PLANTING. PLANTS THAT SETTLE BELOW THE HOLES SHOULD BE BUILT UP THE EDGE OF THE FOOTBALL, FORMING A 30° DIAMETER CIRCLE WITH A 36" RIM OF SOIL DESIGNATED TO HOLD WATER NEAR THE PLANT.

15. THE PLANT SHALL BE WATERED TWO TIMES, THOROUGHLY, BY HAND IMMEDIATELY AFTER PLANTING. PLANTS THAT SETTLE BELOW THE HOLES SHOULD BE BUILT UP THE EDGE OF THE FOOTBALL, FORMING A 30° DIAMETER CIRCLE WITH A 36" RIM OF SOIL DESIGNATED TO HOLD WATER NEAR THE PLANT.

16. ADDITIONAL SOIL ADDED IF NECESSARY AT NO ADDITIONAL COST TO THE CONTRACTOR.

17. PLANT INSTALLATION INSPECTION AND APPROVAL REQUIREMENTS: FOLLOWING PLANT INSTALLATION BACKFILL, BERM, BERM AND WATER BASINS SHALL BE COMPLETE AS SHOWN ON THE PLANT INSTALLATION SPECIFICATIONS. THE CONTRACTOR SHALL COMPLETE THE PERIMETER OF EACH PLANTING AREA. PLANTS DAMAGED OR MISSING WILL BE REPLANTED.

18. PLANT INSTALLATION INSPECTION AND AUTHORIZATION REQUIREMENTS: AFTER THE COMPLETION OF PLANT INSTALLATION AND ACCEPTANCE OF ALL PLANT INSTALLATION,

19. PLANT INSTALLATION PERIOD WILL BE 30 DAYS.

PERFORMANCE REQUIREMENTS:

1. ORGANIC MATTER SEEDING CAUSING EROSION AND DELIVERY OF THE REQUIRED AMOUNTS OF WATER DURING THE PLANT ESTABLISHMENT PERIOD. ENSURE THAT ALL INSTALLED SEEDING COMPONENTS WILL BE WATERED AS NEEDED TO OPERATE SEEDING COMPONENTS WITHIN THEIR OPTIMAL PRESSURES AND FLOW RANGES.

ENVIRONMENTAL PROTECTION

1. BROWSE PROTECTION

1.1. IMPROVE BROWSE, PROTECTION FOR ALL PLANTS AND SHADE AS SHOWN ON THE PLANTING LEGEND.

1.2. REPAIR OR REPLACE EXISTING BROWSE PROTECTION MATERIALS IN SUFFICIENT CONDITION TO PROVIDE PROTECTION TO PLANTS.

1.3. ADJUST BROWSE PROTECTION AS NECESSARY TO ACCOUNT FOR PLANT GROWTH AND OBSERVED ENVIRONMENTAL PROTECTION REQUIREMENTS.

2. TYPICAL PROTECTION FENCING

2.1. CONTRACTOR SHALL INSTALL PROTECTION FENCING AROUND THE EXISTING IRIGATION RADIUS, BEGINNING AT THE COMPLETION OF PLANT INSTALLATION.

2.2. IMPROVE AREAS OF PROTECTION FENCING WHICH HAVE BEEN DAMAGED.

2.3. UPON COMPLETION OF THE MAINTENANCE AND MONITORING PERIOD ALL TEMPORARY PROTECTION FENCING SHALL BE REMOVED.

TEMPORARY IRRIGATION SYSTEM

1. TEMPORARY DRIP IRRIGATION SHALL BE INSTALLED AND MAINTAINED FOR THE ESTABLISHMENT OF THE PLANTING. THE NEW PLANTING SYSTEM SHALL CONNECT TO EXISTING IRRIGATION SYSTEM OWNED AND OPERATED BY SAN GERONIMO WATER DISTRICT.

2. CONTRACTOR SHALL ASSUME A SEPARATE CONTROLLER IS NECESSARY FOR THE OPERATION OF THE IRRIGATION SYSTEM. CONTROLLER TYPE TO BE REVIEWED AND APPROVED BY MARIN COUNTY.

3. CONTRACTOR SHALL COORDINATE WITH MARIN COUNTY TO FACILITATE A MEETING WITH SPAWN TO REVIEW AND CONFIRM EXISTING IRRIGATION SYSTEM AND CAPACITY. AS WELL AS CONFIRM PROPOSED IRRIGATION SYSTEM WILL NOT CONFLICT WITH EXISTING SYSTEM.

4. CONTRACTOR SHALL SUBMIT IRRIGATION DESIGN PLAN TO OWNERS REPRESENTATIVE FOR INFORMATION.

5. LOCATION AND INSTALLATION OF IRRIGATION LATERALS TO BE CONFIRMED WITH SPAWN.

6. NEW IRRIGATION VALVES SHALL BE INSTALLED TO IRRIGATE ALL NEW PLANTINGS. IRRIGATING FOR NEW PLANTS SHALL NOT BE SERVED BY EXISTING IRRIGATION VALVES.

7. A 5000 GAL. WATER TANK SHALL BE INSTALLED TO SUPPORT THE ESTABLISHMENT PERIOD PLUS ANY SUBSEQUENT DIE OFF.

8. IRIGATION:

8.1. APPLIED A MINIMUM OF 50 GALLONS PER PLANT ONCE A MONTH.

8.2. KEEP IRRIGATION SYSTEM IN CHARGE OF THE CONTRACTOR AND THE DISTRICT. AT A MINIMUM, IRRIGATION SYSTEM IS OPERATED OUTSIDE THE IRRIGATION SEASON.

8.3. TEMPORARY DRIP IRRIGATION SHALL BE INSTALLED AND MAINTAINED FOR THE ESTABLISHMENT PERIOD PLUS ANY SUBSEQUENT DIE OFF. DETERMINATION OF THE ESTABLISHMENT PERIOD WILL BE 90 DAYS MINIMUM.

8.4. CONTRACTOR SHALL PROVIDE IRRIGATION SCHEDULE WITH SPAWN. DETERMINE ANNUAL PLANT SURVIVAL COUNT DONE AT THE END OF THE YEAR.

8.5. CONTRACTOR SHALL PROVIDE IRRIGATION SCHEDULE WITH SPAWN. DETERMINE ANNUAL PLANT SURVIVAL COUNT DONE AT THE END OF THE YEAR.
Attachment 9 – Tree Data Fields
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Attachment 10 – GIS Guidelines
1. PURPOSE and SCOPE

The Marin County Flood Control and Water Conservation District (District) strives to improve service delivery, increase efficiencies, and standardize and centralize data. Setting forth the District’s expectations for geospatial data delivery will help us achieve these goals.

