



AGENDA

DATE: **Wednesday, October 8, 2025**

PLACE: **Marin Farm Bureau Conference Room, 520 Mesa Road, Point Reyes Station, CA 94956**

REMOTE OPTION: Members of the public may participate remotely by Zoom:

<https://us02web.zoom.us/j/87864206727> or by phone: +16699009128,,87864206727# meeting ID: 878 6420 6727. Please contact Elise Suronen at (415) 663-1170 ext. 314, or sarabs@marinrcd.org if you have concerns about accessibility. *(Note that we may move agenda items in this meeting to meet time constraints of participants.)*

1. Regular meeting opens at **9:00 a.m.** Roll call, introduction of guests.

ACTION ITEMS: 9:15 - 10:30 a.m.

2. DISTRICT/ADMIN: (30 min)

- A. Board approval of special and regular Meeting Minutes. ~ *Cora Richard, Bookkeeper*
- B. Board approval of the Financial Report. ~ *Marcus Meggett, Fiscal and Ops Manager*
- C. Board approval of Marin RCD positions of President, Vice President & Treasurer. ~ *Nancy Scolari, Executive Director*

3. PROGRAMS: (45 min)

- A. Board approval of finding the Green Gulch Farm Streamflow and Water Storage Improvement Project within the scope of the State Water Resources Control Board's Programmatic Environmental Impact Report of the Statewide Restoration General Order (SRGO PEIR) and directing staff to issue a Notice of Determination. ~ *Gerhard Epke, Water Quality Program Manager*
- B. Board approval to open a 30-day review of the 2025 proposed environmental enhancement projects into the Marin Coastal Permit Coordination Program (PCP) and accept the proposed projects on November 12, contingent upon receiving no public comment. ~ *Gerhard Epke, Water Quality Program Manager*
- C. Board approval to award \$18,000 in matching Measure A funds to clear an emergency creek obstruction along a tributary to Keys/Walker Creek. ~ *Sarah Skinker, Carbon Farming Program Manager*

4. INFORMATIONAL: 10:45 a.m.

- **Down and Dirty - Summer Field Season Highlights** - *Fiona O'Neill, Soil Conservation Technician*

Partner Updates: 5 min each

- USDA Natural Resources Conservation Service (NRCS)– Petaluma Field Office Staff
- Marin Agricultural Land Trust/SAP – MALT Stewardship Staff
- Point Blue & Students & Teachers Restoring a Watershed (STRAW)– Point Blue Staff
- Audubon Canyon Ranch - Jim Jensen, Tomales Bay Land Steward and Preserve Mgr
- Marin Farm Bureau - Farm Bureau Representative

RCD Program Updates (See staff report for details):

- **Federal Funding Freeze:** The proposal is at the highest USDA office and waiting approvals
- **Fire and Forestry Liability:** Update from Marcus and/or Preston on subcontractor coverage
- **Conserving Our Watersheds Program (COW):** COW MILC, the most recent Nonpoint Source Pollution Water Board grant, has begun. The agreement for \$1,000,000 is executed and projects at dairies in the Stemple Creek watershed have been solicited and ranked by the Technical Advisory Group. Design work is beginning this summer. The grant also funds practices in Drakes Bay watershed of the National Seashore and those projects are expected to constitute manure pond decommissioning at those outgoing dairies. An application for COW GIRL phase IX was submitted to the Water Board in early January and is in review.
- **Justice Equity Diversity Inclusion (JEDI):** No report
- **Media/Messaging/Outreach:** Our next newsletter will be published this month.
- **Biomass Project:** The Marin Biomass Project is finalizing its integrated Study and expects to release it in the next month. Upon release of the Study, the team will emphasize work to implement Study's recommendations.
- **Permit Coordination Program (PCP):** The RCD's COW and Carbon Farming 2025 program projects will be put through the PCP in the coming months. Upcoming partner projects include Green Gulch Streamflow Enhancement Project (today's agenda) and vegetation management plans for ACR reserves. No update on Black Mountain culvert project.
- **Urban Streams Program:** Sarah Phillips is on leave with Gerhard/other RCD staff filling in through November. Activities include landowner consultations, Marin Project Coordination meetings (agency permits), and various partnerships with the County such as the Tomales Bay tire removal project with NOAA, a new Tomales Bay TAC/Working Group, dissolution of the Inverness Flood Control District Zone 10, and support in Stinson Beach Zone 5.
- **Carbon Farming Program:** No report
- **Walker Creek Watershed:** No report
- **Funding Opportunities:** Staff continues to meet with Emilie and other north coast RCDs to strategize around Prop 4 funding through SCC and WCB. A funding proposal was developed with UC Berkeley to study compost applications on rangelands.
- **Finance Committee:** The next FC meeting is scheduled for October 20, 2025. An agenda will be posted this week.
- **District:** Admin staff have been focused on financial audit. A Draft Strategic Plan was presented to the Steering Committee. It will be edited by Amy Stork and edited by a writing committee consisting of Jerry and Nancy before coming to the Board in November.
- **Landowner Assistance Provided:**
 - Urban Streams: 4 individuals requested assistance and were consulted
 - COW: Only 1 or 2 consultations besides program applicants this month
 - CE: None reported

5. PUBLIC COMMENT

Public comment for any matter not listed on this agenda, provided that no Board action is to be taken. All statements that require a response will be referred to staff to be placed on the next agenda.

6. MEETING ADJOURNED



MINUTES

DATE: **Wednesday, September 10th, 2025**

PLACE: **Marin Farm Bureau Conference Room, 520 Mesa Road, Point Reyes Station, CA 94956**

1. A regularly scheduled meeting was called to order by David Sherwood, Treasurer, at 9 a.m.

Roll call of Directors: Gerald Meral, David Sherwood, Mike Moretti and Melissa Williams. Terry Sawyer was absent.

Associate Directors: George Clyde, John Dolcini and Paul Ingle

Staff: Nancy Scolari, Marcus Meggett, Cora Richard, Preston Duncan, Elise Suronen, Gerhard Epke, Lee Farese, Sarah Skinker and Fiona O'Neill

Additional Attendees: Isaiah Thalmayer (STRAW), Jessie Ditmar (STRAW), Libby Kennedy (STRAW), Scott Dunbar (MALT), Martha Davis (Nicasio resident), Joe Deviney (Marin Co Ag Commissioner), Chad White (Biomass Project) and Chase Garcia (NRCS)

ACTION ITEMS:

2. DISTRICT:

A. Administer Oath of Office to new Director, Melissa Williams ~ *Nancy Scolari, Executive Director*

Director Melissa Williams took the oath of office, administered by Nancy Scolari, Executive Director

B. Board approval of regular Meeting Minutes. ~ *Cora Richard, Bookkeeper*

MOTION: Jerry; SECOND: Melissa; AYES: Jerry, Mike, David & Melissa; NOES: None; ABSENT: Terry; to approve August 2025 Board minutes with the correction that Moretti abstained from the vote on item 2A.

C. Board approval of the Financial Report. ~ *Marcus Meggett, Fiscal and Ops Manager, Nancy Scolari, Executive Director*

MOTION: Jerry; SECOND: Mike; AYES: Jerry, Mike, David & Melissa; NOES: None; ABSENT: Terry; to approve the Financial Report.

D. Discussion of auditor selection process, highlights of each firm and approval of new auditors. ~ *Marcus Meggett, Fiscal and Ops Manager*

MOTION: Mike; SECOND: Melissa; AYES: Jerry, Mike, David & Melissa; NOES: None; ABSENT: Terry; to select Nigro & Nigro as Marin RCD's new auditor.

E. Board approval of 2025 Marin RCD Employee Handbook ~ *Nancy Scolari, Executive Director & Dena Grunt, Destination HR*

MOTION: Melissa; SECOND: Jerry; AYES: Jerry, Mike, David & Melissa; NOES: None; ABSENT: Terry; to approve the new employee handbook and make it effective retroactively to July 1, 2025.

3. PROGRAMS:

- A. Board approval of Contract C09-2025 with Point Blue Conservation Science Teachers and Students Restoring a Watershed for implementation, maintenance and monitoring of 4 riparian restoration projects. ~*Sarah Skinker, Carbon Farming Program Manager*
MOTION: Jerry; SECOND: Melissa; AYES: Jerry, David & Melissa; NOES: None; ABSENT: Terry; ABSTAIN: Mike; to approve contract C09-2025.

4. INFORMATIONAL:

- **Roundtable discussion on a recent report on the Total Economic Contributions of Agriculture in Marin.** ~*Joe Deviney, Marin County Ag Commissioner*
A thorough discussion was had where some points brought up in relation to the shrinking number of economic contributions from Ag producers were: how difficult it is to be an Ag producer in CA & more support systems should exist for the Ag producers.
- **Rooted in the Land: The Legacy of the Marin Resource Conservation District.** ~*Elise Suronen, Impacts and Operations Director*
Elise gave an insightful presentation with the conclusion that Marin RCD's legacy results in quiet changes to the landscape. We quietly hold everything in place.

Partner Updates:

- **Farm Bureau-** Regina Pozzi, Farm Bureau Manager
No Farm Bureau staff present at this meeting.
- **Marin Agriculture-** Joe Deviney, Marin County Agricultural Commissioner
Joe led the roundtable discussion earlier in the meeting.
- **USDA Natural Resources Conservation Service (NRCS)**– Petaluma Field Office Staff
Chase shared that they are finalizing 3 new preapprovals and have obligated 91 contracts. They had a great Local Work Group meeting but wish more people had been in attendance.
- **Marin Agricultural Land Trust/SAP** – MALT Stewardship Staff
Scott said that the MALT stewardship assistance program is still open. They have received 10 applications, 5 are approved.
- **Point Blue & Students & Teachers Restoring a Watershed (STRAW)**– Point Blue Staff
STRAW is hiring 8 new apprentices, and they are starting in September and will be with straw until next May.
- **Audubon Canyon Ranch** – Jim Jensen
No Audubon Canyon staff present at this meeting.
- **Marin Water Expansion** – John Dolcini (Marin RCD Associate Director)
MMWD officially dropped the spillway modification plan!
Martha Davis has created a website you can visit for updates: <http://nिकासio.net/flood>.

RCD Program Updates (See staff report for details):

- **Federal Funding Freeze:** No update
- **Fire and Forestry:** Marcus reported that he contacted our insurance agency, and they said our policy will cover us in the event of a prescribed burn, but they encouraged us to get a certificate of insurance from the contractor which he has requested. He will follow up with the contractor.

- **Conserving Our Watersheds Program (COW):** COW MILC, the most recent Nonpoint Source Pollution Water Board grant, is in the design and permitting phase. The Technical Advisory Group has visited and approved sediment and manure management projects at six dairies in the Stemple Creek watershed. The grant will also help the Park Service decommission manure ponds at three outgoing dairies in Drakes Bay watershed of Point Reyes. An application for COW GIRL phase IX was submitted to the Water Board in January and is in review.
- **Justice Equity Diversity Inclusion (JEDI):** The carbon farm team plus Michelle Katuna and STRAW held a visit with the Federated Indians of Graton Rancheria at Toluma and Straus on May 9th to revisit riparian restoration sites where FIGR collaborated on designs. The team is planning another site visit for early October. David Escobar has shared his review of our implementation process. Sarah is scheduling the next JEDI meeting to take place after the upcoming FIGR site visit.
- **Media/Messaging/Outreach:** Jerry, Elise and Nancy working on next quarterly newsletter
- **Biomass Project:** The Marin Biomass Project is nearing completion of its integrated study and planning to release it this fall. The team is also planning and working toward implementation of the study's recommendations.
- **Permit Coordination Program (PCP):** CEQA and permit coordination is occurring on several RCD and partner projects this fall. A Notice of Exemption will be posted for the RCD's four riparian restoration projects discussed at today's meeting. COW projects in design might be entered into the PCP soon, as initiated by a future board item and 30 day comment period. The Green Gulch Streamflow Enhancement Project is also expected to come before the RCD board next month. A CEQA determination for this item was scheduled for this September meeting but delayed because of some continuing consultation with the water rights division of the State Water Board. Audubon Canyon Ranch (ACR) has finished a draft of their vegetation management plan for the Martin Griffin Preserve to tier off of the State's CalVTP EIR, and Marin RCD has begun initial review.
- **Urban Streams Program:** Sarah Phillips is on leave with Gerhard and other RCD staff filling in through the end of the year. Activities include landowner consultations, Marin Project Coordination meetings (agency permits), and various partnerships with the County such as the Tomales Bay tire removal project with NOAA, a new Tomales Bay stakeholder group, dissolution of the Inverness Flood Control District Zone 10, and supporting local watershed groups such as Mill Valley Streamkeepers with technical assistance.
- **Carbon Farming Program:** Students and Teachers Restoring a Watershed's (STRAW) riparian restoration monitoring and maintenance season is underway. The team has completed 7 carbon farm plans this year.
- **Walker Creek Watershed:** The project team will regroup in the near future to discuss the State Coastal Conservancy as a potential funding source to apply for implementation funds.
- **Funding Opportunities:** A revised Federal grant amendment was submitted to USDA and we are awaiting their response to continue our \$2M grant proposal. Staff continues to meet with Emilie and other north coast RCDs to strategize around Prop 4 funding through SCC and WCB.
- **Finance Committee:** The next FC meeting is scheduled for September 15, 2025. The last Finance Committee meeting was canceled. The finance committee has received 2 proposals for audit services and a recommendation for an auditor is being made.

- **District:** Admin staff have been focused on financial audit (federal spending), Employee Handbook and new timekeeping-HR software.
- **Landowner Assistance Provided:**
Urban Streams: 3 individuals and 3 organizations requested assistance and were consulted this month
COW: Only 1 or 2 consultations besides program applicants this month
CF: 4

5. ANNOUNCEMENTS & CORRESPONDANCE

- None

6. PUBLIC COMMENT

- None

7. MEETING ADJOURNED at 12:00 p.m.



SPECIAL MEETING MINUTES

DATE: TUESDAY, SEPTEMBER 16, 2025
PLACE: 14000 Pt. Reyes - Petaluma Rd, Point Reyes Station, CA 94956
TIME: 9 A.M. to 4:30 P.M.

ATTENDEES:

Directors: Terry Sawyer, David Sherwood, Mike Moretti, Jerry Meral, Melissa Williams
Staff: Nancy Scolari, Emilie Winfield, Preston Duncan, Sarah Skinker, Fiona O'Neill, Gerhard Epke, Cora Richard, Marcus Meggett
Consultant: Amy Stork

A quorum of directors was present at this special meeting.

A Special Meeting of the Marin RCD took place at **9:00 am** to begin development of a Strategic Plan. This was a working session that was facilitated by a strategic planning consultant to discuss district priorities.

No action items were proposed or made in this meeting.

Approval of a Strategic Plan, once drafted, will happen at a regularly scheduled public meeting.

No public comment was provided and meeting adjourned at 4:35pm.

Marin Resource Conservation District
Monthly Financial Summary
as of 10/6/2025

CASH		
Wells Fargo*		
	October	September
Checking - Operating Account	\$ 801,481	\$ 544,606
No-till Drill Account	\$ 14,596	\$ 14,596
Total Wells Fargo	\$ 816,077	\$ 559,202
County of Marin**		
Checking	\$ 628,909	\$ 713,737
Total Cash	\$ 1,444,986	\$ 1,272,939

OTHER WORKING CAPITAL DETAILS		
Grants Receivable - Open grant invoices - (see page 3)	\$ 214,034	\$ 273,037
Retention Receivable - Due from Grantors	\$ 9,456	\$ 9,456
Prepaid Grant Funds Received:		
Measure A - less-costs/Adm fees	\$ (1,409,298)	\$ (1,083,839)
Ombudsman Fund	\$ (19,793)	\$ (19,793)
Current Bills To Pay (see page 4):		
Administrative Expenses	60.13% \$ (22,901)	\$ (13,111)
Grant Expenses, current to be be paid	39.87% \$ (15,185)	\$ (98,386)
Net Working Capital	\$ 201,300	\$ 340,303

* - Wells Fargo bank balances are reported as of 10/6/2025. However, they are reconciled with the most recent activity through 8/31/2025. There will be adjustments as current statements become available and they could be significant.

** - The County account is reported as of 10/6/2025. However, it is reconciled with the most recent "preliminary" statement through 8/31/2025. There will be adjustments as current statements become available and they could be significant.

Marin Resource Conservation District Monthly Financial Summary

Grants Receivable - Money coming in. The RCD submits invoices to our grantors. Our work is paid on a reimbursable basis. The expected turnaround time for reimbursement varies but is usually 60-90 days.

Retention Receivable - Money coming in after grant is finalized. Some funders require a withholding of 10% of each invoice until the entire project is completed and approved. Once the funder is satisfied with the overall grant, the project is deemed complete and the remaining 10% is paid in full to the RCD.

Prepaid Grant funds - Received money upfront. This funding has been paid in advance of work being completed and is held in our accounts where, upon board approval, it is deducted from the balance.

Current Bills To Pay - Pay these bills now. These are bills where 1) the funder has provided payment, 2) the landowner/contractor cannot wait 60-90 days or 3) they support RCD operating expenses.

MARIN RESOURCE CONSERVATION DISTRICT
Open Invoices
10/6/2025

Grantor	1 - 30	31 - 60	61 - 90	91 and over	Total
Audubon Canyon Ranch	1,185				1,185
CA SCC Carbon	27,474	9,620			37,094
CDFA - HSP Block Grant (ZFP)	262				262
Gold Ridge RCD		3,687			3,687
Marin County Carbon Farming			63,173		63,173
Marin County Urban Streams		40,070			40,070
MMWD	3,719		3,168		6,887
North Coast Resource Conservation (UCOP)	593				593
SCC Wildfire	1,992				1,992
USDA Climate Smart Commodities (SMACCC)			26,103		26,103
USDA Cooperative Grant 2024	5,848		11,229		17,078
USDA GLCI (Grazing Lands)	5,167			11,929	17,096
TOTAL OPEN INVOICES	45,055	53,377	103,674	11,929	214,034
Retainers	0	0	0	9,456	9,456
TOTAL DUE	45,055	53,377	103,674	21,385	223,490
	20%	24%	46%	10%	100%

Note: Aging is based upon the date payments are expected.