This document provides guidance to consultants, contractors, partners, and any others who provide geospatial data to District projects, programs, or staff. It provides guidance on recommended formats and associated documentation for delivering geospatial data and related information. This document is intended as general guidance; individual projects may require modifications or enhancements to these guidelines. District project managers and consultants are encouraged to work together to set and manage expectations for geospatial data deliverables.

2. OVERVIEW

There are several ways to represent geospatial data, including vector data (points, lines, polygons), rasters/images, and tabular data with spatial coordinates. Appropriate representations will vary depending on the type of data and the scope and goals of the contract or project. Data formats should be clearly stipulated and agreed upon among contractors or partners and the District. Questions about data representation and format should be addressed and resolved in consultation with the project manager and GIS data specialist prior to data collection, assembly, and processing.

The District uses Esri ArcGIS software and Autodesk AutoCAD (computer aided design) software. Data deliverables in formats compatible with these are preferred. Recommended data formats are specified in Item 3 below.

All geospatial files submitted to the District must include spatial reference information that identifies the coordinate system/projection, datum, and units of measure. Recommended and required spatial reference parameters are specified in Item 4 below.

All data submitted to the District must be accompanied by associated metadata that provides all necessary information for understanding the submittal, as described in Item 5 below.
3. **RECOMMENDED GEOSPATIAL DATA FILE FORMATS**

The following data file formats are recommended:

**Vector Data**
- Esri File Geodatabase (.gdb)
- Shapefile (.shp)
- AutoDesk AutoCAD drawing files (.dwg)

**Raster Data/Aerial Imagery**
- Esri File Geodatabase Raster (.gdb)
- TIFF image as a GeoTIFF or with world reference file (.tif, .tfw)
- JPEG image with world reference file (.jpg, .jpw)

**LiDAR Point Cloud Data**
- LAS file (.las)
- LAS dataset (.lasd)

**Tabular Data**
- Microsoft Excel (.xlsx)
- Tab or comma-delimited text files (.txt, .csv)

**Map Deliverable**
- Esri ArcMap Document (.mxd)
- Esri ArcMap Package (.mpk)
- Esri ArcGIS Pro Project (.aprx)
- Esri ArcGIS Pro Project Package (.ppkx)

Other data formats may be acceptable under some circumstances but should be Esri supported file formats (ArcGIS supported data formats; ArcGIS supported raster and image formats). Consultants should check with the project manager and GIS data specialist whether other formats can be accepted.

Simple attribute data should be included as part of the ArcGIS attribute table. Complex attributes should be delivered in a well-structured relational Esri file geodatabase. Spatial features and database records must share a common field with identifier that relates the spatial feature to the table record. Associated tabular data files may be provided to connect geospatial feature locations with additional attribute information; primary and foreign keys to create the data connection must be clearly identified and documented. (Note: It is not acceptable to link geospatial features to tables using ObjectID.)

CAD drawing files should include meaningful and interpretable layer names; otherwise, a key to layer names should accompany the data. It may be necessary to deliver certain CAD data files in two versions: one complete to be read by AutoCAD, and one to be read by Esri.
GIS software, in which non-geographic elements such as drawing borders, title blocks, north arrows, and detail drawings are not included.

LiDAR LAS files should include point classification as defined by the American Society for Photogrammetry and Remote Sensing (ASPRS) standards (ASPRS LAS file format).

For maps created in GIS, the GIS project files should be delivered as Esri ArcMap Package (.mpk) or Esri ArcGIS Pro Project Package (.aprx) files, which include map(s) with the symbology and layout(s) used in the final map(s) along with copies of all the spatial data in the map included. Raster data/aerial imagery with large file size can cause issues with map packaging and should not be embedded in ArcMap Packages / ArcGIS Pro Project Packages. Instead, include raster data/aerial imagery files in a separate directory and provide information to link these files to the map document / project after extraction. Esri ArcMap documents (.mxd) or ArcGIS Pro projects (.aprx) with spatial data in a stand-alone directory structure may also be delivered. Map documents / projects must use relative paths and must not use printer-specific page settings.

Maps for display (i.e. PDF, JPEG, PowerPoint, or hard copy) should accompany map deliverables as reference documents, but they are not considered geospatial data deliverables.

4. SPATIAL REFERENCE REQUIREMENTS

All electronic geospatial data must have a spatial reference defined and embedded in, or associated with, the data file. If not readable by Esri software, it must be listed in a document with complete spatial reference information (coordinate system/projection, parameters, and datum). If elevation data is included, vertical datum and unit of measure must be specified. In the case of CAD data, the spatial reference must be a commonly used regional or national coordinate system. CAD data that is in page space or a custom site-specific coordinate system is not acceptable.

The preferred horizontal coordinate system for vector data is:

Projection: California State Plane, Zone III
Datum: North American Datum 1983 HARN
Units: Foot_US (i.e. “survey foot”)
(WKID: 2872 Authority: EPSG)

Raster data including aerial photography may be submitted in their native projection/coordinate system.

Elevation data (surveyed elevations or topographic surface data) must be referenced to the North American Vertical Datum (NAVD) 1988.
If spatial coordinate information is provided in tabular format, at a minimum it should include the attribute fields below, along with complete spatial reference information.

- ID – a unique identifier given to each feature
- Y coordinate (if Latitude, in decimal degrees with 6 significant digits)
- X coordinate (if Longitude, in decimal degrees with 6 significant digits)

5. METADATA REQUIREMENTS

All data submitted must be accompanied by associated metadata that provides all necessary information for understanding the submittal. The District strongly encourages preparation of metadata using Esri ArcCatalog or ArcGIS Pro, or in a format that can be easily imported into ESRI software. The metadata should be located in the same directory as the data file, share the same naming prefix and, when appropriate, be embedded with or attached to the data. For any data files that do not support ESRI metadata, provide relevant information in an associated and clearly identified document file such as Microsoft Word, text file, or similar document.

A metadata document describing the entire dataset should accompany the submittal and at a minimum include:

- List of each file contained in the submittal
- Narrative description of the contents of the dataset, including all spatial data, related tables, and map deliverables
- Version and date of the submittal
- Information on sensitive data issues (if any)
- A short description of data themes (limited to one to two sentences for each theme)
- Linking fields (to documents, digital photographs, web content, etc.)
- Description of QA/QC procedures used to assess the data including measures of spatial accuracy and precision

Metadata for each individual data file should at a minimum include:

- Narrative description (Abstract), with source of input data, collection methods, equipment used, and appropriate scale for use
- Process information including how and when the data were collected, assembled, and/or updated and by whom, equipment and methods used, and any other relevant information
- Complete descriptions of all codes and all other information in the attribute fields
- Contact information for person who collected and/or prepared the geospatial data
- Statement about any issues with the data, including any assumptions, appropriate uses, data sensitivity, or any other relevant statement about how the data should or should not be used.
6. FILE NAMING CONVENTIONS

Clear, short, and descriptive file and attribute field names should be used that convey the nature of the data and subject represented. Names should not contain spaces or special characters but may contain underscores. (Note: Long file and path names of more than 128 characters may not allow backup onto computer or external hard drives.) File names must be unique, complete, and interpretable outside of the file structure.

7. DATA DELIVERY

Data submittals should be delivered via electronic data transfer (e.g. email attachment, file sharing site, etc.), or physical storage device (e.g. USB Flash Drive or external hard drive). The choice of delivery method should be based on the total file size of the submittal. Physical storage device delivery should be used if digital transfer is not feasible due to file size and/or upload-download time.

8. REFERENCES


Attachment 11 – FDS Planting Plans
LEGEND

- ACCESS ROADWAYS
- BASIN SEED MIX
- BASIN SEED MIX AND BASIN CONTAINER PLANTINGS
- EROSION CONTROL SEED MIX
- EROSION CONTROL SEED MIX AND OAK-BAY WOODLAND CONTAINER PLANTINGS

NOTES

1. SEE SHEET L-4 FOR DETAILED PLANT LEGENDS AND OTHER INFORMATION.
2. NO TREES OR SHRUBS SHALL BE PLANTED WITHIN 15 FEET OF THE INBOARD OR OUTBOARD BERM TOE OF THE BASIN.
3. ALL WORK AROUND EXISTING TREES IS TO BE DONE CAREFULLY TO AVOID DAMAGE TO THE TRUNK, BRANCHES AND ROOTS AS DIRECTED. ADJUST NEW PLANTING LOCATIONS AS NEEDED TO AVOID CONFLICTS, SUBJECT TO DISTRICT APPROVAL.

SCALE
0 20 40 FEET
1"=20'

Legend:
- ACCESS ROAD (NO PLANTING), TYP.
- COASTLIVE OAK TREE (Quercus agrifolia) TYP. OF 13
- CALIFORNIA BAY TREE (Umbellularia californica) TYP. OF 22
- CALIFORNIA BUCKEYE TREE (Aesculus californica) TYP. OF 21
- COYOTE BOLY SHRUB (Baccharis pilularis ssp. consanguinea) TYP. OF 28
- TOYON SHRUB (Heteromeles arbutifolia) TYP. OF 23
- EDGE OF 15' PLANTING BUFFER, TYP.
- BERM TOE
- OAK-BAY WOODLAND AREA, TO RECEIVE SEEDING AND CONTAINER PLANTINGS, TYP. SEE PLANT LEGEND
- NEW SWALE CONNECTING TO (E) SWALE, SEE GRADING PLANS
- ACCESS ROADWAYS
- MATCHLINE - SEE SHEET L-3
- BASIN SEED MIX
- BASIN SEED MIX AND BASIN CONTAINER PLANTINGS
- EROSION CONTROL SEED MIX
- EROSION CONTROL SEED MIX AND OAK-BAY WOODLAND CONTAINER PLANTINGS

STEPS TO FOLLOW:

1. SEE SHEET L-4 FOR DETAILED PLANT LEGENDS AND OTHER INFORMATION.
2. NO TREES OR SHRUBS SHALL BE PLANTED WITHIN 15 FEET OF THE INBOARD OR OUTBOARD BERM TOE OF THE BASIN.
3. ALL WORK AROUND EXISTING TREES IS TO BE DONE CAREFULLY TO AVOID DAMAGE TO THE TRUNK, BRANCHES AND ROOTS AS DIRECTED. ADJUST NEW PLANTING LOCATIONS AS NEEDED TO AVOID CONFLICTS, SUBJECT TO DISTRICT APPROVAL.

PLAN: PLANTING PLAN
SHEET: L-1
PLAN: PLANTING PLAN
SHEET: L-1

Attention:

SAN ANSELMO FLOOD RISK REDUCTION PASSIVE FLOOD DIVERSION STORAGE SITE PROJECT
FAIRFAX, CA

MARIN COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT
3501 CIVIC CENTER DR, ROOM 304   SAN RAFAEL    CALIFORNIA   94903

Printed:
Designed:
Checked:
Drawn:
Approved By:

Date: June 4, 2021

Project Number: FZ9-12-005-P2
OAK-BAY WOODLAND AREA, to receive seeding and 
containing trees, typical. See plant legend

CALIFORNIA BAY TREE
(Umbellularia californica)
TYP. OF 8

CALIFORNIA BUCKEYE TREE
(Aesculus californica)
TYP. OF 7

COYOTE BRUSH SHRUB
(Baccharis pilularis ssp. consanguinea)
TYP. OF 11

TOYIN SHRUB
(Heteromeles arbutifolia)
TYP. OF 8

MINIMUM ROOT
PROTECTION ZONE, TYP.

ESTIMATED HANG-ZONE
(TREE CANOPY)
EXTENT, TYP.

OAK-BAY WOODLAND AREA
TO RECEIVE SEEDING AND
CONTAINING TREES, TYP.
SEE PLANT LEGEND

EXISTING TREE TO
REMAIN, TYP.

BERM TOE

EDGE OF 15' PLANTING
BUFFER, TYP.

EROSION CONTROL
SEED AREA, TYP.

BASIN SEED MIX, TYP.

1. SEE SHEET L-4 FOR DETAILED PLANT LEGENDS AND OTHER
INFORMATION.

2. NO TREES OR SHRUBS SHALL BE PLANTED WITHIN 15 FEET
OF THE INBOARD OR OUTBOARD BERM TOE OF THE BASIN.

3. ALL WORK AROUND EXISTING TREES IS TO BE DONE
CAREFULLY TO AVOID DAMAGE TO THE TRUNK, BRANCHES AND
ROOTS AS DIRECTED. ADJUST NEW PLANTING LOCATIONS AS
NEEDED TO AVOID CONFLICTS, SUBJECT TO DISTRICT
APPROVAL.
EXISTING TREE TO REMAIN, TYP.

FAIRFAX CREEK

BUCKEYE TREE (Aesculus californica) TYP. OF 3

COYOTE BRUSH SHRUB (Baccharis pilularis ssp. consanguinea) TYP. OF 3

OAK-BAY WOODLAND AREA TO RECEIVE SEEDING AND CONTAINER PLANTINGS, TYP. SEE PLANT LEGEND

CALIFORNIA BAY TREE (Umbellularia californica) TYP. OF 1

MATCHLINE - SEE SHEET L-2

LEGEND

NOTES

1. SEE SHEET L-4 FOR DETAILED PLANT LEGENDS AND OTHER INFORMATION.

2. NO TREES OR SHRUBS SHALL BE PLANTED WITHIN 15 FEET OF THE INBOARD OR OUTBOARD BERM TOE OF THE BASIN.

3. ALL WORK AROUND EXISTING TREES IS TO BE DONE CAREFULLY TO AVOID DAMAGE TO THE TRUNK, BRANCHES AND ROOTS AS DIRECTED. ADJUST NEW PLANTING LOCATIONS AS NEEDED TO AVOID CONFLICTS, SUBJECT TO DISTRICT APPROVAL.
1. PLANT QUANTITIES PROVIDED FOR INFORMATION PURPOSES. CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE PLANT QUANTITY NUMBERS AS SHOWN IN PLANS AND SPECS.