Total due 91 days and over	91 and over	
USDA GLCI (Grazing Lands)*	6/30/2024	5,410
USDA GLCI (Grazing Lands)*	9/30/2024	4,549
USDA GLCI (Grazing Lands)*	9/30/2024	1,970
Sub-total		\$ 11,929
Retainers		9,456
TOTAL		\$ 21,385

* - Payment from the federal government is frozen.

Note: A number of grants are only invoiced quarterly. The actual amount of the total receivables is not reflected here as we do not use estimates. This reflects only invoices that have been submitted to grantors.

MARIN RESOURCE CONSERVATION DISTRICT

Bills to Pay

September 2025

Name	Date	Memo	Aging	Open Balance
<i>Administrative Expenses</i>				
Emily Stork	9/30/2025	Strategic Planning	6	\$ 6,902
Destination HR Consulting Inc	9/30/2025	Human Resources Consulting	6	\$ 5,946
Duncan, Preston	9/30/2025	Reimbursement	6	\$ 810
Epke, Gerhard	9/30/2025	Reimbursement	6	\$ 480
Farese, Lee	9/30/2025	Reimbursement	6	\$ 881
Horizon Cable TV	9/30/2025	Internet	6	\$ 136
Katuna, Michelle	9/30/2025	Reimbursement	6	\$ 36
Meggett, Marcus	9/30/2025	Reimbursement	6	\$ 60
O'Neill, Fiona	9/30/2025	Reimbursement	6	\$ 310
Pt Reyes 4th Investors LLC	11/1/2025	September Office Rent	N/A	\$ 2,373
Richard, Cora	9/30/2025	Reimbursement	6	\$ 1,832
Scolari, Nancy	9/30/2025	Reimbursement	6	\$ 886
Skinker, Sarah	9/30/2025	Reimbursement	6	\$ 1,029
Suronen, Elise	9/30/2025	Reimbursement	6	\$ 320
Smile Business Products	9/17/2025	Copier	19	\$ 150
US Bank Corporate	9/24/2025	QuickBooks Online fee	12	\$ 110
US Bank Corporate	9/24/2025	RingCentral	12	\$ 310
US Bank Corporate	9/24/2025	SpringAhead	12	\$ 330
Total Administrative Expenses				\$ 22,901
<i>Grant Expenses</i>				
Abundance Ag Engineering	9/30/2025	COW MILC	6	\$ 2,681
Prunuke Chatham	9/30/2025	Biological Survey & Report - COW	6	\$ 5,540
Winfield, Emilie	9/30/2025	Reimbursement	6	\$ 1,452
Yee, Orlena	9/30/2025	Marin Carbon Project Management	6	\$ 5,512
Total Grant Expenses				\$ 15,185
Total Bills to Pay				\$ 38,086

There are contractor invoices outstanding that we know of. They will be reported in the future.

ACTION:

Board approval of Marin RCD Designated Positions of President, Vice President, Treasurer ~ *Nancy Scolari*

Urgency: Somewhat, it is important to have a President and Vice President in position for authorization of contracts and communications with staff.

Past Board Actions: July 10, 2024, was the most recent board approval of designated positions.

Background

Previous to the vacancy of Sally Gale’s seat, Sally Gale served as President, Terry Sawyer as Vice President and David Sherwood as Treasurer. Terry has been the interim President in recent meetings.

Although the Board is not scheduled to designate positions until July or December of 2026, the position of President is vacant and therefore must be filled. The newly designated positions will remain in effect until December 2026.

Please see Policy below for roles and responsibilities of each position.

Budget

N/A

Impact

N/A

**Marin RCD Board of Directors
Designated Positions Policy**

Biennial Organizational Meeting:

The Board of Directors shall hold a biennial organizational meeting at its regular meeting in December [or other appropriate month]. At this meeting the Board will elect a President of the Board, Vice President, and Treasurer from among its members to serve for two years. The Executive Director or designated staff will serve as Clerk of the Board of Directors.

Duties of the President

Per Division 9, Section 9306 of the Public Resources Code, the directors shall organize and elect a president from their number. The President of the Board of Directors shall serve as the presiding officer at all Board meetings.

The presiding officer shall have the same rights as the other members of the Board in voting, introducing motions, resolutions and ordinances, and any discussion of questions that follow said actions. The presiding officer may move, second, debate, and vote from the President.

Duties Regarding Meetings: The President shall preside over and conduct all meetings of the Board of Directors, shall carry out the resolution and orders of the Board of Directors, and shall

Approved 04/10/23

exercise such other powers and perform such other duties as the Board of Directors shall prescribe including, but not limited to, the following:

- a) Call the meeting to order at the appointed time;
- b) Announce the business to come before the Board in its proper order;
- c) Enforce the Board's policies in relation to the order of business and the conduct of meetings;
- d) Recognize persons who desire to speak, and protect the speaker who has the floor from disturbance or interference;
- e) Explain what the effect of a motion would be if it is not clear to every member;
- f) Restrict discussion to the question when a motion is before the Board;
- g) Rule on parliamentary procedure;
- h) Put motions to a vote, and state clearly the results of the vote; and
- i) Preserve order and decorum.

Responsibilities: Responsibilities of the President include, but are not limited to, the following:

- a) Sign all instruments, act, and carry out stated requirements and the will of the Board;
- b) Appoint and disband all committees, subject to Board ratification;
- c) Call such meetings of the Board as he/she may deem necessary, giving notice as prescribed by law;
- d) Coordinate the preparation of meeting agendas with the Executive Director;
- e) Confer with the Executive Director
- f) Be responsible for the orderly conduct of all Board meetings
- g) Be the spokesperson for the Board; and
- h) Perform other duties as authorized by the Board.

When the President disqualifies themselves from participating in an agenda item or becomes partisan in the debate on any such item, the Vice-President shall perform the duties of the presiding officer.

Duties of the Vice President

In the President's absence or in the event of their inability to act, the Vice President shall perform the duties of the President. If the President and Vice President of the Board are both absent or disabled, the Treasurer shall serve as temporary presiding officer of the meeting.

Duties of the Treasurer

The Treasurer shall review all payment vouchers, invoices and associated invoicing materials that have been prepared for the Financial Report/Bills To Be Paid. The Bookkeeper then presents the Financial Report to the Board of Directors for approval. Once the Financial Report and Bills are approved by the Board, the Treasurer signs the payment vouchers which are forwarded to the County for processing.

The Treasurer shall also participate in any ad hoc or standing committee meetings involving financial matters of the district.

Approved 04/10/23

When the President and Vice-President disqualify themselves from participating in an agenda item, the Treasurer shall perform the duties of the presiding officer.

ACTION: Green Gulch Farm Streamflow Restoration Project CEQA Finding

Board approves the staff finding that the Green Gulch Farm Streamflow and Water Storage Improvement Project is within the scope of the State Water Resources Control Board's Programmatic Environmental Impact Report of the Statewide Restoration General Order (SRGO PEIR) and directs staff to issue a Notice of Determination

Urgency:

Yes. Staff and PCI, the consulting firm, have been trying to get this action in front of the board for over a year, and Green Gulch's grant to fund design is expiring.

Background:

Some background was presented to the Board at the RCD's July 2025 meeting in the form of an informational agenda item and slideshow.

Marin RCD has been working with Green Gulch Farm for many years, as the farm has been completing several phases of successful habitat restoration. Marin RCD is also wrapping up writing a carbon farm plan for the farm. Green Gulch Farm is currently looking toward the Marin RCD as a CEQA lead agency.

A valuable role of Marin RCD's Permit Coordination Program is offering the service of a lead agency to farmers, nonprofits and other local partners involved in land management, restoration and agriculture in their regulatory obligation to meet the California Environmental Quality Act (CEQA).

CEQA is a state law requiring public agencies to identify and disclose the potential environmental impacts of projects they intend to carry out, fund, or approve.

Depending on the complexity of the project, CEQA review can occur at different scales. Some projects such as the RCD's 2025 hedgerow plantings were deemed categorically exempt. Others, such as the PCP list for the 2025 COW projects, are classified into project descriptions and analyzed in a study that declares the environmental impacts to be negative based on certain prescriptive guardrails or mitigations.

Environmental Impact Reports, or EIRs, are required for projects that may have a significant environmental effect that cannot be avoided or mitigated against. However, the State Water Board has a [general order and Programmatic Environmental Impact Report \(SRGO PEIR\)](#) which aims to streamline this process for aquatic and riparian habitat restoration projects using the same format of prescribing guardrails or mitigations.

The proposal before you today is that Green Gulch Farm's Streamflow and Water Storage Improvement Project falls within the SRGO PEIR and by following those mitigations will not have detrimental effects on the environment.

The attachments to this item include

- A technical memo with a project description
- A table of the project minimization and protection measures
- A table of mitigation and monitoring responsibilities
- A table analyzing the project's potential impacts with suggested findings

Actions:

Option 1 (Staff recommendation): Make the finding that this project is within the scope of the State Water Resources Control Board's Programmatic Environmental Impact Report of the Statewide Restoration General Order and direct staff to file a CEQA Notice of Determination.

Option 2: Delay making the finding until a future meeting when other requested information can be presented.

Option 3: Deny making the finding.

Impact:

As detailed in the attached memo, this project has multiple benefits including restoration of natural stream flow volumes to Green Gulch and the Redwood Creek Estuary as well as providing sufficient water to meet Green Gulch Farm irrigation and emergency water supply needs.

Specific alliance with [RCD strategic plan](#) and grant goals are as follows:

GOAL 1: Active support of our district's agricultural economy, viability and cultural heritage

STRATEGY:

3. Improve and enhance natural resources on agricultural lands.
4. Support innovative technologies for the agricultural industry.

GOAL 3: Maintain and improve soil health and air quality

STRATEGY:

2. Support private landowners and agricultural producers with the implementation of practices that reduce greenhouse gas emissions, sequester carbon and **support resiliency to climate change.**

GOAL 4: Conserve and enhance flora and fauna

STRATEGY:

1. Conserve coastal prairies, grasslands, croplands, wetlands, upland and riparian forests to enhance biodiversity and economic sustainability.
2. Implement projects that conserve and enhance habitats for threatened, endangered and local species of importance.

Available Budget:

This phase of the project does not currently have any budget for Marin RCD staff, and remaining work is limited to a few hours filing the Notice of Determination. As Green Gulch Farm applies for implementation funds, the Marin RCD is expected to be included in the budget for any support or monitoring work it might participate in.



PCI ECOLOGICAL

MEMORANDUM

Date: August 20, 2025

To: Gerhard Epke & Nancy Scolari Marin Resource Conservation District
Sara Tashker Green Gulch Farm

From: Carrie Lukacic & Kyle Johnson

Subject: Within the Scope of the Statewide Restoration Program EIR and Factual Findings for the Green Gulch Farm Streamflow and Water Storage Improvement Project

The attached evaluation serves as the Marin RCD's independent evaluation of potential impacts and necessary mitigation measures associated with implementation of the Green Gulch Farm Streamflow and Water Storage Project.

Background

The Marin RCD serves as California Environmental Quality Act (CEQA) Lead Agency for the Green Gulch Farm Streamflow and Water Storage Project. The lead agency is responsible for determining the appropriate environmental document (like an EIR or Negative Declaration), conducting an Initial Study, and preparing the required documentation to evaluate the project's environmental impacts.

The Marin RCD determined the most appropriate CEQA compliance mechanism is to determine if the proposed project at Green Gulch Farm falls within the scope of the State Water Resources Control Board (State Water Board) Programmatic Environmental Impact Report (Program EIR) for the Statewide General Order (General Order) for large scale restoration projects to improve the efficiency of regulatory reviews for projects throughout the state that would restore aquatic or riparian resource functions and/or services.

Marin RCD's CEQA Obligations as Lead Agency

The California Environmental Quality Act (CEQA) provides for limited environmental review of subsequent projects under a Program EIR. (CEQA Guidelines Section 15168.) Later activities under a continuing program analyzed in the Program EIR must be examined to determine whether any additional environmental analysis must be conducted. (Guidelines Section 15168(c)(1).) If a lead agency finds that pursuant to Guidelines Section 15162, no subsequent EIR would be required, the lead agency can approve the activity as being within the scope of the project covered by the Program EIR, and no new environmental document would be required. (Guidelines Section 15168(c)(2).) Whether a later activity is within the scope of a Program EIR is a factual question that the lead agency determines based upon substantial evidence in the

record. (Guidelines Section 15168(c)(2).) The lead agency shall incorporate feasible mitigation measures from the Program EIR Mitigation and Monitoring Program (MMP) into later activities in the program. (Guidelines Section 15168(c)(3).) Where the later activities involve site specific operations, the lead agency should use a written checklist to determine whether the environmental effects of the site-specific operations are within the scope of the Program EIR. (Guidelines Section 15168(c)(4).)

The Marin RCD finds the Green Gulch Farm Streamflow and Water Storage Project is within the scope of the CEQA Programmatic EIR for the State Water Resources Control Board Statewide Restoration General Order (SRGO PEIR). All impacts are covered by the SRGO PEIR; no supplemental EIR is required pursuant to CEQA Section 15162. In accordance with CEQA Section 15162, Marin RCD finds:

- 1) No new effects or substantial increase in the severity of previously identified significant effects could occur and no new mitigation measures are required,
- 2) No substantial changes have occurred with respect to the circumstances under which the project is undertaken that cause new significant environmental effects or substantial increase in the severity of previously identified significant effects, and
- 3) There is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the SRGO PEIR was certified as complete, showing new or more substantial significant effects not discussed in the SRGO PEIR.

Attachment A, Green Gulch Farm Streamflow and Water Storage Improvement Project, CEQA Findings provides documentation of the evaluation.

Project Description

The CEQA Findings are based on the following project description. The Green Gulch Farm Streamflow and Water Storage Improvement Project is located within Green Gulch Farm (Farm), operated by the San Francisco Zen Center (Zen Center), situated along Green Gulch in the southwest corner of Marin County, California at 1601 Shoreline Hwy, Muir Beach, CA 94965 (37° 51' 57.4704" N and 122° 33' 58.8816" W). The site includes two assessor parcels (APNs 199-160-17 and 200-020-21) of which San Francisco Zen Center is the owner. The Farm contains 7.5 acres of irrigated fields and is surrounded by Golden Gate National Recreational Area (GGNRA) land.

The Green Gulch Streamflow and Water Storage Improvement Project will restore Green Gulch's natural hydrograph and increase streamflow to improve wildlife habitat and provide ecosystem resiliency in over 3,000 linear feet of lower Green Gulch and over 2,000 linear feet in the Redwood Creek estuary by eliminating spring and dry season direct diversion from Green Gulch. To accomplish the project goal, water storage will change from on-channel reservoirs to an off-channel pond to improve operational functionality, efficiency, and resiliency of Green Gulch Farm's water storage and irrigation infrastructure; to provide the Farm with sufficient water to meet irrigation and emergency supply needs into the future in the face of climate change while reducing use to support ecological function.

The project's primary emphasis is to create and enhance habitat for coho salmon and steelhead. The project will enhance instream flow and improve habitat conditions in Green Gulch and Redwood creeks, which are listed as high-priority watersheds in federal recovery plans for coho salmon and steelhead trout as well as sensitive species that are protected under the federal and California Endangered Species Acts. Both streams have experienced low summer baseflows causing loss of rearing habitat for these species, and both streams have had salmonid restoration projects implemented in the recent past. This project will have additional long-term benefits to coho and steelhead by increasing freshwater flow in the summer months when sufficient water is one of the most critical factors for juvenile survival. The project implements the following specific actions set forth in the recovery plan for California Central Coast coho salmon (NMFS 2012):

- Work with the Muir Beach Community Services District and Green Gulch [F]arm to eliminate water diversions that affect flow within Redwood Creek. (ReC-CCC-25.1.1.1)
- Provide incentives to water rights holders willing to convert some or all of their water rights to instream use via petition change of use and §1707. (ReC-CCC-25.1.1.2)
- Promote off-channel storage to reduce impacts of water diversion. (ReC-CCC-4.2.1.2)

The restoration and improvement of the stream channel, reservoirs, and additional wetland and riparian features will create breeding and foraging habitat for California red-legged frog, California giant salamander, and northwestern pond turtle. The project will meet many of the recovery objectives for the California red-legged frog as described in the 2002 USFWS Recovery Plan (USFWS 2002). It increases the quantity and availability with habitat creation of aquatic breeding areas with an adjoining mix of riparian and upland habitats along Green Gulch and within an unnamed tributary area. These project components are designed to extend the habitat created by the National Park Service and the Golden Gate Parks Conservancy in 2010 and 2011 in the lower reach of Redwood Creek at Muir Beach, immediately downstream of the Redwood Creek/Green Gulch confluence. Creation of improved aquatic and riparian habitat associated with the project will also work toward recovery goals for the northwestern pond turtle as stated in the Western Pond Turtle Range-wide Management Strategy (Western Pond Turtle Range-wide Coalition (2022)). The strategy provides guidance for the conservation and management of habitats to maintain resilient populations. The project will improve aquatic habitat while surrounding areas will provide the upland habitat required by the turtles.

The project will create net benefits to the climate resiliency of both the habitats within, and species dependent on, Green Gulch Creek. The project design prioritizes conservation water management with a system that captures large amounts of water during periods of precipitation and stores it efficiently for use during the dry season; eliminating the need for diverting water from Green Gulch during the critical-dry season period where stream flow is essential for aquatic species. As drought and low-flow conditions become an increasingly common feature of the region's climate, the project's dry-season flow enhancement benefits will be increasingly vital to the climate resiliency

of the stream and its biota. Likewise, the restored wetland features will act as buffers and refugia during high flow events. For Green Gulch Farm, the improved and consolidated off-channel storage will provide water for irrigation and fire protection even in dry years, ensuring further resilience to produce organic produce for themselves and the community. These project functions will become increasingly important as high flows and drought occur more frequently and at greater extremes in a changing climate. For example, maintaining a wetted channel through the dry season may allow fish to move between low flow refugia below the Project site and/or increase aquatic production supportive of the stream's food web.

Several project components are needed to meet the project's restoration goals.