2. QUANTITIES FOR SMALL SHRUB AND HERBACEOUS PLANT MIXES ARE BASED ON SQUARE FOOTAGES AND GENERIC 36" O.C. SPACING CALCULATIONS AND DO NOT FACTOR IN THE MATURE SIZE OF EACH SPECIES. SOME ADJUSTMENTS MAY BE NECESSARY IN THE FIELD PER THE AUTHORIZATION OF THE DISTRICT REPRESENTATIVE, IN COMPLIANCE WITH THE HABITAT DISTRICT REPRESENTATIVE PRIOR TO PLANTING.

3. DISTRICT TO SUPPLY ALL PLANT MATERIAL. CONTRACTOR TO COORDINATE WITH DISTRICT SUPPLIER ON DELIVERY. SEE SPECIFICATION SECTION 32 90 00 - PLANTING.

4. DISTRICT QUANTITIES FOR SMALL SHRUB AND HERBACEOUS PLANT MIXES ARE BASED ON SQUARE FOOTAGES AND GENERIC 36" O.C. SPACING CALCULATIONS AND DO NOT FACTOR IN THE MATURE SIZE OF EACH SPECIES. SOME ADJUSTMENTS MAY BE NECESSARY IN THE FIELD PER THE AUTHORIZATION OF THE DISTRICT REPRESENTATIVE, IN COMPLIANCE WITH THE HABITAT DISTRICT REPRESENTATIVE PRIOR TO PLANTING.

5. SUBSTITUTIONS OF PLANT SPECIES OR SIZES IS NOT PERMITTED WITHOUT PRIOR WRITTEN AUTHORIZATION OF THE DISTRICT REPRESENTATIVE, IN COMPLIANCE WITH THE HABITAT RESTORATION MANAGEMENT PLAN AND OTHER PERMIT REQUIREMENTS.
Attachment 12 – Irrigation & Utility Lines
Attachment 13 – Hourly Wages & Rates For Supplemental Work
## Hourly Wages and Rates for Supplemental Work

<table>
<thead>
<tr>
<th>Crew Member</th>
<th>Rate per Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualified Botanist, Biologist, Ecologist, Environmental Scientist or person with at least 3 years experience</td>
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<tr>
<td>Crew Leader</td>
<td>$</td>
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<tr>
<td>Landscape Maintenance Laborer</td>
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<tr>
<td>Area Supervisor</td>
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<td>Arborist</td>
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<td>Irrigation Technician</td>
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<td>Monitor</td>
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<th>Equipment</th>
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<td>Additional:</td>
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<table>
<thead>
<tr>
<th>Landscape Plant Installation</th>
<th>Rate per Plant (Price of plant and labor to install)</th>
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<tbody>
<tr>
<td>Perennial herb</td>
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<td>Tree</td>
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<td>Seed Mix</td>
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<td>Additional:</td>
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</table>
Attachment 14 – Timing of Proposed Maintenance Frequency by Site & Year
Timing of proposed maintenance frequency by site and year.

Marin County Flood Control & Water Conservation District
Mitigation Maintenance Frequency Schedule

<table>
<thead>
<tr>
<th>FDS Site</th>
<th>3000 Sir Francis Drake Blvd.</th>
<th>Fairfax</th>
<th>Year 1</th>
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<th>Twice per week</th>
<th>Weekly</th>
<th>Biweekly</th>
<th>Monthly</th>
<th>Bi-monthly</th>
<th>Monthly</th>
<th>Quarterly</th>
<th>3 times/yr.</th>
<th>Twice a Yr.</th>
<th>Yearly</th>
<th>As Required</th>
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<tbody>
<tr>
<td>Tree Maintenance</td>
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<td>Irrigation system inspection</td>
<td>Irrigation system repair</td>
<td>Trash Removal</td>
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</table>

**Comments:**
Must follow minimum requirements of permits, monitoring plan, and scope of work.
Marin County Flood Control & Water Conservation District
Mitigation Maintenance Frequency Schedule

FDS Site
3000 Sir Francis Drake Blvd.
Fairfax

<table>
<thead>
<tr>
<th>Maintenance Type</th>
<th>Frequency</th>
<th>Year 3</th>
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<tbody>
<tr>
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<td>Irrigation</td>
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<td>Exclusion fencing</td>
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<td>Other</td>
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<tr>
<td>Shrub, Perennial and Groundcover</td>
<td>Twice a Yr.</td>
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<tr>
<td>Maintenance</td>
<td>Twice per week</td>
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<td>Irrigation</td>
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<td>Other</td>
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<tr>
<td>Invasive Plant Maintenance</td>
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<td>Cal-IPC Moderate/High</td>
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<td>Maintenance</td>
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<td>Misc. Maintenance</td>
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<td>Irrigation system inspection</td>
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<td>work.</td>
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</table>
## Marin County Flood Control & Water Conservation District
### Mitigation Maintenance Frequency Schedule

**FDS Site**
3000 Sir Francis Drake Blvd.
Fairfax

<table>
<thead>
<tr>
<th>Year</th>
<th>Twice per week</th>
<th>Weekly</th>
<th>Biweekly</th>
<th>Monthly</th>
<th>Bi-monthly</th>
<th>Quarterly</th>
<th>3 times yr.</th>
<th>Twice a Yr.</th>
<th>Yearly</th>
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**Tree Maintenance**
- **Irrigation**
- **Exclusion fencing**
- **Weed control**
- **Other**

**Shrub, Perennial and Groundcover Maintenance**
- **Irrigation**
- **Weed control**
- **Trash removal**
- **Other**

**Invasive Plant Maintenance**
- **Cal-IPC Moderate/High Maintenance**
- **Other**

**Maintenance**
- **Irrigation system inspection**
- **Irrigation system repair**
- **Trash Removal**
- **Fire fuel reduction**

**Comments:**
Must follow minimum requirements of permits, monitoring plan, and scope of work.
<table>
<thead>
<tr>
<th>FDS Site</th>
<th>3000 Sir Francis Drake Blvd.</th>
<th>Fairfax</th>
<th>Year 5</th>
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<td>Trash Removal</td>
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<td>Fire fuel reduction</td>
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</tbody>
</table>

**Comments:**

Must follow minimum requirements of permits, monitoring plan, and scope of work.
# Marin County Flood Control & Water Conservation District