- A new 11.6 AF off-channel pond/Reservoir 7 will be constructed to replace the storage capacity eliminated by the removal of reservoirs 3 and 4 (discussed below) and to provide sufficient water storage to eliminate summertime direct withdrawals from Green Gulch at Zendo Pond. A new water pump will be installed adjacent to Reservoir 7 to move stored water to the farm fields for irrigation and to provide water if necessary, during fires or other emergency situations. The reservoir will include a cover to reduce evaporative losses by over an acre-foot per year.
- The project will replace direct, dry-season flow diversion from Reservoir 3 (Zendo Pond) with a gravity-flow surface water diversion system during the wet season while maintaining minimum flows in Green Gulch during the withdrawal period. To accomplish this, Reservoir 3 (Zendo Pond) on Green Gulch will be filled to convert the on-channel pond to a channel and adjacent floodplain wetland that are vegetated with native wetland and riparian species to maximize habitat value. The existing point of diversion for the water right will be maintained to fill the new, off-channel reservoir (Reservoir 7) during winter high flows. The diversion period is November 1 through April 1, and diversion will only occur when flows in Green Gulch exceed 0.5 cfs (minimum bypass flows to Green Gulch). Flow that exceeds the capacity of the surface water diversion structure during the diversion period will continue down Green Gulch and into Redwood Creek. The maximum diversion rates will be 234 gallons per minute or about 0.52 cubic feet per second.
- The project will decommission the storage capacity of an existing on-channel reservoir (Reservoir 4) by reducing the height of the pond embankment. The existing point of diversion will be maintained, and a new surface water diversion structure will be installed to provide a means to support filling Reservoir 7 as necessary during drought conditions and only used during the diversion period. Projected flows from the surface water diversion structure through a 2-inch pipe to Reservoir 7 would be about 300 gallons per minute or 0.7 cubic feet per second maximum. Flows exceeding the capacity of the surface water diversion structure will continue down the new rocked channel and into Redwood Creek. The reservoir area will be allowed to naturally transition to a wetland except for an area of the pond designed to hold perennial water for California red-legged frog breeding habitat. The goal of the decommissioned reservoir site is to provide habitat for California red-legged frog and other wetland-dependent species.
- Installation of a new siphon at Reservoir 5 will replace the aging pump and maintain the ability to use water to help fill Reservoir 7 in emergency situations, such as drought. This siphon will be a screened high volume centrifugal 3-inch

pump intake. The pump will be screened with a ½-inch by 1-inch mesh to allow fine particles through while keeping other items out. It will draw water, as needed during periods of extreme drought.

- A new water-efficient irrigation system will be constructed to replace an existing, dilapidated system and will include connections to access water for fire emergencies. An existing in-stream pump (Pondato pump) and casing will be removed from the stream, and the irrigation supply will be replaced by Reservoir 7 and the newly constructed pump.
- The project includes completion of petitions to change the Farm's riparian and licensed appropriative water rights to enable implementation of the project. This will result in a reduction in the existing water rights from 17 AFA (acre feet per annum) to 15 AFA. It will eliminate use of riparian water rights from April through October annually, and it will result in the dedication of 2.0 AFA for instream flows. A change in the appropriative and the riparian water right is necessary to accomplish the goals of the project, and the Farm is dedicating a portion of their historic water rights to streamflow for the benefit of fish and wildlife. This Instream Flow Dedication (CA Water Code 1707) will protect the additional streamflow from any other use in perpetuity. The change in water right will reduce the licensed amount of water storage from 17 AFA to 15 AFA, and the Farm will cease using riparian rights from April through October for irrigation.
- Project monitoring and adaptive management will ensure project goals and objectives are achieved. Monitoring will focus on the stability and revegetation of the restored areas at Zendo Pond, Reservoir 4, and along with the new rocked outfall below Reservoir 4 to ensure the areas are functioning and the vegetation efforts are successful. Adaptive management activities may include additional plantings of native vegetation and removal of invasive species through the restored areas. Although not necessarily expected, adaptive management may also include grading or at Zendo Pond or Reservoir 4 if monitoring shows the newly created wetlands, the frog pond, or the stage zero channel and surrounding wetlands/floodplain is not functioning as well as expected. This work could occur for up to five years following the completion of construction.

Implementation of the restoration elements described above will occur over two June-October construction seasons once implementation funding is secured (2026-2027 or later). Adaptive management will occur in up to five subsequent years, primarily focusing on function of the water diversion structures, revegetation efforts, and function of the California red-legged frog pond. The approximate final footprint for the anticipated improved habitat conditions includes the following:

- Reservoir 3 wetland restoration: 0.4 acres
- Reservoir 4 seasonal wetland restoration: 0.1 acres
- Reservoir 4 upland native vegetation restoration: 0.7 acres
- Enhanced streamflow reach (Green Gulch): 3,200 linear feet
- Enhanced streamflow reach (Redwood Creek): 2,000 linear feet

Project implementation methods include grading to restore floodplain and wetland areas and to construct off-channel storage at the new Reservoir 7, installation of erosion control, and revegetating with native wetland, riparian, and upland plants. Institutional elements of project implementation include water rights changes to reduce licensed

water storage, eliminate direct diversion during April to October, and maintain minimum stream flows during the November through March collection period.

Project Best Management Practices and Avoidance and Minimization Measures

The project includes a wide array of avoidance and minimization measures identified by agencies that will permit or otherwise authorize the project. Each measure is part of the project and will be implemented during project construction. The impacts analysis presented in the CEQA Findings evaluates impacts with implementation of the project avoidance and minimization measures. These measures focus on avoiding or minimizing potential impacts rather than mitigating impacts after they occur. The measures are included in the project description, shown on the project plan set, and addressed in detail in the technical construction specifications as required to ensure implementation. Some measures are already incorporated into the project plans, and others will be implemented during construction as mandated by permitting agencies. The actual language for each measure is included in Attachment B.

- Construction Windows and Construction Hours
- Environmental Awareness Training
- Preconstruction Surveys of Special Status Species
- Work Area Speed Limits and Access Disturbance
- Avoidance of Vegetation Disturbance
- Minimizing Disturbance to Riparian Vegetation
- Stormwater Pollution Prevention and Rain Event Limitations
- Erosion Prevention
- Dewatering Requirements and Timing
- Species Observations and Handling Protocols
- Post-construction Revegetation Requirements
- Special Status Species Protection and Survey Protocols
- Cultural and Tribal Resource Monitoring
- Construction Biological Monitoring
- Construction Noise Reduction
- Protection of Environmentally Sensitive Areas
- Preventing Spread of Invasive Species
- Disease and Pathogen Contamination
- Native and Invasive Vegetation Removal Methods
- Hazardous Materials Management and Spill Prevention
- In-water Equipment Use Requirements
- Aquatic Species Relocation Requirements and Work Windows
- Material Cleanup and Disposal
- Wildfire Prevention
- Cultural Resources Awareness Training
- Human Remains Discovery Protocols

Required CEQA Mitigation Measures

The evaluation of potential impacts identified the need for several mitigation measures to reduce impacts. These requirements are in addition to the best management practices and avoidance and minimization measures already integrated into the proposed project. Some of the measures were already completed during project design,

and the remaining measures will be implemented during project construction. The Mitigation Monitoring and Reporting requirements are included as Attachment C.

- AES-1: Minimize Degradation of Visual Quality
- AIR-1: Minimize Conflicts with Applicable Air Quality Plans
- AIR-2: Minimize Construction Air Pollutant Emissions
- AIR-3: Minimize GHG Emissions
- CUL-1: Conduct Inventory and Significance Evaluation of Architectural Resources (completed)
- CUL-2: Conduct Inventory and Significance Evaluation of Archaeological Resources (completed)
- CUL-3: Implement Measures to Protect Archaeological Resources during Project Construction or Operation
- CUL-4: Implement Measures to Protect Human Remains during Project Construction or Operation
- GEO-3: Conduct Individual Restoration Project Geotechnical Investigation and Report (completed)
- GEO-4: Adhere to International Building Code (completed)
- GEO-5: Conduct Expansive Clay Investigation (completed)
- GEO-6: Implement Measures for Waterway Construction Activities
- GEO-7: Implement Measures for Levee Construction and Other Fill Embankment Designs (completed)
- GEO-8: Assess the Presence of Highly Organic Soils
- GEO-9: Conduct a General Project-Level Analysis (completed)
- HAZ-1: Prepare and Implement a Health and Safety Plan
- HAZ-2: Notify Appropriate Federal, State, and Local Agencies if Contaminated Soils are Identified, and Complete Recommended Remediation Activities
- HAZ-3: Notify Appropriate Federal, State, and Local Agencies If Accidental Discharges of Hazardous Materials
- HAZ-5: Coordinate with Applicable Federal, State, and Local Agencies and Districts
- HAZ-6: Prepare and Implement a Vector Management Plan
- FIRE-1: Develop and Implement a Fire Prevention Plan
- NOISE-1: Minimize Noise Conflicts
- TRA-1: Prepare Construction Traffic Management Plan
- TCR-1: Conduct Inventory and Significance Evaluation of Tribal Cultural Resources with Tribes that are Culturally and Geographically Affiliated with the Project Vicinity (completed)
- TCR-2: Implement Measures to Protect Tribal Cultural Resources during Project Construction or Operation.

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project, CEQA Findings**

Impact Statements from the PEIR as written for Green Gulch Farm at the San Francisco Zen Center	PEIR Mitigation Measures	PEIR Findings After Mitigation	Green Gulch Farm Impact Analysis	Applicable PEIR Mitigation Measures	Green Gulch Farm Construction Findings	Green Gulch Farm Operations and Maintenance Findings
3.2 Aesthetics						
3.2-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in substantial degradation of visual qualities.	AES-1: Minimize Degradation of Visual Quality	LTSM	The project's construction site is visible from Highway 1 (a scenic highway) and Golden Gate National Park hiking trails. Temporary construction activities are determined to be less than significant as the impact will be temporary in nature. Reservoir 7 will likely remain visible from both Hwy 1 and from trails surrounding the farm. The design includes a protective chain link fence with slats and climbing vegetation consistent with the objectives of mitigation measure AES-1. Although the reservoir will remain visible from the surrounding landscape, the reservoir is part of the agricultural practices that currently occur on the site and within the character of the agricultural use. Therefore, the visual quality will not be degraded, and the impact would be less than significant with implementation of mitigation. This is the same finding as presented in the PEIR. The project will not require substantial changes to operations and maintenance already occurring on the farm, therefore, would not cause significant impacts to the visual qualities of the site. The impact would be less than significant.	AES-1	LTSM	LTS
3.2-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in substantial adverse effects on scenic vistas and scenic resources.	None	LTS	The project's construction site is visible from Highway 1 (a scenic highway) and Golden Gate National Park hiking trails; however, there are no designated scenic vistas at the site. The project will not result in substantial adverse effects on scenic vistas or scenic resources, given localized effects, and the visual qualities of the area will not be substantially degraded as construction in the area will last only up to two construction seasons. Construction will not change the agricultural character of the site because the project elements all support continued agricultural use. The impact would be less than significant. As farm operations will not be substantially changed, operations and maintenance would not result in substantial adverse effects on scenic vistas or scenic resources. The site will continue in agricultural use after construction is complete. The operational impact will be less than significant.	None	LTS	LTS
3.2-3: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in new sources of substantial light or glare.	AES-2: Avoid Effects of Project Lighting	LTSM	The project's construction site will not include use of materials that would produce glare or nighttime lighting, as it will not require nighttime construction. There will be no impact. Operations and maintenance of the project will not include lighting for nighttime activities or activities that would produce glare; therefore, this potential impact is determined to be less than significant.	None	No Impact	No Impact
3.3 Agriculture and Forestry Resources						
3.3-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project convert Special Designation Farmland to nonagricultural use or conflict with a Williamson Act contract or zoning for agriculture use.	AG-1: Minimize and Avoid Loss of Special Designation Farmland AG-2: Minimize Impacts on Lands Protected by Agricultural Zoning or Williamson Act Contract	SU	The project area is not located within a Special Designation Farmland. The farmland at the site does not meet the criteria for classification as Prime Agricultural Land, though a portion of the project area is enrolled in the Williamson Act Program. Work within the portion of the project area enrolled under the Williamson Act Program includes construction of Reservoir 7, designed to eliminate dry season stream diversions and provide a more reliable water source for agriculture operations. Construction of a reservoir in an agricultural field will not adversely impact the Williamson Act contract. The project would not conflict with the Williamson Act as the land use will remain in agricultural production with the purpose of preserving agricultural lands. The property is currently zoned for agricultural use and will continue operating for agricultural use. The project does not conflict with local zoning for agricultural use. Project construction and post-construction operations and maintenance would result in no impact.	None	No Impact	No Impact
3.3-2: Could The Green Gulch Farm Streamflow and Water Storage Improvement Project conflict with existing zoning for forestland, timberland, or timberland zoned Timberland Production, or result in the loss of forestland from conversion of land to non-forest use.	None	LTS	The project area is not located within designated forestland, timberland, or timberland production; therefore, the project would not result in the loss of forestland from conversion of land to non-forest use. The property is currently zoned for agricultural use and will continue operating as such under the project. There would be no impact from project implementation, or operations and maintenance of the project site.	None	No Impact	No Impact
3.3-3: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project involve other changes in the existing environment that, because of their location or nature, indirectly result in the conversion of Special Designation Farmland to nonagricultural use or conversion of forestland to non-forest use.	None	NI	The project would not result in the indirect conversion of forestland to non-forest use or of Special Designation Farmland to nonagricultural use as all project elements support agricultural uses. There would be no impact from project implementation or operations and maintenance of the project site.	None	No Impact	No Impact
3.4 Air Quality and Greenhouse Gas Emissions						
3.4-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project conflict with an applicable air quality plan.	AIR-1: Minimize Conflicts with Applicable Air Quality Plans	SU	The project area is located within the Bay Area Air Quality Management District (BAAQM).The applicable air quality plan for the project is the BAAQMD's 2017 Clean Air Plan: Spare the Air, Cool the Climate (2017 CAP) adopted in April 2017. The BAAQMD considers a project consistent with the CAP if it: 1) can be concluded that a project supports the primary goals of the CAP (by showing that the project would not result in significant and unavoidable air quality impacts); 2) includes applicable control measures from the CAP; and 3) does not disrupt or hinder implementation of any CAP control measure. The project would not result in new long-term operations-related emissions and construction-related emissions would be temporary in nature. Emissions would be reduced with implementation of Mitigation Measure AIR-1 to ensure construction-related emissions are reduced to feasible levels; therefore, construction of the project would not conflict with or obstruct implementation of applicable air plans. Farm operations and maintenance would not be substantially changed from the existing operations except the means to fill the new reservoir will be through gravity pipeline. Operations and maintenance do not currently conflict with an air quality plan and no conflicts or potential conflicts will exist in the future. No impact would occur from operation or maintenance activities.	AIR-1	LTSM	No Impact

LTS - Less than Significant
 LTSG - Less than Significant w/Best Management Practices
 LTSM - Less than Significant w/Mitigation
 SU - Significant Unavoidable

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project, CEQA Findings**

Impact Statements from the PEIR as written for Green Gulch Farm at the San Francisco Zen Center	PEIR Mitigation Measures	PEIR Findings After Mitigation	Green Gulch Farm Impact Analysis	Applicable PEIR Mitigation Measures	Green Gulch Farm Construction Findings	Green Gulch Farm Operations and Maintenance Findings
3.4-2: Could emissions from the Green Gulch Farm Streamflow and Water Storage Improvement Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	AIR-1: Minimize Conflicts with Applicable Air Quality Plans	SU	Marin County is one of the nine counties that surround the San Francisco Bay, located within the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB is designated nonattainment for federal and State ozone standards, the State PM10 standard, and the federal and State PM2.5 standards. Construction activities would emit air pollutants during construction; however, implementation of mitigation measure AIR-1 would reduce the project's contribution to the cumulative net increase of criteria pollutants through minimizing idling times, use of equipment that complies with CARB requirements and emission standards, and utilizing lower-emitting alternative fuels, when possible. Farm operations and maintenance would not be substantially changed; therefore, the project would not result in new long-term emissions of criteria pollutants. No Impact would occur.	AIR-1	LTSM	No Impact
3.4-3: Could emissions from the Green Gulch Farm Streamflow and Water Storage Improvement Project result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people.	No mitigation measures identified	LTS	Construction activities under the project could temporarily generate odorous emissions from grading and excavation. Given the temporary and intermittent nature of potential impacts and the dissipation of odors, objectionable odors are unlikely to affect a substantial number of individuals as the number of permanent residents living at the SF Zen Center and daily visitors accessing the property via nearby hiking trails is low. Therefore, the impact would be less than significant. Operations and maintenance activities are not expected to result in the dissipation of any new objectionable odors or other emissions, as existing conditions would not be substantially changed under the project. No impact would occur.	None	LTS	No Impact
3.4-4: Could emissions from the Green Gulch Farm Streamflow and Water Storage Improvement Project expose sensitive receptors to substantial pollutant concentrations.	AIR-1: Minimize Conflicts with Applicable Air Quality Plans AIR-2: Minimize Construction Air Pollutant Emissions	SU	The SF Zen Center, a Buddhist practice center, is considered a sensitive receptor location as children, the elderly, and others who may have a heightened risk of negative health outcomes due to exposure to air pollution congregate here. Construction activities would create fugitive dust, CO, and TAC in areas within close proximity to working equipment, and enhanced air quality protection measures would be needed to reduce the potential to expose sensitive receptors to substantial pollutant concentrations. Implementation of mitigation measures AIR-1 and AIR-2 would reduce the potential impact to less than significant levels by requiring equipment use emission reduction methods. Operations of project elements will not result in new sources of fugitive dust, CO, and TAC; however, maintenance activities would require implementation of air quality protection measures and mitigation measures AIR-1 and AIR-2 to reduce potential impacts to a less than significant levels.	AIR-1 AIR-2	LTSM	LTSM
3.4-5: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in an increase in GHG emissions that may have a significant impact on the environment.	AIR-3: Minimize GHG Emissions	SU	Greenhouse Gas (GHG) emissions may increase due to project construction activities, transportation, and equipment. With the incorporation of mitigation measure AIR-3, the project will implement GHG mitigation measures as listed in the most recent air district guidance documents (Table 6-1, BAAQMD CEQA Air Quality Guidelines, April 20, 2022), reducing the project's potential impact to increase GHG emissions on the environment. The impact would be reduced to less than significant levels. Operations and maintenance activities are not expected to increase GHG emissions that may have a significant impact on the environment. No impact would occur.	AIR-3	LTSM	LTS
3.4-6: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs.	None	None	Implementation of the project is not expected to conflict with applicable local and/or regional plans related to GHG emissions. The project as currently designed will implement applicable best management practices and protection measures to reduce GHG emissions (Bay Area Air Quality Management District Environmental Quality Act Air Quality Guidelines 2022), as required. Therefore, a less-than-significant impact would occur. Operations and maintenance of Green Gulch Farm would not include any changes or increase in demand that could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. No impact would occur.	None	LTS	No Impact
3.5 Biological Resources Terrestrial						
3.5-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project adversely affect habitat for special-status plant species.	No mitigation measures were identified for special-status plants. Protection and minimization measures required for ecological permitting and incorporated into project requirements.	SU	No special-status plant species were identified during site visits in 2022 and 2024. The Marin checker lily (<i>Fritillaria lanceolata</i> var. <i>tristulis</i>) was determined to have a moderate potential to occur. Habitat for other potentially present species does not exist in the project area. Surveys for this species will continue as required by permitting agencies as described in the protection measures incorporated into the project description and implemented as part of the project. Restoration of temporarily impacted potential habitat is included in the project description and is addressed in the protection and minimization requirements. With the incorporation of the same requirements as presented in the PEIR, impacts under the project would be less than significant. Farm operations and maintenance would remain substantially similar to existing conditions and would be unlikely to impact special-status plant species or suitable habitat. The impact would be less than significant.	None	LTSG	LTS
3.5-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in adverse direct effects on special-status wildlife species.	No mitigation measures were identified for special-status wildlife. Protection and minimization measures required for ecological permitting and incorporated into project requirements.	SU	Coho salmon, steelhead, and California giant salamander are present in the project area, though salmonids are not found at the immediate project site. They have been seen in the lower reaches of Green Gulch near the confluence with Redwood Creek; nonetheless, the project includes protection measures in the event species are present. California red-legged frog and northwestern pond turtle have a high potential for presence at the site as both have been seen within the boundary of Green Gulch Farm, and the project includes protection measures as required by the USFWS in the Statewide Programmatic Biological Opinion for Restoration (USFWS 2025). Monarch butterfly and burrowing owl have a moderate potential to occur, though have occurred off the Farm property. Protection and minimization measures for these species are included in the project and will be implemented during construction. These measures include worker environmental awareness training, preconstruction surveys and relocation of species that could be harmed, working within allowable species work windows, construction period biological monitoring, and revegetation measures to repair temporarily disturbed habitat. All disturbance under the project would be temporary within potential habitat for special-status wildlife species. The project would provide habitat enhancement for these species, providing a long-term benefit. The short-term impact would be less than significant with the protection and minimization measures included in the project. The project would result in long-term habitat benefits from restoring wetlands, providing more water for riparian beneficial uses, and increasing habitat within the project area. Operations and maintenance activities would not cause adverse effects to existing habitat and the habitat enhancement elements will provide long-term benefits for present special-status wildlife species. A less-than-significant impact would occur.	None	LTSG	LTS

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 LTSM - Less than Significant w/Mitigation
 SU - Significant Unavoidable

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project, CEQA Findings**

Impact Statements from the PEIR as written for Green Gulch Farm at the San Francisco Zen Center	PEIR Mitigation Measures	PEIR Findings After Mitigation	Green Gulch Farm Impact Analysis	Applicable PEIR Mitigation Measures	Green Gulch Farm Construction Findings	Green Gulch Farm Operations and Maintenance Findings
<p>3.5-3: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in adverse effects on riparian habitat or sensitive natural communities.</p>	<p>No mitigation measures were identified for sensitive natural communities. Protection and minimization measures required for ecological permitting and incorporated into project requirements.</p>	<p>SU</p>	<p>The project would result in temporary disturbance to sensitive habitats, including wetlands and other waters of the United States and riparian habitats; however, the project includes habitat restoration and revegetation to provide an overall ecological benefit. The project will enhance and expand existing wetlands and improve streamflow conditions in Green Gulch. Temporarily disturbed riparian habitats will be restored with native vegetation and erosion control as described in the project description. These measures would reduce temporary impacts to less than significant under the project.</p> <p>Operations and maintenance would not cause significant adverse effects on riparian habitat or sensitive natural communities. The project would expand riparian and wetland habitat and provide additional summertime flow for aquatic beneficial uses, resulting in a positive benefit.</p>	<p>None</p>	<p>LTSG</p>	<p>Beneficial</p>
<p>3.5-4: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in adverse effects on state and federally protected wetlands through direct removal, hydrological interruption, or other means.</p>	<p>No mitigation measures were identified for wetlands. Protection and minimization measures required for ecological permitting and incorporated into project requirements.</p>	<p>LTSG</p>	<p>The project would result in effects and alteration of local hydrology in federally and state protected wetland and waters, and existing open water (currently on-channel reservoirs) would be converted to wetland habitat. The project would permanently fill 6,070 sf of wetland; however, the project would result in 16,602 sf of new wetland habitat. This would result in less than significant temporary disturbances undertaken to provide a net benefit to wetland and water resources. Therefore, the overall impact would be beneficial.</p> <p>Operations and maintenance of project elements would increase the extents of wetlands and provide more water for beneficial uses in Green Gulch; therefore, the impact would be beneficial.</p>	<p>None</p>	<p>LTSG</p>	<p>Beneficial</p>
<p>3.5-5: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project interfere with the movement of native resident and migratory wildlife species.</p>	<p>No mitigation measures were identified for the movement of migratory species. Protection and minimization measures required for ecological permitting are incorporated into the project description.</p>	<p>LTSG</p>	<p>The on-channel Zendo Pond will be filled and Green Gulch flows reestablished through the area, including a surrounding floodplain. Construction will require dewatering and species relocation. There are no fish species at the pond or in the creek within the project disturbance area; however, if present, aquatic species would be captured and relocated to locations downstream in Green Gulch. The aquatic species identified for potential capture and relocation include California giant salamander, California red-legged frog, nutes, western pond turtle. Once relocated, the species would be excluded from the work area until construction is complete. The temporary impact would be less than significant. The project would benefit the movement of native and resident migratory species along Green Gulch Creek by removing the on-channel pond, providing a vegetated stream corridor through the site, and by providing additional summer-time flows to the creek.</p> <p>Operations and maintenance of the project will improve conditions for native resident and migratory species with the addition of increased summer flows in Green Gulch and the removal of the on-channel reservoir. The results will be beneficial.</p>	<p>None</p>	<p>LTSG</p>	<p>Beneficial</p>
<p>3.5-6: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project conflict with local policies or ordinances protecting biological resources.</p>	<p>None</p>	<p>LTSG</p>	<p>The project is consistent with the biological goals and policies as discussed in Section 2.4 (Biological Resources) of the Marin Countywide Plan (CWP, 2014). It is also consistent with Marin County ordinances. The project is designed to provide an ecological benefit and prioritizes protection and enhancement of sensitive resources. The project includes obtaining authorizations from Marin County, as well as state and federal resource agencies with jurisdiction under the project.</p> <p>Operations and maintenance would be consistent with the existing use and would not conflict with applicable local policies or ordinances. No impact would occur.</p>	<p>None</p>	<p>No Impact</p>	<p>No Impact</p>
<p>3.5-7: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project conflict with the provisions of an adopted habitat conservation plan or natural community conservation plan.</p>	<p>TERR-1: Coordinate with CDFW, USFWS, and Permittees Regarding HCPs, NCCPs, and Other Conservation Plans</p>	<p>LTSM</p>	<p>The project is not located within an existing HCP or NCCD per the CDFW Conservation Plan Boundaries - NCCD and HCP (CDFW BIOS, 2025). No impact would occur.</p>	<p>None</p>	<p>No Impact</p>	<p>No Impact</p>
3.6 Biological Resources - Aquatic						
<p>3.6-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in substantial adverse effects to special-status fish species directly, or indirectly through habitat modifications.</p>	<p>No mitigation measures were identified in the PEIR. Protection and minimization measures required for ecological permitting are incorporated into the project description.</p>	<p>SU</p>	<p>The project will provide benefits to fish and other aquatic species that experience habitat limitations in the project area and downstream of the project area during low-flow periods by eliminating dry season stream diversions. Neither coho nor steelhead currently have access up Green Gulch to the work area at Zendo Pond. Nonetheless, the project includes dewatering protection measures for aquatic species to reduce potential impacts to less than significant levels through surveying for fish presence and carefully relocating fish out of harms way during construction. The project dedicates about 2 acre feet per annum of riparian water rights to streamflow in Green Gulch providing direct ecological benefit to aquatic species.</p> <p>Operations and maintenance would not cause adverse effects to special-status fish species and the additional flows in Green Gulch would be beneficial.</p>	<p>None</p>	<p>LTSG</p>	<p>Beneficial</p>
<p>3.6-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in substantial adverse direct effects on the movement of native resident or migratory fish.</p>	<p>No mitigation measures were identified in the PEIR. Protection and minimization measures required for ecological permitting and incorporated into the project description.</p>	<p>LTS</p>	<p>The project will provide benefits to fish and other aquatic species that experience habitat limitations in the project area and downstream of the project area during low-flow periods by eliminating dry season stream diversions. Neither coho nor steelhead currently have access up Green Gulch to the work area at Zendo Pond. Nonetheless, the project includes dewatering protection measures for aquatic species to reduce potential impacts to less than significant levels.</p> <p>Operations and maintenance would not cause adverse effects on the movement of native resident or migratory fish. No impact would occur.</p>	<p>None</p>	<p>LTS</p>	<p>No Impact</p>

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3.7-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project cause a substantial adverse change in the significance of a historical resource pursuant to State CEQA Guidelines Section 15064.5.	<p>CUL-1: Conduct Inventory and Significance Evaluation of Architectural Resources</p> <p>CUL-2: Conduct Inventory and Significance Evaluation of Archaeological Resources</p> <p>CUL-3: Implement Measures to Protect Archaeological Resources during Project Construction or Operation</p> <p>CUL-4: Implement Measures to Protect Human Remains during Project Construction or Operation</p>	SU	<p>A Historical Property Survey was prepared for the project February 27, 2025 (EDS 2025). Historic materials and features were discovered within the project area associated with historic operations of the Wheelright Ranch. The historic materials and features were determined to be ineligible for the National Register of Historic Places (NHRP) and California Register of Historic Resources (CRHR). Implementation of mitigation measures CUL-1, CUL-2, CUL-3, and CUL-4 reduce the potential impacts to less than significant levels as they provide a process to follow in the event a previously undiscovered historic resource is unearthed during construction. The mitigation measures provide the protections needed to avoid a substantial adverse change in the significance of historic resources pursuant to CEQA Guidelines Section 15064.5.</p> <p>Operations and maintenance activities would not result in additional ground disturbance; therefore, there would be no potential to uncover previously undiscovered historic resources. There would be no impact.</p>	<p>CUL-1</p> <p>CUL-2</p> <p>CUL-3</p> <p>CUL-4</p>	LTSM	No Impact
3.7-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5.	<p>CUL-2: Conduct Inventory and Significance Evaluation of Archaeological Resources</p> <p>CUL-3: Implement Measures to Protect Archaeological Resources during Project Construction or Operation</p>	SU	<p>No archaeological resources were identified within the project area during the Historic Property Survey. Implementation of mitigation measures CUL-2 and CUL-3 would provide the protections needed to avoid a substantial adverse change in the significance of any archaeological resources pursuant to State CEQA Guidelines Section 15064.5 as the measures provide a process to follow in the event a previously undiscovered historic resource is unearthed during construction. The mitigation measures provide the protections needed to avoid a substantial adverse change in the significance of historic resources pursuant to CEQA Guidelines Section 15064.5. Therefore, potential impacts would be reduced to less than significant levels.</p> <p>Operations and maintenance activities would not result in additional ground disturbance; therefore, there would be no potential to uncover previously undiscovered archaeological resources. There would be no impact.</p>	<p>CUL-2</p> <p>CUL-3</p>	LTSM	No Impact
3.7-3: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project disturb any human remains, including those interred outside of dedicated cemeteries.	Mitigation Measure CUL-4: Implement Measures to Protect Human Remains during Project Construction or Operation	SU	<p>Implementation of mitigation measure CUL-4, which identifies protocols to follow should human remains be uncovered during implementation of the project, would reduce potential impacts to less than significant levels.</p> <p>Operations and maintenance would not include ground disturbing activities likely to result in the discovery or disturbance of human remains. No impact would occur.</p>	CUL-4	LTSM	No Impact
3.8 Energy Resources						
3.8-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in substantial inefficient, wasteful, or unnecessary long-term consumption of energy resources or changes to hydropower generation.	None	LTS	<p>The project reduces energy consumption and improves efficiency of an existing irrigation system through the installation of a system primarily utilizing gravity flow and the replacement of dilapidated equipment. Construction as well as operation and maintenance of the project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Impacts would be less than significant.</p>	None	LTS	LTS
3.8-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	None	LTS	<p>The project would adhere to requirements of Title 24 of the California Building Code intended to enhance energy efficiency. The project is consistent with the Marin Countywide Plan goals related to energy efficiency and adopted policies.</p> <p>Operations and maintenance would reflect improved energy efficiency as a result of the updated irrigation system. Impacts would be less than significant.</p>	None	LTS	LTS
3.9 Geology and Soils						
3.9-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project could direct or indirect adverse effects on people or structures related to risk of loss, injury, or death due to a fault rupture.	<p>GEO-1: Include Geotechnical Design Recommendations</p> <p>GEO-2: Comply with Alquist Priolo Act</p>	LTSM	<p>No portion of the project area is located within an Alquist-Priolo Earthquake Fault Zone and there are no mapped active faults in the project area (DOC 2025). There would be no impact associated with adverse effects on people or structures due to fault rupture.</p> <p>Operation and maintenance of the project would not impact people or structures.</p>	None	No Impact	No Impact
3.9-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project directly or indirectly result in adverse effects on people or structures related to risk of loss, injury, or death due to strong seismic ground shaking.	<p>GEO-3: Conduct Individual Restoration Project Geotechnical Investigation and Report</p> <p>GEO-4: Adhere to International Building Code</p>	LTSM	<p>The project is located in an area that could experience earthquakes and ground shaking; however, the project would not directly or indirectly result in substantial adverse effects from strong ground shaking. The project is informed by a project specific Geotechnical Report, and the project design reflects the requirements in the report. The project will adhere to the International Building Code and secure applicable permits from State, federal, and local agencies with jurisdiction under the project. Implementation of mitigation measures GEO-3 and GEO-4 reduces potential impact levels to less than significant levels.</p> <p>Operation and maintenance of the structures built per the design that were based on input from the geotechnical engineers and constructed to adhere to the appropriate building codes. The impact would be less than significant.</p>	<p>GEO-3</p> <p>GEO-4</p>	LTSM	LTS
3.9-3: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project directly or indirectly cause adverse effects on people or structures from unstable soil conditions.	<p>GEO-5: Conduct Expansive Clay Investigation</p> <p>GEO-6: Implement Measures for Waterway Construction Activities</p> <p>GEO-7: Implement Measures for Levee Construction and Other Fill Embankment Designs</p> <p>GEO-8: Assess the Presence of Highly Organic Soils</p>	LTSM	<p>The project design incorporates recommendations of the Geotechnical Report to address subsurface conditions and soil stability concerns. The Geotechnical Study evaluated the potential presence of expansion soils and highly organic soils, and provides design requirements for construction of a new reservoir that accounts for the specific site conditions. A geotechnical engineer will be present during the construction of key project elements such as the installation of the reservoir embankments. Implementation of mitigation measures GEO-5, GEO-6, GEO-7, and GEO-8 reduce potential impacts to less than significant levels by guiding design and construction to ensure geotechnical guidelines are achieved.</p> <p>Operation and maintenance would not include activities resulting in unstable soil conditions that may cause adverse effects to people or structures. The impact would be less than significant.</p>	<p>GEO-5</p> <p>GEO-6</p> <p>GEO-7</p> <p>GEO-8</p>	LTSM	LTS