## Mitigation Maintenance Frequency Schedule

<table>
<thead>
<tr>
<th>Off-site Mitigation Area</th>
<th>San Geronimo Commons</th>
<th>Woodacre</th>
<th>Year 1</th>
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</thead>
<tbody>
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### Woodacre Year 1

**Tree Maintenance**
- Irrigation
  - Twice per week
  - Weekly
  - Biweekly
  - Monthly
  - Bi-monthly
  - Quarterly
  - 3 times yr.
  - Twice a yr.
  - Yearly
  - As Required

**Shrub, Perennial and Groundcover Maintenance**
- Irrigation
- Weed control
- Trash removal
- Other

**Invasive Plant Maintenance**
- Cal-IPC Moderate/High Maintenance
- Other

**Misc. Maintenance**
- Irrigation system inspection
- Irrigation system repair
- Trash Removal
- Fire fuel reduction

**Comments:**
Must follow minimum requirements of permits, monitoring plan, and scope of work.
<table>
<thead>
<tr>
<th>Off-site Mitigation Area</th>
<th>San Geronimo Commons</th>
<th>Woodacre</th>
<th>Year 2</th>
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<td>Invasive Plant Maintenance</td>
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**Mitigation Maintenance Frequency Schedule**

**Off-site Mitigation Area**
San Geronimo Commons
Woodacre

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**Comments:**
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Attachment 15 – SAFRR Vegetation Monitoring
Monthly Monitoring & Maintenance Report Form
## SAFRR Vegetation Monitoring
### Monthly Monitoring and Maintenance Report Form

**County Department / Contractor Firm Name:**

**Month:**  
**Year:**

### Monitoring

<table>
<thead>
<tr>
<th>Date</th>
<th>Site</th>
<th>Type of Monitoring (taking photopoints, transects, checking survivorship, checking invasive plant cover, etc.)</th>
<th>Photos Taken (Y/N)</th>
<th>Corrective Action Recommended</th>
<th>Corrective Action Taken</th>
<th>Estimated Hours</th>
<th>Staff Name/Title</th>
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### Maintenance

<table>
<thead>
<tr>
<th>Date</th>
<th>Site</th>
<th>Type of Maintenance (e.g., trash removal, checking irrigation, removing weeds, etc.)</th>
<th>Treatment applied</th>
<th>Species Treated</th>
<th>Estimated square feet removed</th>
<th>Estimated Hours</th>
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Attachment 16 – General Provisions
GENERAL PROVISIONS

Responsible Parties
Representing the County of Marin in all matters regarding the submission of this solicitation package shall be Abraham Gebru, Marin County Flood Control And Water Conservation District, AGEBRU@MARINCOUNTY.ORG.
All inquiries shall be directed to the designated County staff person as shown. Contact with any other County personnel or any undue “badgering” of such County personnel by the proposer is prohibited. Failure to comply with this request may be considered cause for disqualification of your proposal.

Award of Contract
Request for Proposal (RFP)
Award of proposal, if awarded, will be made to the Proposer offering the most advantageous proposal after consideration of all Evaluation Criteria set forth below. The criteria are not listed in order of preferences. An Evaluation Committee will be established by the County of Marin. The Committee will evaluate all proposals received in accordance with the Evaluation Criteria. The County of Marin reserves the right to establish weight factors that will be applied to the criteria depending upon order of importance. Evaluation scores will not be released until after award of proposal. The County of Marin shall not be obligated to accept the lowest priced proposal but will make an award in the best interests of the County after all factors have been evaluated.

Receipt of the official Contract shall indicate award of the proposal. Award of proposal shall be made by the County of Marin to the responsible Proposer who meets the provisions and specifications of this proposal after consideration of all evaluation criteria to provide the services as described in this request. The County reserves the right to make a multiple award of this proposal.

Award Evaluation Criteria
The Evaluation Criteria that will be used to evaluate all received proposals are listed in Section 4 of the RFP.

A selection committee will evaluate each submission and determine which individuals, firms, corporations, organizations, or teams will be invited to enter into a Contract.

The Selection Committee may also contact and evaluate the proposer’s references; contact any Proposer to clarify any response; contact any current users of a proposer’s services; solicit information from any available source concerning any aspect of a proposal; and/or seek and review any other information deemed pertinent to the evaluation process. The Evaluation Committee is not obligated to accept the lowest priced proposal but shall make an award in the best interest of the County of Marin, reject any and all proposals, and to waive any informalities and minor irregularities in the proposals.

Discussions/interviews may, at the County of Marin’s sole option, be conducted with responsible Proposers who submit proposals determined to be reasonably susceptible of being selected for an award.
Discussions/interviews may be for the purpose of clarification to assure full understanding of, and responsiveness to, the solicitation requirements. Proposers shall be accorded fair and equal treatment with respect to any opportunity for discussion and written revision of proposals. Revisions may be permitted after submissions and before award for obtaining best and final proposals. In conducting discussions/interviews, the County of Marin will not disclose information derived from proposals submitted by competing Proposers.

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<td>Qualifications &amp; Experience</td>
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<td>5</td>
<td>Conflict of Interest Statement</td>
<td>Pass/Fail</td>
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**Subtotal**: 100

### Preferences
Whenever the County of Marin acquires services or supplies by purchase order and/or contract, the Purchasing Agent, in evaluating the price or proposal, shall award preferences based upon the following preferences. In no case shall the total of all preferences which a bid is eligible exceed fifteen (15.0) percent.

1. **Local Business Preference** - In accordance with County of Marin Code 3.10 there shall be a five (5.0) percent preference on the price submitted by a local county business.

2. **Workforce Development Preference** - In accordance with County of Marin Code 2.50.070 Ordinance # 3435 there shall be a five (5.0) percent preference to contractors that can certify that at least 50 percent of the workforce under the service contract will be Marin County Residents.

3. **Recycled Product Preference** - In accordance with County of Marin Code 3.08 there shall be a fifteen (15.0) percent preference on the price submitted involving recycled products.

*This section shall not apply to transactions in which the allowance of these preferences are otherwise prohibited by state or federal statutes or regulation.*

### Supplier Performance Management Program (SPMP)
The Supplier Performance Management Program may be used to evaluate and assess contractor performance. This program may include but is not limited to: scheduled contract review, scorecards to measure performance on contract specific metrics, and periodic meetings to review performance and address any corrective action that may need to be taken. The intent is to be mutually beneficial, not only to ensure the supplier/contractor is meeting our expectations, but that the County is communicating our expectations to the supplier/contractor.
Addenda

Any changes, additions, deletions or clarifications to this proposal package shall be made by written addendum, issued by the County of Marin. Addenda will be sent to all known entities in receipt of the solicitation and shall be incorporated in the proposal. The proposer shall sign and date the addendum and submit with their response to the solicitation.