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3.9-4: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in substantial soil erosion or loss of topsoil.	None	LTSG	Construction-related activities could result in substantial soil erosion or the loss of topsoil by disturbing large volumes of soil through excavation and grading making soil susceptible to wind and water erosion. Numerous avoidance and minimization measures incorporated into the project design would reduce the potential for soil erosion or loss of topsoil, including an extensive erosion control and revegetation plan. Implementation of the project as designed, including the revegetation requirements. Operation and maintenance of Green Gulch Farm after construction is complete would result in a less than significant impact with continued implementation of the general farm operations that help protect top soil and keep it on site.	None	LTSG	LTS
3.9-5: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project directly or indirectly result in the loss of a unique paleontological resource or geological resource.	GEO-9: Conduct a General Project-Level Analysis GEO 10: Conduct Worker Training	SU	A general project-level analysis is complete. The project site occurs within Alluvium (Holocene or Pleistocene) (Qal) (Marin County GIS 2025). The geological unit Qal represents Quaternary alluvial deposits that can contain paleontological resources. However, it is generally considered to have a low to moderate potential for paleontological finds primarily based on Quaternary alluvium being too young to preserve significant fossils. This means that while fossils might be present, they are not typically as abundant or well-preserved as in older, more consolidated sedimentary rocks. The potential impact on paleontological resources would be less than significant. There are no known geological resources at the site; therefore, no mitigation is required. Operation and maintenance would not include ground-disturbing activities that could cause adverse effects to paleontological resources or geological resources. No impact would occur.	GEO-9	LTSM	No Impact
3.10 Hazards and Hazardous Materials						
3.10-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project involve the routine transport, use, or disposal of hazardous materials that, if accidentally released, could create a hazard to the public or the environment, or that could be located within one-quarter mile of a school.	None	LTSG	Construction of the project would include the use of vehicles and equipment that require small quantities of hazardous materials, including fuel and lubricants. The project site is not located within 1/4 mile of a school; however, transport of materials along public roadways may pass a school. Existing laws and regulations govern the storage, transport, use, and disposal of hazardous materials. The transport, use, and disposal of hazardous materials for the construction of the project would be adequately controlled through these existing regulatory requirements and the potential for impacts would be less than significant. Operation and maintenance would not require transportation, use, or disposal of hazardous materials. No impact would occur.	None	LTS	No Impact
3.10-2: Could ground-disturbing activities for construction of the Green Gulch Farm Streamflow and Water Storage Improvement Project encounter previously unidentified contaminated soil and/or groundwater, potentially exposing construction workers, the public, and the environment to risks associated with hazardous materials.	HAZ-1: Prepare and Implement a Health and Safety Plan and Provide Qualified Over Shift of Fill Removal Related to Earth Moving Activities HAZ-2: Notify Appropriate Federal, State, and Local Agencies if Contaminated Soils are Identified, and Complete Recommended Remediation Activities HAZ-3: Notify Appropriate Federal, State, and Local Agencies If Accidental Discharges of Hazardous Materials	LTSM	There are no known contaminated soil and/or groundwater on the site that could potentially expose construction workers or the public to hazardous materials. Nonetheless, construction activities could uncover a previously unknown contaminated site, although the risk is low. If a contaminated site is discovered, the impact could be significant and would require mitigation that guides the removal of contaminated soil as well as notification to the appropriate regulatory agencies within jurisdiction under the project. With the implementation of mitigation measures HAZ-1, HAZ-2, and HAZ-3 potential impacts would be reduced to a less than significant level by providing and following the appropriate guidelines for development of a project-specific health and safety plan and following the elements of the plan. Operation and maintenance would not include the use of hazardous materials and would not expose the public to environmental risk. There would be no impact.	HAZ-1 HAZ-2 HAZ-3	LTSM	No Impact
3.10-3: The Green Gulch Farm Streamflow and Water Storage Improvement Project could be implemented within 2 miles of an airport, resulting in a safety hazard.	HAZ-4: Establish Airport Operation Area Buffer Zones	SU	The project site is not located within 2 miles of an airport. There would be no impact during construction or operation of the project and mitigation measure HAZ-4 is not necessary.	None	No Impact	No Impact
3.10-4: Could implementation of the Green Gulch Farm Streamflow and Water Storage Improvement Project interfere with emergency response access or with an adopted emergency response or evacuation plan (including those located in or near state responsibility areas or land classified as very high FHSZ) or result in inadequate emergency access.	HAZ-5: Coordinate with Applicable Federal, State, and Local Agencies and Districts	LTSM	Green Gulch Farm is located within a State Responsibility Area and classified within the Very High Fire Hazard Severity Zone (FHSZ) (CalFire, 2025) and Highway 1 serves as the emergency access to and from Green Gulch Farm. The project does not physically interfere with adopted emergency response or evacuation plans for Highway 1, as construction is not located on the highway. The project was designed to have a nearly balanced cut/fill in order to minimize soil haul. Material deliveries will travel on Highway 1. Potential impacts on emergency response are not anticipated as the number of truck trips, as well as vehicle and equipment transport would be intermittent. Coordination may be needed with applicable federal, State, and local agencies to ensure they're aware of the project's trucking needs and can provide guidance, as necessary. Coordination with local agencies as required in mitigation measure HAZ-5 and implementation of the requirements agreed upon during coordination would reduce the project's potential impacts to less than significant levels. Operation and maintenance activities would not interfere with an emergency response access or evacuation plan as farm traffic only occurs within the Farm boundary. No impact would occur.	HAZ-5	LTSM	No Impact
3.10-5: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project expose people or structures, either directly or indirectly, to a significant loss, injury, or death due to wildland fires.	FIRE-1: Develop and Implement a Fire Prevention Plan	LTSM	Green Gulch Farm is located within a State Responsibility Area and classified within the Very High Fire Hazard Severity Zone (FHSZ) (CalFire, 2025). The project is located in an area where construction activities could pose a threat to people or structures due to the higher likelihood of a wildland fire occurring should there be dry vegetation present nearby. Construction will include the development and implementation of a Fire Prevention Plan as described in mitigation measure FIRE-1. Implementation of the project-specific Fire Prevention Plan would provide the means necessary to reduce project impacts to less than significant levels. Farm operations and maintenance would remain substantially similar to existing conditions and would not expose people or structures to wildfire. The project includes a water connections to allow for an emergency water supply for fire fighting. The impact would remain be less than significant.	FIRE-1	LTSM	LTS

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3.10-6: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project create vector habitat that would pose a significant public health hazard.	HAZ-6: Prepare and Implement a Vector Management Plan	LTSM	The project entails constructing a new reservoir to consolidate water storage for irrigation; The new reservoir could introduce vector habitat to the project area once constructed. Mitigation measure HAZ-6 requires development and implementation of a Vector Management Plan to address strategies and specific techniques to help minimize mosquito production. There would be no impact during construction; however, the new reservoir may require implementation of HAZ-6 and development and implementation of a Vector Control Plan before operation of the project to reduce potential impacts to less than significant levels.	HAZ-6	No Impact	LTSM
3.11 Hydrology and Water Quality						
3.11-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in the release of pollutants into surface water and/or groundwater that could violate water quality standards or waste discharge requirements, substantially degrade water quality, or obstruct implementation of a water quality control plan.	None	LTSG	The project will include earth-moving work through the use of heavy equipment and other construction activities raising potential impacts due to release of pollutants into surface water and/or groundwater. Implementation of erosion control measures included as part of the project would minimize potential water quality impacts from construction activities in and around watercourses and in areas where runoff could reach Green Gulch or any tributaries. The measures, including those required in the Stormwater Pollution Protection Plan (SWPPP) would reduce the potential for water quality impacts. Therefore, implementation of the project would result in a less-than-significant impact associated with a potential violation of water quality standards or waste discharge requirements, and a less-than-significant impact associated with potential degradation of surface water and/or ground water quality or obstruct implementation of a water quality control plan. Implementation of protection as well as revegetation measures included in the project would reduce the potential impact on water quality to less than significant levels. Operations and maintenance would be consistent with the existing use and would not substantially increase the potential risk of release of water pollutants. No impact would occur.	None	LTSG	No Impact
3.11-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that a project may impede sustainable groundwater management of the basin or obstruct implementation of a sustainable groundwater management plan.	None	LTS	Temporary dewatering of Green Gulch at Zendo Pond would provide a dry work area for removal of the in-channel storage pond. Temporary dewatering would not impact groundwater levels as surface water, not groundwater, would be diverted under the project. The project would increase the potential for groundwater recharge by reestablishing creek flow and connection with the newly constructed adjacent floodplain at Zendo Pond. Construction activities would not interfere with groundwater recharge; therefore, the impact would be less than significant. Operations and maintenance would be consistent with the existing use and increase the potential for groundwater recharge. It would not substantially decrease groundwater supplies. The impact may be beneficial.	None	LTS	Beneficial
3.11-3: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project could substantially alter the existing drainage pattern of a site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner that could substantially increase the rate of runoff; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems; or impede or redirect flood flows.	None	LTS	Green Gulch Farm has existing stormwater drainage system elements. Most of the drainage network is associated with the buildings and roadways at the SF Zen Center. Construction activities would result in ground disturbance; however, the ground disturbance would not alter the drainage patterns or contribute runoff water that would exceed the capacity of existing storm drains. Decommissioning Zendo Pond would reestablish Green Gulch streamflow through the area. This work would not impede or redirect flows as the creek will be flowing through its historic channel alignment. The potential impact of implementing the projec would be less than significant. Operations and maintenance of the project would not alter the drainage patterns and would not trigger the need for new stormwater capacity. The impact would be less than significant.	None	LTS	LTS
3.12 Land Use and Planning						
3.12-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project conflict with a land use plan, policy, or regulation adopted to avoid or mitigate an environmental effect.	none	SU	The project site is located in rural unincorporated Marin County. The site has a general plan designation of Agriculture (AG1), Agriculture Coastal Zone (C-AG1), and Open Space (OS) per the Marin Countywide Plan (CWP), and a zoning designation of Agriculture and Conservation (A). The project is consistent with the sites designated land use and zoning regulations, and applicable local authorizations would be secured prior to construction. No impact is anticipated construction, operation, or maintenance of the project.	None	No Impact	No Impact
3.12-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project physically divide an established community.	none	SU	The project is located within SF Zen Center's Green Gulch Farm in a rural unincorporated area of Marin County. The project would not divide an established community. No impact would occur during construction, operation, or maintenance of the project.	None	No Impact	No Impact
3.13 Mineral Resources						
3.13-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in the loss of availability of a known mineral resource	MIN-1: Minimize Potential Impacts from Loss of a Known Mineral Resource	LTSM	The project is not located near known mineral resources designated by the California Geological Survey or permitted mines. The project would not impact the availability of known mineral resources; therefore, there would be no impact during construction, operation, or maintenance activities.	None	No Impact	No Impact
3.13-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project could result in the loss of availability of a locally important mineral resource recovery site.	MIN-2: Minimize Potential Impacts from the Loss of a Locally Important Mineral Resource Recovery Site.	LTSM	The project is not located within or near a mineral resource recovery site. There would be no impact during construction, operation, or maintenance of the project.	None	No Impact	No Impact

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3.14 Noise						
<p>3.14-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in a temporary or permanent increase in ambient noise levels in excess of standards established in applicable plans and ordinances.</p>	<p>NOISE-1: Minimize Noise Conflicts NOISE-2: Minimize Operations and Maintenance Noise Conflicts</p>	SU	<p>Construction of the project would require use of heavy equipment, including an excavators, loaders, bulldozers, dump trucks, power saws and other hand tools that would generate temporary construction noise. Construction would occur over two construction seasons at locations across the project area. The project area is located in agricultural fields with a residence and the Zen Center in close proximity. Other residences are present further east of the project area, and all residences are associated with members of the Zen Center. During project construction activities involving the use of heavy equipment, noise levels could reach a maximum of 85 dBA at a distance of 50 feet include the use of heavy equipment resulting in a temporary increase in ambient noise levels during construction hours. The Marin County Noise Ordinance establishes that authorized construction activities occurring between 7:00 a.m. and 6:00 p.m. on weekdays and between 9 a.m. and 5 p.m. on Saturdays are exempt from the noise standards per the ordinance. Construction activities would occur Monday through Friday between 7:00 a.m. to 6:00 p.m. Hikers and visitors to the Golden Gate National Recreation Area would likely hear construction noise; however, hikers would pass by the construction site so noise would be temporary in nature. Therefore, project construction would not result in noise levels in excess of standards established in the local noise ordinance. Nonetheless, the SF Zen Center is considered a sensitive noise receptor and construction noise may be significant. Reducing noise during construction of project components near the Center would be necessary to prevent potential noise conflicts. The mitigation measure requires working with well maintained equipment and minimizing idling times near the nearby residence and Zen Center. The need for noise barriers would be evaluated and noise barriers would be installed if necessary. Implementation of the the noise measure would reduce the impact to less than significant during construction.</p> <p>Operation of the project would not change the ambient noise levels, and there would be no impact.</p>	NOISE-1	LTSM	No Impact
<p>3.14-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project expose sensitive receptors to excessive groundborne vibration.</p>	NOISE-1: Minimize Noise Conflicts	SU	<p>Project construction activities will include the use of heavy equipment causing a temporary increase in groundborne vibration. The vibration levels at the nearest residence and at the Zen Center would depend on soil conditions, construction methods, and equipment use. Construction may expose the residence or Center to groundborne vibration and the impact could be significant without mitigation. Reducing noise during construction of project components near the Center would be necessary to prevent noise conflicts. The mitigation measure requires working with well maintained equipment and minimizing idling times near the nearby residence and Zen Center. Implementation of the noise measure would reduce the impact to less than significant levels during construction.</p> <p>Operations at the farm often include use of small farm equipment and the background level noise and vibrations reflect daily equipment use. Vibration levels at the nearest residence from use of equipment may be noticeable but not at levels substantially higher than what occurs daily. The potential impact during operation and maintenance, would be less than significant.</p>	NOISE-1	LTSM	LTS
<p>3.14-3: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project expose sensitive receptors to excessive groundborne noise levels.</p>	NOISE-1: Minimize Noise Conflicts	SU	<p>Construction of the project would require use of heavy equipment, including an excavators, loaders, bulldozers, dump trucks, power saws and other hand tools that would generate temporary construction noise. Construction would occur over two construction seasons at locations across the project area and would occur in agricultural fields near a residence and the Zen Center in close proximity. Other residences are present further east of the project area, and all residences are associated with members of the Zen Center. During project construction activities involving the use of heavy equipment, noise levels could reach a maximum of 85 dBA at a distance of 50 feet include the use of heavy equipment resulting in a temporary increase in ground noise levels during construction hours. Construction activities would occur Monday through Friday between 7:00 a.m. to 6:00 p.m. Hikers and visitors to the Golden Gate National Recreation Area would likely hear construction noise; however, hikers would pass by the construction site so noise would be temporary in nature. The SF Zen Center is considered a sensitive noise receptor and construction noise may be significant. Reducing noise during construction of project components near the Center would be necessary to prevent noise conflicts. The mitigation measure requires working with well maintained equipment and minimizing idling times near the nearby residence and Zen Center. The need for noise barriers would be evaluated and noise barriers would be installed as necessary. Implementation of the the noise measure would reduce the impact to less than significant during construction.</p> <p>Operations at the farm often include use of small farm equipment and the background level noise reflect daily equipment use. Noise levels at the nearest residence from use of equipment may be noticeable but not at levels substantially higher than what occurs daily. The potential impact during operation and maintenance, would be less than significant.</p>	NOISE-1	LTSM	LTS
<p>3.14-4: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project be located within the vicinity of a private airstrip, an airport land use plan, or where such a plan has not been adopted, within 2 miles of a public airport or public use airport, and expose people residing or working in the project area to excessive noise levels.</p>	NOISE-3: Prepare Preconstruction Safety Plans	LTSM	The project area is not located near an existing airport or airstrip. No impacts would occur during construction or operation of the project.	None	No Impact	No Impact
3.15 Population and Housing						
<p>3.15-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project require relocation by construction and operation crews, resulting in population growth and demand for housing.</p>	None	LTS	Construction, as well as operations and maintenance of the project, would not require relocation of construction and/or operation crews. Operation and maintenance of the site by farm staff following project completion would remain the same. Many farm employees currently live on site. There would be no impact on population growth or demand for new housing, and there would be no impact.	None	No Impact	No Impact
<p>3.15-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere.</p>	None	LTS	The project would be located on an agricultural parcel and would not displace people or housing. None of the residences located near the project site would be lost due to project implementation, nor the operation and maintenance of the site. There would be no impact.	None	No Impact	No Impact

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**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project, CEQA Findings**

Impact Statements from the PEIR as written for Green Gulch Farm at the San Francisco Zen Center	PEIR Mitigation Measures	PEIR Findings After Mitigation	Green Gulch Farm Impact Analysis	Applicable PEIR Mitigation Measures	Green Gulch Farm Construction Findings	Green Gulch Farm Operations and Maintenance Findings
3.16 Recreation						
3.16-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project directly impair, degrade, or eliminate recreational resources, facilities, and opportunities.	REC-1: Minimize Impairment, Degradation, or Elimination of Recreational Resources	LTSM	The project would generate noise that could degrade or impair the use of a nearby recreational area. The existing farm road through the project area is used as a Golden Gate National Recreation Area trail and the farm is surrounded by the Golden Gate National Recreation Area. In addition under an easement with the National Park Service, Green Gulch Farm is required to maintain public access at all time, including during construction of the project. The trail would be kept open for NPS visitors. Construction-related increase in noise levels would be temporary and would not prompt construction of a new recreation facility to replace the loss of use of the trails through or surrounding the Farm. Construction may require slight rerouting of the trail during construction to allow trail access; however, the trail would remain open for use. Construction activities may and the impact would be less than significant. No mitigation would be required. The trail would remain open during operation and maintenance of the project, and there would be no impact.	None	LTS	No Impact
3.16-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project alter recreational resources or facilities or require the construction or expansion of recreational facilities that could result in environmental impacts.	REC-1: Minimize Impairment, Degradation, or Elimination of Recreational Resources	LTSM	The project would not alter recreational resources or facilities or require the construction or expansion of recreational facilities. The existing farm road through the project area is used as a Golden Gate National Recreation Area trail. Under an easement with the National Park Service, Green Gulch Farm is required to maintain public access at all time, including during construction of the project. The trail would be kept open for NPS visitors. Construction may require slight rerouting of the trail during construction to allow trail access; however, the trail would remain open. Any necessary rerouting during construction would occur within the existing farm fields; therefore, new impacts due to rerouting of trails would be less than significant as they would be located within previously disturbed areas and temporary in nature. No mitigation would be required. Operation and maintenance activities would not cause alterations to recreational resources or facilities that could result in significant environmental impacts.	None	LTS	No Impact
3.16-3: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project increase the use of existing recreational resources and facilities such that substantial physical deterioration would occur or be accelerated.	REC-2: Minimize Impacts on Existing Recreational Resources	LTSM	The project would be located near the Golden Gate National Recreation Area. No elements of the project are expected to increase use of the surrounding recreational site, nor would it increase use of the NPS trail through the Farm. Trail users may choose to use surrounding trails rather than the trail through the Farm during construction. The trails are not expected to see any substantial deterioration from the potential temporary increase in use. The impact would be less than significant. Operation and maintenance would have no impact on trail use and would not change the current trail use patterns.	None	LTS	No Impact
3.17 Transportation						
3.17-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project conflict with a plan, ordinance, or policy addressing the circulation system including transit, roadways, bicycle, and pedestrian facilities.	TRA-1: Prepare Construction Traffic Management Plan TRA-2: Prepare Waterway Traffic Control Plan TRA-3: Develop Channel Closure Plan for Affected Facilities TRA-4: Reduce Project Effects on Boat Passage and Transit Facilities TRA-5: Minimize Effects on Trails and bicycle and Pedestrian Circulation and Identify Alternatives	LTSM	The project would not conflict with any plans addressing circulation systems within Marin County as construction would take place on private property away from highways or public roadways; however, delivery of materials and equipment along Shoreline Highway from Highway 101 may require some temporary lane closures or traffic control measures as mandated by CalTrans. The impact could have a short-term, temporary impact on roadway circulation. No trails, waterway, or rail closures would be necessary. A Traffic Management Plan would be developed as required in mitigation measure TRA-1. The plan would describe the necessary agency coordination, signage, flaggers, and other means necessary to safely move materials and equipment to and from the site. Operation and maintenance of the project would not conflict with any plans, ordinances, or policies addressing the circulation system; therefore, there would be no impact.	TRA-1	LTSM	No Impact
3.17-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project conflict with or be inconsistent with State CEQA Guidelines Section 15064.3(b)/Vehicle Miles Travelled.	TRA-6: Reduce Emissions	SU	Construction activities would require material delivery and construction personnel vehicle trips to and from the site. Marin County has screening tools when a thorough analysis of vehicle miles traveled (VMT) is not required. Small projects generating fewer than 110 trips per day are considered to have a less-than-significant transportation impact, and no VMT analysis is required. On the busiest construction day, vehicle trips would be less than 20 round trips/day; therefore, the project would be consistent with CEQA Guidelines Section 15064.3. There would be no impact. Operation of the project following construction would not increase VMT, because the workforce to operate the system would not change and individuals operating the system live at the site.	None	LTS	No Impact
3.17-3: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project substantially increase hazards due to a geometric design feature or incompatible uses.	TRA-7: Conduct Routine Inspections TRA-8: Repair Damaged Roadways and Trails Following Construction	LTSM	The project would not include design features that would change roadway hazards. There would be no impact during construction and operation activities.	None	No Impact	No Impact

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**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project, CEQA Findings**

Impact Statements from the PEIR as written for Green Gulch Farm at the San Francisco Zen Center	PEIR Mitigation Measures	PEIR Findings After Mitigation	Green Gulch Farm Impact Analysis	Applicable PEIR Mitigation Measures	Green Gulch Farm Construction Findings	Green Gulch Farm Operations and Maintenance Findings
3.18 Tribal Cultural Resources						
3.18-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project cause a substantial adverse change in the significance of a tribal cultural resource, as defined in PRC Section 21073.	<p>TCR-1: Conduct Inventory and Significance Evaluation of Tribal Cultural Resources with Tribes that are Culturally and Geographically Affiliated with the Project Vicinity</p> <p>TCR-2: Implement Measures to Protect Tribal Cultural Resources during Project Construction or Operation. These measures include, but are not limited to, those outlined in PRC Section 21084.3</p> <p>CUL-4: Implement Measures to Protect Human Remains during Project Construction or Operation</p>	LTSM	<p>A Historic Property Survey (February 2025) was conducted for the project site to determine if historic and cultural resources are present at the project site as required in mitigation measure TCR-1. The HPS did not result in the identification of any National Register of Historic Places (NRHP)-eligible or listed historic properties within the area of potential effects; however, the study found that there is a moderate potential for a post-review discovery of precontact period archaeological resources during project-related ground-disturbing activities. The Marin RCD and the Federated Indians of Graton Rancheria (FIGR) met at the project site during project development, and the Tribe requested a Tribal Monitor be present on site during construction of the new reservoir. As part of mitigation measure TCR-2, a project-specific Archaeological Monitoring Plan (AMP) would be developed prior to any ground disturbance to identify where monitoring would be necessary, the types of archaeological resources that could be encountered, and procedures to follow in the event of an archeological discovery. The Tribe would review and approve the contents of the AMP. The potential impact on tribal cultural resources could be significant if resources are present and disturbed during construction. Mitigation measure CUL-4 would be incorporated to protect human remains discovered during project construction or operation. Implementation of Mitigation measures TCR-1, TCR-2, and CUL-4 would reduce potential construction-related impacts to less than significant levels by requiring a specific process to protect resources and human remains.</p> <p>Operation of the irrigation system and exercising the changed water rights would not result in ground disturbance, and therefore, there would be no impact on tribal cultural resources.</p>	<p>TCR-1 TCR-2 CUL-4</p>	LTSM	No Impact
3.19 Utilities and Service Systems and Public Services						
3.19-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project require or result in the construction or relocation of new water or expanded water, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	None	SU	<p>The project would not require the construction or relocation of a new water, stormwater drainage, electric power, natural gas, telecommunications, or other public utility facility. Existing utilities may require relocation to accommodate implementation of the project if the utilities are located within the project footprint and cannot be avoided. Relocation would be primarily within a few feet of its existing location. Most existing utilities would be avoided. The impacts from such relocation are included as part of the project and the types and range of potential environmental effects to other resource areas due to the relocation are analyzed in the other resource areas. This potential impact is determined to be less than significant.</p> <p>Utility relocation would not be required during project operations.</p>	None	LTS	No Impact
3.19-2: Implementing the Green Gulch Farm Streamflow and Water Storage Improvement Project could result in insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.	None	LTS	<p>Project construction would not change water supply availability to water users through alteration of floodplains, water ways, groundwater, or surface water conditions. The project would enhance the availability of water in the stream for aquatic beneficial uses. This potential impact is determined to be less than significant.</p> <p>Operation and maintenance would not change water supplies except for the increased instream flows for aquatic beneficial uses.</p>	None	LTS	No Impact
3.19-3: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs and could fail to comply with federal, state, and local statutes and regulations related to solid waste.	None	LTS	<p>Project construction would not increase the amount of solid waste hauled to local landfills. Waste materials generated would be used on site for construction. There would be no impact from construction or operations and maintenance of the project.</p>	None	No Impact	No Impact
3.19-4: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in substantial adverse physical impacts associated with construction of new or modified fire protection, police protection, schools, and other public facilities.	None	LTS	<p>Project construction would not result in the increased need for public services including police, fire, emergency medical facilities, school, and library facilities as it would not result in any modifications to public services. Temporary construction would not change demand for these services, nor would operation and maintenance of the project.</p>	None	No Impact	No Impact
3.20 Wildfire						
3.20-1: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project exacerbate fire risk.	FIRE-1: Develop and Implement a Fire Prevention Plan	LTSM	<p>The project is located in a Very High Fire Hazard Severity Zone (FHSZ) (CalFire, 2025). Implementation of FIRE-1 would reduce the potential impact to a less-than-significant level through the implementation of fire prevention measures during construction.</p> <p>Operation and maintenance of the project would not exacerbate fire risk. The project would provide water for fire suppression purposes by pumping water from Reservoir 7 to the existing fire storage tank near the Zen Center and installing an emergency location at the pump location. The impact would be less than significant as water would be available.</p>	FIRE-1	LTSM	LTS
3.20-2: Could the Green Gulch Farm Streamflow and Water Storage Improvement Project result in downslope or downstream risks as a result of runoff, post-fire slope instability, or drainage changes.	FIRE-1: Develop and Implement a Fire Prevention Plan	LTSM	<p>Implementation of the project would not increase or decrease fire risk within the project area, and it would not result in risks of runoff, post-fire slope instability, or detrimental drainage changes. The project would decommission an existing reservoir that has a landslide above it to reduce the risk of future collapse. The new drainage will flow through an existing intermittent and stable channel. All disturbed areas within the project area will be treated with erosion control and revegetation to limit potential runoff. The potential impact would be less than significant.</p> <p>Operation and maintenance would have no impact on fire risk or drainage systems.</p>	None	LTS	No Impact

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SF Zen Center Green Gulch Farm Avoidance and Minimization Measures

	A	B	C
1	Protection Measure Title	Measure Sources & Measure Number	Protection Measure Description and Requirements
2	Receipt and Copies of All Permits and Authorizations	SWRCB-SRGO-GPM-01 USFWS-GPM-01 NMFS-CC-BO-GPM-01	Green Gulch Farm will not begin work until all necessary permits and authorizations have been received (e.g., USACE, USFWS, NMFS, State and Regional Boards, CDFW). The Green Gulch Farm will ensure that a readily available copy of the applicable agency permits and authorizations (e.g., USFWS Biological Opinion, NMFS Biological Opinion, Section 404 permit, etc.) is maintained by the construction foreman/manager on the project site for the duration of project activities.
3	Construction Work Windows	SWRCB-SRGO-GPM-02 SWRCB-SPM-03 USFWS-SPM-CRLF-CTS-01 USFWS-GPM-02 NMFS-CC-BO-GPM-02	Green Gulch Farm's general construction season shall be from June 1 to October 31. Restoration, construction, fish relocation and dewatering activities within any wetted or flowing stream channel shall occur only within this period. If precipitation sufficient to produce runoff is forecast to occur while construction is underway, work will cease and erosion control measures will be put in place sufficient to prevent significant sediment runoff from occurring. Exceptions regarding the construction season will be considered on a case-by-case basis only if justified and if measurable precipitation sufficient to produce runoff is not forecast to occur during any of the above activities, and if approved by the RC, Corps, and NMFS. Revegetation activities including limited soil preparation outside the active channel may occur beyond October 31 if necessary to better ensure successful plant establishment during the onset of winter precipitation.
4	Construction Hours	SWRCB-SRGO-GPM-03 SWRCB-SRGO-AMP-05 USFWS-GPM-03 USFWS-SPM-AMP-05	Green Gulch Farm will limit construction activities to daylight hours, to the extent feasible. If nighttime construction is necessary, all project lighting (e.g., staging areas, equipment storage sites, roadway, and construction footprint) will be selectively placed and directed onto the roadway or construction site and away from aquatic habitats. Light glare shields will be used to reduce the extent of illumination into aquatic habitats.
5	Environmental Awareness Training	SWRCB-SRGO-GPM-04 USFWS-GPM-04	Green Gulch Farm will ensure that ALL construction personnel will participate in environmental awareness training conducted by an agency-approved biologist or resource specialist before engaging in any construction activities. Construction personnel will be informed regarding the identification, potential presence, legal protections, avoidance and minimization measures, and applicable general protection measures for all wildlife resources with the potential to occur within or immediately adjacent to the project site. For projects where the agency-approved biologist or resource specialist is not regularly on the project site, training may be provided via online/web-based meeting with an interactive portion (e.g., web-based or in-person discussion) to be included during remote training sessions. For projects that may continue over an extended duration and require excessive training events, a training video developed under the supervision of the approved biologist or resource specialist may be used to train new personnel, as long as an approved biologist or resource specialist is available via phone to answer questions about the training or that may arise during construction.
6	Environmental Monitoring	SWRCB-SRGO-GPM-05	Green Gulch Farm will ensure a resource specialist confirms that all applicable protective measures are implemented during project construction. The resource specialist will have authority to stop any work if they determine that any permit requirement is not fully implemented. The resource specialist will prepare and maintain a monitoring log of construction site conditions and observations, which will be kept on file.
7	Work Area and Speed Limits	SWRCB-SRGO-GPM-06 SWRCB-SRGO-GPM-12 USFWS-GPM-06 USFWS-GPM-12	Green Gulch Farm will restrict construction work and materials staging to designated work areas, routes, staging areas, temporary interior roads, or the limits of existing roadways. Prior to initiating construction or grading activities, brightly colored fencing or flagging or other practical means will be erected to demarcate the limits of the project activities, including the boundaries of designated staging areas; ingress and egress corridors; stockpile areas for spoils disposal, soil, and materials; and equipment exclusion zones. Flagging or fencing will be maintained in good repair for the duration of project activities. Vehicles will obey posted speed limits on public roadways and will limit speeds to 20 miles per hour (mph) within the project area on unpaved surfaces and unpaved roads (to reduce dust and soil erosion) or in areas where specialstatus species have the potential to occur. Speeds greater than 20 mph may be permitted in the project area where special-status species are not expected to occur (e.g., within areas from which special-status species have been excluded) and where there is no risk of generating excessive dust (e.g., surfaces are paved, saturated, or have been treated with other measures to prevent dust).
8	Environmentally Sensitive Areas	SWRCB-SRGO-GPM-07 USFWS-GPM-07 USFWS-SPM-REP-02	Green Gulch Farm will use monitoring, flagging, or fencing, where appropriate, to minimize disturbance to environmentally sensitive areas as identified on the plans or as noted by an approved-biologist. If fencing is used: - Fencing used will be approved by CDFW and/or USFWS for compatibility with species under their jurisdiction, as applicable, that may occur on site. - The agency-approved biologist or resource specialist will determine the location of fencing prior to the start of construction (e.g., between active work area(s) and sensitive resources). - Fencing will remain in place throughout the duration of the construction activities and will be inspected and maintained regularly by the agencyapproved biologist or resource specialist until completion of the project. - Repairs to the fencing will be made within 24 hours of discovering any failure. - Fencing will be removed when all construction equipment is removed from the site, the area is cleared of debris and trash, and the area is returned to natural conditions.
9	Prevent Spread of Invasive Species	SWRCB-SRGO-GPM-08 USFWS-GPM-08	Green Gulch Farm will minimize the spread or introduction of invasive exotic plant species by arriving vehicles, equipment, imported gravel, and other materials, will be avoided to the maximum extent possible. When practicable, invasive exotic plants in the project areas will be removed and properly disposed of in a manner that will not promote their spread. Equipment will be cleaned of any sediment or vegetation at designated wash stations before entering or leaving the project area to avoid spreading pathogens or exotic/invasive species. Isolated infestations of noxious weeds identified in the project area will be treated with approved eradication methods at an appropriate time to prevent further formation of seed and destroy viable plant parts and seed. Wash sites shall be in confined areas that limit run-off to any surrounding habitat and on a flat grade. Upland areas will use rice straw or invasive species-free local slash/mulch for erosion control, while the remainder of the project area will use certified, weed-free erosion control materials. Mulch must be certified weedfree. The Green Gulch Farm will follow the guidelines in the CDFW's California Aquatic Invasive Species Management Plan (CDFW 2022) and Aquatic Invasive Species Disinfection/Decontamination Protocols (CDFW 2016), where relevant. Construction supervisors and managers will be educated on weed identification and the importance of controlling and preventing the spread of noxious weeds. The Green Gulch Farm will follow any applicable local guidance to prevent the spread of invasive animal species. Construction supervisors and managers will be responsible for implementation of appropriate protocols (e.g., disinfection of equipment and footwear) to prevent the spread of invasive animals.
10	Practices to Prevent Pathogen Contamination	SWRCB-SRGO-GPM-09 USFWS-GPM-09	Green Gulch Farm will review and implement restoration design considerations and best management practices as published by the Working Group for Phytophthoras in Native Habitats (www.calphytos.org), when there is a risk of introduction and spread of plant pathogens in site plantings. (http://www.suddenoakdeath.org/welcome-to-calphytos-org-phytophthoras-in-native-habitats/resources/#restoration.)
11	Equipment Maintenance Throughout Project	SWRCB-SRGO-GPM-10 USFWS-GPM-10 NMFS-CC-BO-IWW-26 NMFS-CC-BO-IWW-27	Green Gulch Farm will ensure all construction equipment is kept in good working condition, showing no signs of fuel or oil leaks. Prior to construction, all mechanical equipment shall be thoroughly inspected and evaluated for the potential of fluid leakage. All questionable motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fitting, and seals shall be replaced. The contractor shall document in writing all hoses, fittings, and seals replaced and shall keep this documentation until the completion of operations. All mechanical equipment shall be inspected on a daily basis to ensure there is no motor oil, transmission fluid, hydraulic fluid, or coolant leaks. All leaks shall be repaired in the equipment staging area or other suitable location prior to resumption of construction activity.
12	Material Disposal and Cleanup	SWRCB-SRGO-GPM-11 SWRCB-SRGO-GPM-13 SWRCB-SRGO-GPM-14 USFWS-GPM-11 USFWS-GPM-13 USFWS-GPM-14	All refuse, debris, unused materials, and supplies that cannot reasonably be secured will be removed daily from the project work area and deposited at an appropriate disposal or storage site. All construction debris will be removed from the project work area immediately upon project completion. Work pads, temporary falsework, and other construction items will be removed from the 100-year floodplain by the end of the construction window. Removal of materials must not result in discharge to waterbodies. Upon completion of the project, all areas subject to temporary ground disturbances will be re-contoured if necessary and revegetated with native seed or transplants to promote restoration of the area to pre-project conditions.