Addenda issued within five (5) calendar days of the proposal opening date/time shall be cause for extension of the opening date, if so determined by the Purchasing Agent, in order to allow prospective Proposers sufficient time to prepare their proposals.

Change Orders

The County of Marin may at any time, without notice to any sureties, make any change in the work specified in the resulting Contract by issuing a change order, including but not limited to changes:

1. In the terms and conditions of the Contract
2. In the written specifications

NO ORDER, STATEMENT OR CONDUCT, WRITTEN OR ORAL, SHALL BE TREATED AS A CHANGE ORDER UNLESS IN WRITING AND SIGNED BY BOTH PARTIES.

Invoicing and Payment

Payment by the County of Marin to vendor shall be made in full, per invoice within 30 calendar days after receipt of a correct invoice. Invoices shall be made per division. Invoices shall be mailed through the postal service. Purchase Orders are required for each order placed and invoices should reference the associated purchase order.

Depending on originating charges vendor shall submit an invoice only after services have been rendered to the following addresses:

MARIN COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
Attn: Abraham Gebru
3501 Civic Center Drive, Suite 304
San Rafael, CA 94903

Assignment and Subcontracting

The proposer shall have no right, authority or power to sell, mortgage or assign the resulting contract and/or purchase order or any interest herein, or any right, power or authority to allow or permit any other person or persons or organizations to have any interest in or use any part of the rights or obligations granted hereunder for any purpose whatsoever without the prior written consent of the County of Marin. Neither the contract and/or purchase order nor any interest created thereby shall pass by operation of law to any trustee or receiver in bankruptcy or to any other receiver or assignee for the benefit of creditors or any claim hereunder to any other party or parties, except as expressly authorized by the County of Marin.

Force Majeure

Time extension for delay may be allowed for the Proposer by the County of Marin for any delay in the completion/delivery of specified items which arises from unforeseeable causes beyond the control of the proposer and without fault or negligence of the proposer, including but not restricted to such causes as the act or negligence of the County of Marin, stormy or inclement weather in which specified work cannot be done, strikes, boycotts, acts of God, acts of the public enemy, acts of government, fire, flood, epidemics,
freight embargo, delays of suppliers which arise from unforeseeable causes beyond the control and without
the fault or negligence of both the proposer and supplier.

Nondiscriminatory Employee

The County of Marin does not discriminate on the basis of race color, religion, creed, sex, age, marital
status, national origin, mental or physical disability, political belief or affiliation, veteran status, sexual
orientation, gender identity (including gender expression), genetic information, and any other class of
individuals protected from discrimination under state or federal law in any of its activities or operations.
This includes, but is not limited to, hiring and firing of staff, selection or volunteers and vendors, and
provision of services. We are committed to providing an inclusive and welcoming environment for all
members of our staff, clients, volunteers, contractors, subcontractors, vendors and clients.

Fair Employment Provisions

The contractor awarded this proposal and doing the work herein specified shall not knowingly fail to hire
or allow to be dismissed from employment thereon any persons because of race, color, sex, religion,
national origin, or creed. The hiring of all labor for the work included in this contract shall be in
accordance with applicable directives of the Department of Fair Employment and Housing of the State of
California.

The contractor shall comply fully with Titles I and II of the Americans with Disabilities Act (ADA), Sections
508 and 504 of the 1973 Rehabilitation Act as amended in 1998 in that the contractor’s hiring practices do
not discriminate against disabled persons.

The contractor shall cooperate fully with the County and affiliated unions to promote and ensure the
maximum employment of minorities and other protected group members with particular emphasis on
residents of Marin County, in all phases and at all levels of the work. The contractor shall encourage
maximum utilization of apprenticeship and other on-the-job training programs to achieve this goal.

Contractor and/or any permitted subcontractor shall not unlawfully harass nor discriminate against any
individual based on race, religious creed, color, national origin, ancestry, medical condition, marital status,
sex, sexual orientation, age or condition of disability. Contractor and/or any permitted subcontractor
understands and agrees that Contractor and/or any permitted subcontractor is bound by and will comply
with the nondiscrimination mandates of all Federal, State and local statutes, regulations and ordinances.

A County representative will be available to advise and assist in implementation of the foregoing.

The Contractor shall comply with any and all federal, state and local laws (including, but not limited to the
County of Marin Nuclear Free Zone and Living Wage Ordinance) affecting the services provided by the
contractor.

Cancellation of Contract

Without CAUSE, the County of Marin may cancel this contract at any time with thirty (30) days written
notice to the supplier/contractor. With CAUSE, the County of Marin may cancel this contract at any time
with five (5) days written notice to the Proposer. Cancellation for cause shall be at the discretion of the
County of Marin and shall be, but is not limited to, failure to supply the materials, equipment or service
specified within the time allowed or within the terms, conditions or provisions of this contract. The
Successful Proposer may not cancel this contract without prior written consent of the County of Marin
Purchasing Agent.
Termination for Default – Time Extension for Delay

If the proposer fails or refuses to prosecute the work, or any separable part thereof, so as to ensure that the items specified will not be completed and/or delivered within the time specified in the proposal documents and Purchase Order, the County of Marin, may, by written notice to the proposer, terminate its right to proceed with the work or such part of the work as to which there has been a delay at the County’s option. The proposer and its sureties shall be liable to the County of Marin for liquidated damages, or if no liquidated damages are so provided, then for any damages to the County of Marin resulting from the proposer’s failure or refusal to complete/deliver the items within the specified time.

Termination for Convenience

The County reserves the right to terminate the contract at any time, for the convenience of the County of Marin, without penalty or recourse, by giving written notice to the Contractor at least thirty (30) calendar days prior to the effective date of such termination. The Contractor shall be entitled to receive just and equitable compensation for services and/or supplies delivered to and accepted by the County pursuant to the contract prior to the effective date of termination. Termination compensation cannot exceed the monthly service fee, and the termination nullifies the remaining months of the contract.

1. Termination for lack of funding: The County reserves the right to terminate any contract in any user agency if said agency loses funding during the term of the contract.

2. Termination for non-performance: The County may terminate the contract in whole or in part if delivery or performance is repeatedly unsatisfactory. Unsatisfactory performance includes but is not limited to:
   a. Repeated failure to respond within requested time-frame
   b. Failure to perform services when promised or expected
   c. Inability to reach Contractor contact; lack of customer service

Nuclear Free Zone

The County of Marin is a nuclear free zone in which work on nuclear weapons and/or the storage or transportation of weapons related components and nuclear material is prohibited or appropriately restricted. The County is prohibited or restricted from contracting for services or products with, or investing County funds in, any nuclear weapons proposer (Marin County Ordinance, Chapter 23.12 Nuclear-Free Zone).

https://www.marincounty.org/depts/bs/boards-and-commissions/commissions/peaceconversion

Damages

The proposer shall be held responsible for damage to existing facilities/sites, or to completed new work, that may be caused by the proposer's work or workmen. Proposer shall properly repair damage or remove and replace damaged property as appropriate at the proposer’s expense as required by the County of Marin.