SF Zen Center Green Gulch Farm Avoidance and Minimization Measures

	A	B	C
1	Protection Measure Title	Measure Sources & Measure Number	Protection Measure Description and Requirements
13	Staging Areas and Stockpiling of Materials and Equipment	SWRCB-SRGO-GPM-12 SWRCB-SRGO-WQHM-01 USFWS-WGHM-01 USFWS-GPM-12 NMFS-CC-BO-IWW-25	<p>Staging, storage, and stockpile areas must be outside of waters of the state. To the extent feasible, staging will occur on access roads or other previously disturbed upland areas, such as developed areas, paved areas, parking lots, areas with bare ground or gravel, and areas clear of vegetation, to avoid aquatic habitats and limit disturbance to surrounding habitats. Similarly, all maintenance equipment and materials (e.g., road rock and project spoil) will be restricted to the existing service roads, paved roads, or other determined designated staging areas.</p> <p>Staging areas will be established for equipment storage and maintenance, construction materials, fuels, lubricants, solvents, and other possible contaminants in coordination with resource agencies. Staging areas will have a stabilized entrance and exit and will be located at least 100 feet from bodies of water unless site-specific circumstances do not provide such a setback, in such cases the maximum setback possible will be used. If an off-road site is chosen and if special-status species are potentially present, the Biological Monitor will survey the selected site to verify that no aquatic resources would be disturbed by staging activities.</p> <p>Stockpiling of materials, portable equipment, vehicles and supplies (e.g., chemicals), will be restricted to the designated construction staging areas. If rain is predicted in the forecast during the dry season, and stockpiled soils will remain exposed and unworked for more than 7 days, then erosion and sediment control measures must be used. If there is a high-wind scenario (to be defined by the approving Water Board as appropriate for an individual project site), then soils will be covered at all times. During the wet season, no stockpiled soils will remain exposed, unless properly installed and maintained erosion and sediment controls are in place on and around the stockpile. Temporary stockpiling of material onsite will be minimized. Stockpiled material will be placed in upland areas far enough away from aquatic habitats that these materials cannot discharge to a water of the state.</p>
14	Revegetate Disturbed Areas	SWRCB-SRGO-GPM-15 USFWS-GPM-15 NMFS-CC-BO-RVM-06	All temporarily disturbed areas will be de-compacted and seeded/planted with an assemblage of native riparian, wetland, and/or upland plant species suitable for the area. The Green Gulch Farm will develop a revegetation plan, including (as applicable) a schedule; plans for grading of disturbed areas to pre-project contours; planting palette with plant species native to the project area; invasive species management; performance standards; success criteria; and maintenance requirements (e.g., watering, weeding, and replanting). Plants for revegetation will come primarily from active seeding and planting; natural recruitment may also be proposed if site conditions allow for natural recruitment to reestablish vegetation and avoid potential negative risks associated with erosion and impacts to water quality. Plants imported to the restoration areas will come from local stock, and to the extent possible, local nurseries. Only native plants (genera) will be used for restoration efforts. Certified weed-free native mixes and mulch will be used for restoration planting or seeding. Revegetation activities within and adjacent to waters of the state will commence as soon as is practicable after construction activities at a site are complete.
15	Preventing Erosion during Construction	SWRCB-SRGO-WQHM-01 NMFS-CC-BO-WQHM-01	When appropriate, isolate the construction area from flowing water until project materials are installed and erosion protection is in place. Stockpiling of materials, including portable equipment, vehicles and supplies, such as chemicals, shall be restricted to the designated construction staging areas, exclusive of any riparian and wetland areas. Construction BMPs for off-channel staging, and storage of equipment and vehicles, will be implemented to minimize the risk of contaminating the waters by spilled materials. BMPs will also include minimization of erosion and stormwater runoff, as appropriate.
16	Storm Water Pollution Prevention Plan	SWRCB-SRGO-WQHM-02 USFWS-WQHM-02	Green Gulch Farm will ensure the SWPPP requirements are met covered by the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) will prepare and implement the required, site-specific, storm water pollution prevention plan (SWPPP).
17	Hazardous Materials Management and Spill Response Plan	SWRCB-SRGO-WQHM-04 SWRCB-SRGO-WQHM-06 USFWS-WQHM-04 USFWS,WQHM-06 NMFS-CC-IWW-BO-28	<p>As part of the SWPPP, Green Gulch Farm will prepare and implement a hazardous materials management and spill response plan. Green Gulch Farm will ensure that any hazardous materials are stored at the staging area(s) with an impermeable membrane between the ground and hazardous material and that the staging area is designed to prevent the discharge of pollutants to groundwater and runoff water. Green Gulch Farm will stop work, follow the spill response plan, and arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills. Green Gulch Farm will notify regulatory agencies within 24 hours of any leaks or spills. Green Gulch Farm will properly contain and dispose of any unused or leftover hazardous products off-site. Green Gulch Farm will use and store hazardous materials, such as vehicle fuels and lubricants, in designated staging areas located away from stream channels and wetlands, according to local, state, and federal regulations, as applicable. Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation with 100 feet of the proposed watercourse crossings. If a spill occurs, no additional work shall commence in-channel until (1) the mechanical equipment is inspected by the contractor, and the leak has been repaired, (2) the spill has been contained, and (3) NMFS and CDFW are contacted and have evaluated the impacts of the spill.</p> <p>Following an accidental discharge of a reportable quantity of a hazardous material, sewage, or an unknown material, the following applies (Wat. Code, Â§ 13271): As soon as (A) discharger has knowledge of the discharge or noncompliance, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures then: - first call - 911 (to notify local response agency) - then call - Office of Emergency Services (OES) State Warning Center at: (800) 852-7550 or (916) 845-8911 - Lastly, follow the required OES procedures as set forth in: http://www.caloes.ca.gov/FireRescueSite/Documents/CalOESSpill_Booklet_Feb2014_FINAL_BW_Acc.pdf Following notification to OES, the discharger will notify the State or Regional Board (and other agencies requiring notification in their respective permits), as soon as practicable (ideally within 24 hours). Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.</p>
18	Appropriate In-Water Materials	SWRCB-SRGO-IWW-01 USFWS-IWW-01	Selection and use of gravels, cobble, boulders, and instream woody materials in streams, and other materials (e.g., oyster shells, other substrates) for reef/bed restoration will be performed to avoid and/or minimize adverse impacts to aquatic resources, special-status aquatic species, and their habitats. On-site gravels will be screened and sorted; gravels imported from a commercial source will be clean-washed and of appropriate size. As necessary to protect aquatic species, placement will be overseen by an agency-approved Monitor; implementation timing will be determined based on the least amount of overlap, or impact on, all aquatic natural resources that may be affected and the timing of their use of the receiving area. Imported gravel from outside the project watershed will not be from a source known to contain historic hydraulic gold mine tailings, dredger tailings, or mercury mine waste or tailings. Materials that may foul or degrade spawning gravels, such as sand or soil eroding from sand bag or earthen dams will be managed to avoid release and exposure in salmonid streams. Oyster shells or other substrates for reef/bed restoration will be cured and inspected to be free of pathogens and/or non-native species.
19	In-Water Vehicle Selection and Work Access	SWRCB-SRGO-IWW-02 USFWS-IWW-02	If work requires that equipment enter wetlands or below the bank of a waters of the state, equipment with low ground-pressure (typically less than 13 to 20 pounds per square inch (psi)) should be selected where feasible to minimize soil compaction. Low groundpressure heavy equipment mats should be used if needed to lessen soil compaction. Hydraulic fluids in mechanical equipment working in the waters of the state, will not contain organophosphate esters. Vegetable based hydraulic fluids are preferred, where feasible. The amount of time this equipment is stationed, working, or traveling in the waters of the state will be minimized. All equipment will be removed from the aquatic feature during non-work hours where appropriate or returned to the agency-approved staging area in the aquatic feature.

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1	Protection Measure Title	Measure Sources & Measure Number	Protection Measure Description and Requirements
20	Preventing Soil and Water Contamination	SWRCB-SRGO-IWW-03 USFWS-IWW-03	<p>Debris, soil, silt, excessive bark, 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, resulting from projected related activities, shall be prevented from contaminating the soil and/or entering the waters of the State. Any of these materials, placed within or where they may enter a stream or lake, by the applicant or any party working under contract, or with permission of the applicant, shall be removed immediately. During project activities, all trash that may attract potential predators of salmonids will be properly contained, removed from the work site, and disposed of daily.</p> <p>Material used for bank stabilization or in-water restoration will minimize discharge sediment or other forms of waste to waters of the state. Where feasible, construction will occur from the top of the stream bank, or on a ground protection mat underlain with filter fabric, or a barge. All materials placed in streams, rivers or other waters will be nontoxic. Any combination of wood, plastic, cured concrete, steel pilings, or other materials used for in-channel structures will not contain coatings or treatments, or consist of substances toxic to aquatic organisms (e.g., zinc, arsenic, creosote, copper, other metals, pesticides, or petroleum-based products) that may leach into the surrounding environment in amounts harmful to aquatic organisms. Except for the following conditions, equipment must not be operated in standing or flowing waters without site-specific approval from State or Regional Board staff.</p>
21	Temporary Dam or Cofferdam Construction	SWRCB-SRGO-IWW-05 USFWS-IWW-05 NMFS-CC-BO-IWW-01 NMFS-CC-BO-IWW-05 NMFS-CC-BO-IWW-07 NMFS-CC-BO-IWW-09	<p>Cofferdams may be installed both upstream and downstream, and along portions of the cross section of a channel or other waterway if necessary to isolate the extent of the work areas. When feasible, construction of cofferdams will begin in the upstream area and continue in a downstream direction, allowing water to drain and allowing fish and aquatic wildlife species to leave (under their own volition), from the area being isolated by the cofferdam, prior to closure. The flow will then be diverted only when construction of the upstream dam is completed and the work area has been naturally drained of flow, at this point, the downstream dam, if necessary, would be completed and then flow would be diverted around the work area. Cofferdams and stream diversion systems will remain in place and fully functional throughout the construction period. In order to minimize adverse effects to aquatic species, stream diversions will be limited to the shortest duration necessary to complete in-water work. In-water cofferdams will only be built from materials such as sandbags, plastic, clean gravel (possibly wrapped in impermeable material), rubber bladders, vinyl, steel, or earthen fill, in a manner that minimizes siltation and/or turbidity. Sandbags may only be used to build cofferdams upstream of spawning gravels when filled with clean gravel (or other material acceptable to the approving Water Board). Where possible, cofferdams should be pushed into place. If pile driving (sheet piles) is required, vibratory hammers should be used and impact hammer should be avoided. If necessary, the footing of the cofferdam will be keyed into the channel bed at an appropriate depth to capture the majority of subsurface flow needed to dewater the streambed. When cofferdams with bypass pipes are installed, debris racks will be placed at the bypass pipe inlet in a manner that minimizes the potential for fish impingement and/or entrapment. As needed and where feasible, bypass pipes will be monitored for accumulation of debris. All accumulated debris will be removed. When appropriate, cofferdams will be removed so surface elevations of water impounded above the cofferdam will not be reduced at a rate greater than one inch per hour. Cofferdams in tidal waters should be removed during the lowest possible tide and in slack water to the extent feasible to minimize disturbance and turbidity. This will minimize the probability of fish and other aquatic species stranding as the area upstream becomes dewatered. All dewatering/diversion facilities will be installed such that natural flow is maintained upstream and downstream of project areas.</p> <p>An area may need to be dewatered for long enough to allow special-status species to leave on their own before final clearance surveys and construction can begin.</p>
22	Dewatering/Diversion	SWRCB-SRGO-IWW-06 USFWS-IWW-06 USFWS-AMP-07 NMFS-CC-BO-IWW-05 NMFS-CC-BO-IWW-06 NMFS-CC-BO-IWW-09 NMFS-CC-BO-IWW-10 NMFS-CC-BO-IWW-11 NMFS-CC-BO-IWW-12 NMFS-CC-BO-IWW-14	<p>The area to be dewatered will encompass the minimum area necessary to perform construction activities. The Green Gulch Farm will provide a dewatering plan with a description of the proposed dewatering structures, and appropriate types of BMPs for the installation, operation, maintenance, and removal of those structures. The period of dewatering/diversion will extend only for the minimum amount of time needed to perform the restoration activity and to allow special-status species time to leave on their own before final clearance surveys and construction can begin. Where feasible and appropriate, dewatering/diversion will occur via gravity-driven systems, and where water is pumped from within the construction area, it should be pumped to upland areas (where feasible) and to a location where it can infiltrate without return flows to the watercourse. Dewatering/diversion will be designed to avoid direct and preventable indirect mortality of fish and other aquatic species. If special-status fish species may be present in the area to be dewatered, a fish capture and relocation plan will be developed and implemented for review and approval by appropriate agencies (e.g., CDFW, NMFS, USFWS, as applicable). Stream flows will be allowed to gravity flow around or through the work site using temporary bypass pipes or culverts. Bypass pipes will be sized to accommodate, at a minimum, twice the expected construction-period flow, to not increase stream velocity, and will be placed at stream grade. Conveyance pipe outlet energy dissipaters will be installed to prevent scour and turbidity at the discharge location. When use of gravity-fed dewatering is not feasible and pumping is necessary to dewater a work site, a temporary siltation basin and/or use of silt bags may be required. Silt fences or mechanisms to avoid sediment input to the flowing channel will be installed adjacent to flowing water. Water pumped or removed from dewatered areas will be conducted in a manner that does not contribute turbidity to nearby receiving waters. Where possible, pumps will be located and refueled in a flat area well away from the stream channel. Fuel absorbent mats will be placed under the pumps while refueling. Equipment working in the stream channel or within 25 feet of a wetted channel will have a double (i.e., primary and secondary) containment system for diesel and oil fluids.</p> <p>All work will comply with the CDFW Fish Screening Criteria (CDFW 2001) and NMFS Fish Screening Criteria for Anadromous Salmonids (NMFS 1997). Pump intakes will be covered with mesh per the requirements of current fish screening criteria to prevent potential entrainment of fish or other aquatic species that could not be removed from the area to be dewatered. The pump intake will be checked periodically for impingement of fish or other aquatic species. Diverted flows must be of sufficient quality and quantity, and of appropriate temperature, to support existing fish and other aquatic life both above and below the diversion. Preproject flows must be restored to the affected surface water body upon completion of work at that location. Where diversions are planned, contingency plans will be developed that include oversight for breakdowns, fueling, maintenance, leaks, etc.</p> <p>In those specific cases where it is deemed necessary to dewater a work site that is located in aquatic habitat, the work area shall be isolated and all the flowing water upstream of the work site shall be temporarily diverted around the work site to maintain downstream flows during construction. Prior to dewatering, determine the best means to bypass flow through the work area to minimize disturbance to the channel and avoid direct mortality of fish and other aquatic vertebrates (as described more fully below under General Conditions for Fish Capture and Relocation).</p> <p>Fish relocation and dewatering activities shall only occur between June 15 and October 31 of each year. If precipitation sufficient to produce runoff is forecast to occur while construction is underway, work will cease and erosion control measures will be put in place sufficient to prevent significant sediment runoff from occurring. Exceptions on the fish relocation/dewatering time period will be considered on a case-by-case basis only if justified and if precipitation sufficient to produce runoff is not forecast to occur during any of the above activities, and if approved by the RC, Corps and NMFS. If the channel is expected to be seasonally dry during this period, construction should be scheduled so that fish relocation and dewatering are not necessary.</p>
23	Fish and Aquatic Species Exclusion While Installing Diversion Structures	SWRCB-SRGO-IWW-07 USFWS-IWW-07 NMFS-CC-BO-IWW-02 NMFS-CC-BO-IWW-19	<p>Fish and other aquatic species will be excluded from occupying the area to be dewatered by blocking the stream channel above and below the area to be dewatered with fine-meshed block nets or screens while coffer dams and other diversion structures are being installed. Block net mesh will be sized to ensure aquatic species upstream or downstream do not enter the areas proposed for dewatering. Mesh will be no greater than 1/8-inch diameter. The bottom of the net must be completely secured to the channel bed. Block nets or screens must be checked at least twice daily at the beginning and end of the workday and cleaned of debris to permit free flow of water. Block nets or screens will be placed and maintained throughout the dewatering period at the upper and lower extent of the areas where aquatic species will be removed. Net placement is temporary and will be removed once dewatering has been accomplished or construction work is complete for the day.</p> <p>Fish will be excluded from reentering the work area by blocking the stream channel above and below the work area with fine-meshed net or screens. Mesh will be no greater than 1/8-inch diameter. The bottom of the seine must be completely secured to the channel bed to prevent fish from reentering the work area. Exclusion screening must be placed in areas of low water velocity to minimize fish impingement. Upstream and downstream screens must be checked daily (prior to, during, and after instream activities) and cleaned of debris to permit free flow of water. Block nets shall be placed and maintained throughout the construction period at the upper and lower extent of the areas where fish will be removed. Block net mesh shall be sized to ensure salmonids upstream or downstream does not enter the areas proposed for dewatering between passes with the electro-fisher or seine.</p>