Living Wage

This contract is subject to the County of Marin Living Wage Ordinance #3435 [(part), 2005]. The ordinance requires the payment of a living wage to all covered employees engaged in providing services pursuant to a service contract as defined in section 2.50.030 (F). Proposer specifically agrees that should the County of Marin investigate allegations of non-compliance with the Living Wage Ordinance, proposer shall make
available for audits its books and records relating to the service contract, as well as the books and records of its subcontractors and proposer will make available employees in furtherance of its investigation. Misrepresentation during the procurement or contracting process in order to secure the contract will disqualify a contractor or subcontractor from further consideration in the procurement or contracting process. Failure to comply once a contract has been awarded will constitute a material breach of the contract and may result, among other things, in the suspension or termination of the affected contract opportunities for a period not to exceed three years. (Marin County Ordinance, Chapter 2.50 Living Wage)


Cooperative Agreement
Agreement may be used by other governmental agencies, school districts, and special districts upon mutual consent of both parties. The proposer shall provide firm fixed pricing for all items or services, as specified herein, and allow agencies to purchase said goods or services at any time during the effective period of the resulting County of Marin Contract and/or Purchase Order.

Joint Procurement
In accordance with 2 C.F.R §200.318(e) Intergovernmental agreements for procurement or use of common goods and services is encouraged by federal procurement guidelines. Joint procurement is a contracting method in which two or more agencies agree from the outset to use a single solicitation document and enter into a single contract for goods or services. The proposer understands in providing a response to this solicitation, that a single contract will be issued for the benefit of all agencies identified within the solicitation.

Independent Proposer
The proposer agrees and certifies that they or any of their agents, servants, or employees is not an agent or employee of the County of Marin. The proposer is an independent solely responsible for proposer’s acts. The resulting Contract and/or Purchase Order shall not be construed as an agreement for employment with the County. The Non-Collusion Affidavit shall be signed and returned with the submitted proposal.

Non-Appropriation of Funds
The County of Marin warrants that it has funds available to remit payments on the resulting County Purchase Order at the time the purchase order is executed. Should appropriated funds during the term of the Purchase Order become unavailable for the purpose of the Contract and/or Purchase Order, the County may cancel the agreement by providing the proposer with written notice. Such notice shall release both the County and proposer from all obligations under the Contract and/or Purchase Order, and proposer shall refund the County the balance of any advance payment made for orders of goods and/or services which are outstanding, or which have not been received by the County.

Compliance or Deviation to Specifications
Proposer hereby agrees that the material, equipment or services offered will meet all the requirements of the specifications in this solicitation unless deviations are clearly indicated in the proposer’s response and listed as such under Exceptions to the Scope of Work.

Governing Laws
This Request for Proposal and the resulting purchase order and/or contract shall be governed by all applicable federal, state, and local laws, codes, ordinances, and regulations including, but not limited to, those promulgated by the Federal Emergency Management Agency (FEMA), Homeland Security, CAL-OSHA, FED-OSHA, Environmental Protection Agency (EPA), Equal Employment Opportunity Commission (EEOC), California Department of Fair Employment and Housing (DFEH), the California State Department of
Health and Human Services (CalHHS) and the County of Marin Environmental Health Department, the Federal Migratory Bird Treaty Act of 1918, the California Department of Fish and Wildlife codes 3503, 3503.5, 3513, and Marin County Code 23.16.010 for Pacheco Pond Wildlife area. This contract shall be in accordance with the substantive and procedural laws of the State of California.

Insurance

Successful proposer shall be required to furnish and maintain insurance as follows:

**Commercial General Liability:**

The Contractor shall maintain a commercial general liability insurance policy in the amount of $1,000,000 ($2,000,000 aggregate). The County shall be named as an additional insured on the commercial general liability policy.

**Commercial Automobile Liability:**

Where the services to be provided under this Contract involve or require the use of any type of vehicle by Contractor, Contractor shall provide comprehensive business or commercial automobile liability coverage, including non-owned and hired automobile liability, in the amount of $1,000,000.00.

**Workers’ Compensation:**

The Contractor acknowledges the State of California requires every employer to be insured against liability for workers’ compensation or to undertake self-insurance in accordance with the provisions of the Labor Code. If Contractor has employees, a copy of the certificate evidencing such insurance, a letter of self-insurance, or a copy of the Certificate of Consent to Self-Insure shall be provided to County prior to commencement of work.

Debarment and Suspension Certification

Title 49, Code of Federal Regulations, Part 29

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, and manager:

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

Note: Providing false information may result in criminal prosecution or administrative sanctions. The above certification is part of the Bid. Signing this bid on the signature portion thereof shall also constitute signature of the Certification.

Conformity with Law and Safety

Vendor shall observe and comply with all applicable laws, ordinances, codes and regulations of governmental agencies, including Federal, State, Municipal and Local Governing Bodies having jurisdiction over the scope of services or any part hereof, including all provisions of the Occupation Safety and Health Act of 1979 and all amendments thereto, and applicable Federal, State and Local Government Safety Regulations. All services performed by Vendor must be in accordance with these laws, ordinances, codes
and regulations. Vendor shall indemnify and save County harmless from any and all liability, fines, penalties and consequences arising from any non-compliance of violations of such laws, ordinances, codes and regulations.

Accidents: If a death, serious personal injury, or substantial property damage occurs in connection with the performance of this agreement, Vendor shall immediately notify the County by telephone. Vendor shall promptly submit to County a written report, in such form as may be required by County, of all accidents which occur in connection with this agreement. This report must include all of the following information:

1. Name and address of the injured or deceased person, and
2. Name and address of Proposer’s subcontractor (if any), and
3. Name and address of Proposer’s Liability Insurance Carrier, and
4. A detailed description of accident and whether any of County’s equipment or material was involved.

Attorney’s Fees
If any action at law or inequity is brought to enforce or interrupt the provisions of this agreement, the prevailing party shall be entitled to reasonable attorney’s fees in addition to any other relief to which it may be entitled.

Proposer Agreement to Terms and Conditions
Submission of a signed proposal will be interpreted to mean Proposer has agreed to all the terms and conditions set forth in the pages of this solicitation.

Right to Audit
County shall have the right of audit and inspection of the Vendor’s business records at any time during the term of this agreement. Vendor shall have readily available all records related to the performance of the agreement and shall provide office space as may be required for County to audit these records.

California Public Records Act (CPRA)
Applicants acknowledge and agree that the County is a public agency subject to the disclosure requirements of the California Public Records Act (“CPRA”). If Applicant’s proprietary information is contained in documents or information submitted to the County, and Applicant claims that such information falls within one or more CPRA exemption, the Applicant must clearly mark such information “CONFIDENTIAL AND PROPRIETARY” and identify the specific lines containing such information.

In the event of a request for such information, County will make reasonable efforts to provide notice to Applicant prior to any disclosure. If Applicant contends that any documents are exempt from the CPRA and wishes to prevent disclosure, then Applicant is required to obtain a protective order, injunctive relief or other appropriate remedy from a court of law in Marin County before the County’s deadline to respond to the CPRA request. If Applicant fails to obtain such remedy, County may disclose the requested information without penalty or liability.

Applicant further agrees that it shall defend, indemnify and hold County harmless against any claim, action or litigation (including but not limited to all judgments, costs, fees and attorneys’ fees) that may result from deniable by County of a CPRA request for information arising from any representation, or any action (or inaction) by the Applicant.
Taxes

Successful Proposer shall pay all federal, state and local taxes, levies, duties and assessments of every nature due in connection with any work under the contract and shall indemnify and hold harmless the County of Marin from any liability on account of any and all such taxes, levies, duties, assessments and deductions.

Tax, California Non-Resident Income and Franchise Tax Withholding

The California Franchise Tax Board through the California Revenue and Taxation Code (R&TC) Section 18662 and the related regulations requires the withholding of California income and franchise taxes from payment made to nonresident California vendors performing services in this state. A withholding of 7% (the 2011 rate which is applicable to change) of all service-related invoices will be withheld and remitted to the state; there is no required withholding on goods provided. In addition, there are higher applicable rates that apply to nonresident foreign non-corporate partners, corporate partners and foreign bank (including financial institution partners).
OFFER

In compliance with the solicitation, the undersigned offers and agrees, if this bid is accepted within sixty (60) calendar days from date of opening, to furnish any or all of the items upon which prices are quoted, at the price set opposite each item, delivered at the designated point within the time specified. Discounts will not be considered in the evaluation of any quotation, unless otherwise stated in this invitation.

The County of Marin is committed to developing and supporting diverse, equitable, and inclusive values within all aspects of its operations. By conducting business for or with the County, you are representing your commitment to rejecting inequities in employment, services, and practices by ensuring fair and equitable treatment for all.

REPRESENTATIONS AND CERTIFICATIONS

Proposer certifies the following

That they are a:   _______ Certified Dealer/Vendor for the Items in this Bid
                   _______ Manufacturer of the Items in this Bid

Business is operated as:  _______ an Individual
                          _______ a Partnership
                          _______ a Corporation
                          Incorporated in the
                          State of ______________________

Company Name: ____________________________________________
Company Address: ____________________________________________
Company Phone: ____________________________________________
Company Website: ____________________________________________

Signature of person authorized to sign bid: x ____________________________________________
Printed name: ____________________________________________
Title: ____________________________________________
Date: ____________________________________________
E-mail address: ____________________________________________
DEBARMENT AND SUSPENSION CERTIFICATION

Title 49, Code of Federal Regulations, Part 29

The Contractor, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, and manager:

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Dated this ___________________ day of _______________, 20 __________

By _____________________________

Authorized Signature for Contractor

_____________________________

Printed Name & Title
LOCAL BUSINESS PREFERENCE CERTIFICATION

PLEASE DO NOT COMPLETE THIS FORM UNLESS YOU QUALIFY FOR THE PREFERENCE

Chapter 3.10 of the Marin County Code, Preference in Contracts and Purchases, allows a 5% preference on the price submitted to local businesses which Contract with or

All respondents must certify they meet the definition of local business. Please initial one of the following definitions which apply to your business and describe below:

1. ______ has its principal place of business in Marin County; or
   Describe:  ____________________________________________________________________________
   ___________________________________________________________________________________
   ________________________________

2. ______ has a business license issued in Marin County for a period of six months prior to any claim of preference; or
   Describe:  ____________________________________________________________________________
   ___________________________________________________________________________________
   ________________________________

3. ______ maintains an office or other facility in Marin in which not less than five persons are employed substantially full time.
   Describe:  ____________________________________________________________________________
   ___________________________________________________________________________________
   ________________________________ Pursuant to Marin County Code, Chapter 3.10.40, any business which falsely claims a preference shall be ineligible to bid on county purchases or contracts for a period of one year from the date of discovery of the false certifications.
   Upon request, vendor agrees to provide additional information to substantiate this certification. Vendor certifies information provided is true and accurate under penalty of perjury.

____________________________________________________________________________________
Firm Name

____________________________________________________________________________________
Business Address City, State, Zip Code

____________________________________________________________________________________
Signature of Authorized Representative Contact Number

____________________________________________________________________________________
Title E-Mail Address
WORKFORCE PREFERENCE CERTIFICATION

PLEASE DO NOT COMPLETE THIS FORM UNLESS YOU QUALIFY FOR THE PREFERENCE

All respondents must certify and describe that their business employs at least 50% of the workforce under the service contract at the time of this solicitation are Marin County residents as defined below:

“Employee” means an individual who is permanently or temporarily employed by a county contractor or subcontractor performing direct services during any applicable pay period on work funded (in whole or in part) pursuant to a service contract as defined under this chapter.

Direct services do not include activity not directly contracted for by the county; for example, if the contract is for providing “counseling,” then only those employees providing that counseling are affected. Employees that would not be affected in that scenario would include support staff to those counselors, staff who process payroll or bill for the counselor’s time, or staff who supervise or manage those counselors. In another example, if the contract is to provide janitorial services, only those employees providing the janitorial services in county facilities would be affected. Employees who order supplies or repair equipment used in the performance of those services would not be affected.

Employee does not include an individual who is: (1) A worker classified as a student trainee, or intern working through an approved state or academic program or working towards state licensure or a professional accreditation sanctioned by a public entity or recognized licensure agency; (2) nor does it include anyone, regardless of age, who is providing services to earn academic credit or as part of a formal government approved, time-specific training program (e.g., Marin conservation corps trainees); and (3) employee also does not include a person providing volunteer services.

Describe: ___________________________________________________________________________________
                                                                                           ___________________________________________________________________________________
                                                                                           ___________________________________________________________________________________

The Marin Workforce Bidders Preference Certification form must be completed and returned with your bid/proposal response if you are claiming the 5% bidding preference. Upon request, vendor agrees to provide additional information to substantiate this certification.

Vendor certifies information provided is true and accurate under penalty of perjury.

____________________________________________________________________________________
Firm Name

____________________________________________________________________________________
Business Address City, State, Zip Code

____________________________________________________________________________________
Signature of Authorized Representative Contact Number

____________________________________________________________________________________
Title E-Mail Address