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24	Removal of Diversion and Barriers to Flow	SWRCB-SRGO-IWW-08 USFWS-IWW-08 NMFS-CC-BO-IWW-13	When construction is completed, the flow diversion structure shall be removed as soon as possible in a manner that will allow flow to resume with the least disturbance to the substrate. Cofferdams will be removed so surface elevations of water impounded above the cofferdam will not be reduced at a rate greater than one inch per hour. This will minimize the risk of beaching and stranding of fish as the area upstream becomes dewatered. Upon completion of construction activities, any diversions or barriers to flow will be removed in a manner that will allow flow to resume with the least disturbance to the substrate and consideration of turbidity levels. Alteration of creek beds will be minimized to the maximum extent possible; any imported material that is not part of the project design will be removed from stream beds upon completion of the project.
25	Avoidance of Vegetation Disturbance	SWRCB-SRGO-VHDR-01 USFWS-VHDR-01	Green Gulch Farm will minimize, to the greatest extent feasible, the amount of soil, terrestrial vegetation, emergent native vegetation, and submerged vegetation (e.g., eelgrass and kelp in marine areas, or submerged aquatic vegetation in brackish and freshwater areas) disturbed during project construction and completion and using methods creating the least disturbance to vegetation. Disturbance to existing grades and native vegetation, the number of access routes, the size of staging areas, and the total area disturbed by the project will be limited to the extent of all temporary and permanent impacts as defined by the final project design. All roads, staging areas, and other facilities will be placed to avoid and limit disturbance to waters of the state and other aquatic habitats (e.g., streambank or stream channel, riparian habitat) as much as possible. When possible, existing ingress or egress points will be used and/or work will be performed from the top of the creek banks or from barges on the waterside of the stream or levee bank, or dry gravel beds. Existing native vegetation will be retained as practicable, emphasizing the retention of shade-producing and bank stabilizing trees and brush with greater than 6-inch diameter branches or trunks. Where possible, vegetation disturbance and soil compaction will be minimized by using low ground-pressure (typically less than 13 to 20 pounds psi) equipment that exerts less pressure per square inch on the ground than other equipment. To minimize impacts to vegetation, select equipment with a greater reach.
26	Native and Invasive Vegetation Removal Materials and Methods	SWRCB-SRGO-VHDR-02 NMFS-CC-BO-RVM-04 USFWS-VHDR-02	If riparian vegetation is to be removed with chainsaws or other power equipment, Green Gulch Farm will require machines that operate with vegetable-based bar oil will be used, as practicable. All invasive plant species (e.g., those rated as invasive by the California Invasive Plant Council or local problem species) will, if feasible, be removed from the project site, using locally and routinely accepted agriculture practices. Invasive plant material will be destroyed using approved protocols and disposed of at an appropriate upland disposal or compost area. Invasive plant materials stockpiled at sites known to experience flash flooding outside the flood season will be removed within 15 days of the initial creation of the stockpile in order to contain the potential spread of invasive plant material. Stockpiling of invasive plant materials is prohibited during the flood season. Green Gulch will be removed invasive plant species (e.g., those rated as invasive by the Cal-IPC, or local problem species) from the project site as practicable, using locally and routinely accepted management practices. Invasive plant material will be destroyed using approved protocols and disposed of at an appropriate upland disposal or compost area. Invasive plant materials stockpiled at sites known to experience flash flooding outside the flood season will be removed within 15 days of the initial creation of the stockpile, to contain the potential spread of invasive plant material. Stockpiling of invasive plant materials is prohibited during the flood season (typically November to April). Nonnative Plant Removal 1. When practicable, nonnative plants will be removed when flowers or seeds are not present. 2. Whenever practicable, nontarget vegetation will be protected in order to minimize the creation of exposed ground and potential for re-colonization of nonnative plants. A botanist will be consulted prior to any restoration implementation and during preparation of restoration plans.
27	Topsoil Storage and Revegetation of Barren Stream banks	SWRCB-SRGO-VHDR-03 USFWS-VHDR-03	Green Gulch Farm will conserve topsoil for reuse at project location or use in other areas. Any stream bank area left barren of vegetation as a result of the implementation or maintenance of the practices shall be restored to a natural state by seeding, replanting, or other agreed upon means with native trees, shrubs, and/or grasses. Barren areas shall typically be planted with a combination of willow stakes, native shrubs and trees and/or erosion control grass mixes.
28	Revegetation Erosion Control Materials and Methods	SWRCB-SRGO-VHDR-04 USFWS-VHDR-04	Erosion control fabrics used in revegetated areas will be slit in appropriate locations as necessary to allow for plant root growth. Only non-monofilament, wildlife-safe fabrics will be used. All plastic exclusion netting placed around plantings will be removed after 2 years or sooner if practicable.
29	Revegetation Monitoring and Reporting	SWRCB-SRGO-VHDR-05 USFWS-VHDR-05	All revegetated areas will be maintained and monitored for a minimum of 2 years after replanting is complete and until success criteria are met, to ensure the revegetation effort is successful. The standard for success is at least 60% absolute cover compared to pre-project conditions at the project site or at least 60% cover compared to an intact, local reference site (or an available reference site accepted by the approving Water Board). Green Gulch Farm will prepare a summary report of the monitoring results and recommendations at the conclusion of each monitoring year.
30	Preconstruction Surveys	USFWS-SPM-ASP-02 USFWS-SPM-AMP-03	Green Gulch Farm will ensure a qualified, agency-approved biologist with experience on the identification of all applicable life stages of the special-status species will conduct reconnaissance-level preconstruction surveys and implement additional measures, as appropriate, to protect the species from construction-related disturbance before work begins. The intent of the survey is to assess current species habitat and use locations in the project area immediately prior to construction. Special-status plant species surveys shall be conducted in the appropriate blooming period, as applicable, prior to the start of construction for proper plant identification. If construction activities cease for more than five consecutive days, and there is potential for special-status species to re-occupy the site, the agency-approved biologist will re-survey the project area and implement measures, as appropriate. A project proponent can choose to assume animal species presence, forgo preconstruction surveys, and implement additional protection measures, as appropriate, to protect special status species from construction-related disturbance. Green Gulch Farm will ensure an agency-approved biologist conducts preconstruction surveys for the amphibians, reptiles, terrestrial wildlife and plant species prior to any initial ground disturbance within all suitable habitat within or adjacent to the project site, to identify locations where special-status reptiles may be present, evaluate current activity status in the project area, and protect the species and its habitat from avoidable construction-related disturbance. The intent of this survey is to assess current special-status reptile habitat and use locations in the project area immediately prior to construction. Preconstruction surveys may be phased across a construction site if construction in different areas will occur at different times; only areas where disturbance is imminent need be surveyed. The project area will be re-inspected by the agency-approved biologist whenever a lapse in construction activity of 5 days or greater has occurred. Preconstruction surveys are necessary before vegetation removal and again at the start of construction. Amphibian pre-construction surveys will be conducted no more than 24 hours prior to initial ground disturbance for California red-legged frog. Surveys will include the following: - Focused surveys for adult/juvenile/larval amphibians. - Egg mass searches for foothill yellow-legged frog and pacific tailed frog. - Any adult or juvenile amphibians found within the work area during preconstruction surveys shall be allowed to leave of their own volition. - Any foothill yellow-legged frog egg masses found during the preconstruction survey, or anytime during construction, will be clearly marked with flagging as instructed by a qualified biologist; egg masses will be avoided until the mebyros have hatched, as determined by a qualified biologist. Northwestern pond turtle pre-construction surveys will occur within 72 hours of ground disturbance and will include a focused survey for adult/juvenile turtles and nest site searches. Any adults or juveniles found within the work area will be allowed to leave of their own volition. Nest sites discovered during the pre-construction survey aor anytime during construction will be clearly marked with flagging or construction fencing as instructed by a qualified biologist; nest sites shall be avoided until vacated, as determined by a qualified biologist.

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31	Environmentally Sensitive Areas and/or Wildlife Exclusion	USFWS-SPM-REP-02	Green Gulch Farm will use monitoring, flagging, and/or fencing to minimize disturbance to environmentally sensitive areas (e.g., waters and wetlands). This measure augments SCRP-GPM-7, which applies to sensitive aquatic resources. If fencing is used: - The agency-approved biologist or resource specialist will determine the location of the fencing prior to the start of construction (e.g., between active work area(s) and sensitive resources). - Fencing will remain in place throughout the duration of the construction activities, and will be inspected and maintained regularly by the agency-approved biologist or resource specialist until completion of the project. - Repairs to the fencing will be made within 24 hours of discovery. - Fencing will be removed when all construction equipment is removed from the site, and the area cleared of debris and trash, and returned to natural conditions.
32	Rain Event Limitations	USFWS-SPM-AMP-03	To the maximum extent practicable, Green Gulch Farm's construction activities will be restricted to periods of low rainfall (less than 1" per 24-hour period) and periods of dry weather (with less than a 50% chance of rain). During these restricted periods, under no circumstances will construction activities occur between 30 minutes prior to sunset and 30 minutes after sunrise (i.e., no night work during rain events). If rain exceeds 0.5 inch during a 24-hour period, work will cease until no further rain is forecast. Construction activities halted due to precipitation may resume when precipitation ceases and the National Weather Service 72-hour weather forecast indicates less than a 50% chance of 0.5 inch of rain or less during a 24-hour period. Prior to construction activities resuming, an agency-approved biologist will inspect the project area and all equipment/materials for the presence of special-status amphibians.
33	Disease Prevention and Decontamination	USFWS-SPM-AMP-04	To prevent disease conveyance among work sites during project implementation, the agency-approved biologist will ensure that the decontamination protocols described in CDFW, Aquatic Invasive Species Disinfection/Decontamination Protocols (CDFW 2016, or latest version) will be implemented prior to gear and equipment arriving at or moving between work sites and will be followed at all times. A copy of the code of practice must be available at the project site.
34	Encounters with Species	USFWS-SPM-AMP-10	If California red-legged frog are encountered each will be treated on a case-by-case basis, the following will apply: - If a special-status amphibian is detected in the project area, work activities within 50 feet of the individual that may potentially be harmed, injured, or killed will cease immediately and the agency-approved biologist will be notified. Based on the professional judgment of the agency-approved biologist, if project activities can be conducted without harming or injuring the species, it may be left at the location of discovery and monitored by the agency-approved biologist. All project personnel will be notified of the finding and at no time will work occur within 50 feet of a species without agency-approved biologist present. - Where practicable, contact with the special-status amphibian will be avoided and it will be allowed to move out of the potentially hazardous situation of its own volition. Allowing a special-status amphibian to move out of the potentially hazardous situation of its own volition may not be appropriate for multi-day projects because they could stay or move back into the project site. If there is an immediate hazard or if there is no suitable, accessible habitat nearby for the amphibian to relocate to, it will be moved following approved handling protocol (AMP-0011).
35	Habitat Avoidance - Western Pond Turtle	USFWS-SPM-WPT-01 USFWS-SPM-WPT-02	A Qualified Biologist will survey and flag the work area for suitable overwintering habitat (e.g. leaf litter layer under trees and shrubs) or nesting habitat to avoid western pond turtle. Any flagging used must be removed after work is completed. Project personnel will be advised to avoid disturbance in these areas unless site-specific conservation measures allow work to be conducted in these areas to minimize or avoid disturbance. To the extent feasible, logs or rocks will not be moved or otherwise disturbed to avoid impacts to turtles utilizing these objects as cover. If such features must be moved, the biologist will visually inspect these features prior to and during moving to ensure turtles are not present. The biologist will also ensure any work materials do not create dispersal barriers to pond turtle. If a pond turtle is found in the work area during construction, work will stop until the individual(s) leave the area on their own volition. Workers should be vigilant to avoid turtles on roadways and be made aware of the potential for hatchling dispersal. Workers must also visually check for turtles (particularly hatchlings) under vehicles and equipment prior to moving them and allow the turtles to leave the area on their own volition before moving vehicles or equipment. Vehicles should stay on designated roads where feasible and if overland travel is needed in suitable habitat where there is a possibility of dispersing hatchlings, a monitor may be required. Before construction activities occur, a Qualified Biologist will search all suitable aquatic habitat in the project area a minimum of three times during appropriate weather conditions (e.g. sunny periods between 8am to 12pm, and from 3pm until an hour before dusk; air temperatures 55.0-90.0 degrees Fahrenheit; wind speeds less than 12.0 mph). Surveys will occur when western pond turtles are most likely to be detected in aquatic habitat. The highest probability of detection is from April 1 to September 30 (May 1 to August 31 at elevations above 3,500 feet). If work will occur outside of this window, a Qualified Biologist will also search upland habitat between October 1 and March 31 (September 1 to April 30 at elevations above 3,500 feet). In areas where western pond turtles are known to occur or could be present, follow current guidance for visual encounter surveys in the Visual Encounter Survey Protocol for Western Pond Turtles developed by the Oregon Native Turtle Working Group (ODFW 2020). If surveys are not conducted or do not follow USFWS-approved methods, assume western pond turtles are present in suitable aquatic and upland habitat. Inquire with local USFWS Field Office on western pond turtle data records and if surveys have been completed in the project area.
36	Environmentally Sensitive Areas and Wildlife Exclusion	USFWS-SPM-WPT-04 USFWS-SPM-REP-02	Fencing and/or monitoring will be used to protect western pond turtles and will be implemented in coordination with a Qualified Biologist. If the project site is suitable for fencing, the USFWS requires an Exclusion Fencing Plan, and a Qualified Biologist will determine where ESAF will be installed to protect western pond turtle habitat adjacent to the proposed project footprint. If complete exclusion of the project disturbance footprint with WEF is not feasible in the project area, projects may consider directional fencing (fencing that is meant to guide the movement of western pond turtles safely around a work area) to discourage western pond turtles from entering the project area from suitable habitat, or fencing off only portions of the larger project area as they are being actively worked on. The local USFWS Field Office may be contacted for technical assistance on excluding western pond turtles from a project area where complete exclusion fencing is not feasible. WEF must be opaque, non-climbable material, at least 2.0 feet (0.6 meters) high, have one-way exit funnels away from the work area, and contoured such that western pond turtles are unable to climb over the fence. WEF will include coverboards spaced every 50 to 100 feet on either side to provide cover to western pond turtles that encounter the fence. If WEF is found to be compromised, a Qualified Biologist will conduct a survey immediately preceding construction activity that occurs in western pond turtle habitat, or in advance of any activity that may affect other species. The Qualified Biologist will search along WEF and in pipes, culverts, and beneath equipment (e.g., vehicles or heavy equipment) before they are moved (see ASP-4, Entrapment). Monitoring can be conducted in lieu of WEF at sites where installation is not practicable (see GPM-5, Environmental Monitoring; and GPM-7, Environmentally Sensitive Areas and/or Wildlife Exclusion).
37	Clearing and Grubbing Vegetation - Western Pond Turtle	USFWS-SPM-AMP-06	An agency-approved biologist will be present during all vegetation clearing and grubbing activities in areas where the specialstatus reptiles are confirmed to occur, or where measures are being implemented based on presence of suitable habitat. Prior to vegetation removal, the agency-approved biologist will thoroughly survey the area for these species. Vegetation in sensitive areas will be cleared by handheld motorized tools (e.g., weed eaters, chainsaws) or hand pulling unless alternate methods are proposed by the project proponent and approved by agency(ies). Tree stumps and roots will be left in place where possible to avoid any ground disturbance and preserve refugia habitat, with the exception of non-native invasive plants that could propagate from remaining vegetative material. Native branches, leaf litter, mulch, woody debris, and other vegetative trimmings may be retained and spread on site to enhance habitat as appropriate.

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38	Species Observations and Encounters - Western Pond Turtle	USFWS-SPM-REP-05	<p>Each proposed project with the potential to encounter western pond turtle will submit a rescue and relocation plan to agency(ies) for review and approval prior to initiating construction. General guidance to be considered during plan development is as follows: 1) leave the uninjured animal if it is not in danger, or 2) move the animal to a nearby location if it is in danger as described in REP-006, Species Handling and Relocation, below. These options are further described as follows:</p> <ul style="list-style-type: none"> - When a special-status reptile is encountered in the project area, the priority is to stop all activities in the surrounding area that have the potential to result in the harm, injury, or death of the individual. The agency-approved biologist then needs to assess the situation to select the course of project that will minimize adverse effects to the individual. - Avoid contact with the animal and allow it to move out of the project footprint and hazardous situation on its own to a safe location. This guidance only applies to situations where an animal is encountered while moving through habitat and under conditions that will allow it to escape. This does not apply to animals that are uncovered or otherwise exposed or in areas where there is not enough adjacent habitat to support the life history of the special-status reptiles if they move outside the construction footprint. - Avoidance is the preferred option if the animal is not moving or is within some sort of burrow or other refugia. In this case, the area will be well marked for avoidance by construction and an agency-approved biologist will be assigned to the area when work is taking place nearby. If avoidance is not practicable or safe for the special-status reptile, the project proponent will implement REP-006, below.
39	Work Windows - Western Pond Turtle	USFWS-SPM-WPT-03	<p>For project areas where the northwestern pond turtle or southwestern pond turtle are known or assumed to occur, avoid work during the following windows:</p> <ul style="list-style-type: none"> -For project activities that involve in-water/dewatering work, work will be avoided from October 1 to March 31. -For project activities within 500 meters (1604.4 feet) of suitable nesting habitat (i.e. sunny, open grasslands and ruderal habitat or bare soil), avoid disturbing nesting adult females from May 15 to July 31 for the northwestern pond turtle (except May 1 to July 31 in the San Joaquin Valley) and May 1 to July 31 for the southwestern pond turtle unless wildlife exclusion fencing has been installed around all suitable nesting habitat within the proposed project footprint prior to the start of the nesting season (i.e., prior to May 15 for the northwestern pond turtle (except prior to May 1 in the San Joaquin Valley) and prior to May 1 for the southwestern pond turtle). -For project activities in overwintering habitat (e.g. muddy pond bottoms), work will be avoided from October 1 to March 31 (September 1 to April 30 above 3,500 feet elevation) unless wildlife exclusion fencing has been installed around all suitable overwintering habitat within the proposed project footprint prior to the start of the overwintering season (i.e., prior to October 1 at elevations < 3,500 feet and prior to September 1 at elevations > 3,500 feet). Alternatively, if installation of wildlife exclusion fencing around all overwintering habitat is not feasible, then all suitable overwintering cover (e.g. leaf litter layer, woody debris) will be removed from the project footprint before overwintering begins (i.e., prior to October 1 at elevations < 3,500 feet and prior to September 1 at elevations > 3,500 feet), and will be maintained daily free of suitable overwintering cover. A qualified biologist will also search all mammal burrows for overwintering western pond turtles and move them out of harm's way. The qualified biologist then may collapse the burrows to prevent their usage by overwintering western pond turtles. -For project activities in aestivation habitat (e.g., upland habitat (e.g. leaf litter) within 500 meters (1,640.4 feet) of suitable aquatic habitat), work will be avoided when nearby seasonal aquatic habitat is dry unless wildlife exclusion fencing has been installed around all suitable aestivation habitat within the proposed project footprint before nearby seasonal aquatic habitats dry up. <p>Work windows may be modified via completion of the ESA Section 7(a)(2) Review Form and local Field Office approval and in consultation with California Department of Fish and Wildlife.</p>
40	Capture and Relocation - Western Pond Turtle	USFWS-SPM-WPT-05 USFWS-SPM-REP-05 USFWS-SPM-AMP-06	<p>Western pond turtles will only be captured and relocated when it is the only option to prevent injury or mortality, and after all attempts to avoid interaction with the species have been used. If necessary to avoid injury or mortality, relocation of western pond turtles will be conducted by a Qualified Biologist in accordance with the requirements of REP-6, Species Handling and Relocation. Western pond turtle relocation will be conducted as described in a USFWS-approved reptile relocation plan submitted by the Green Gulch Farm to the local USFWS Field Office concurrently with the ESA Section 7(a)(2) Review Form or at least 60 days before construction. Early submission facilitates timely USFWS review and approval and helps avoid project delays.</p> <ul style="list-style-type: none"> -Avoid and minimize transfer of diseases (e.g. turtle-shell disease, respiratory disease). The Qualified Biologist will wear disposable nonlatex or rubber gloves when handling individual turtles to inhibit transmission of disease. Any suspected observations of disease such as respiratory or turtle-shell disease in western pond turtles or any other species of turtle at the project site will be reported to the USFWS within 24 hours and before relocating any western pond turtle. If any western pond turtle or other turtle species in the project site test positive or are suspected of turtle-shell disease, then all turtles at the project site will be considered to be potentially infected. All equipment and clothing will be decontaminated and dried completely prior to and after use at an aquatic project site to prevent disease transmission between water bodies. -Western pond turtles will be released within a few hours of capture. Individuals will be kept in containers with high sides, such as 5-gallon (18.9 liter) plastic buckets or 10-gallon (37.9 liter) storage tubs. Place a lid or piece of cloth over the top to darken the container. Keep captured western pond turtles out of direct sunlight because overheating is possible in a short time. -The Qualified Biologist will capture and relocate the western pond turtle the shortest distance possible to a location that contains similar suitable habitat and that will not be affected by activities associated with the project. No western pond turtles will be relocated more than 500 meters or to a different watershed to prevent disorientation and the spread of diseases. -If a western pond turtle found in upland habitat is suspected of traveling to an overwintering/aestivation or nesting site and voids its bladder upon handling, then the western pond turtle will be returned to aquatic habitat. -Nesting or gravid female western pond turtles will be avoided to the greatest extent practicable. If an adult female western pond turtle is gravid or post-nesting, the Qualified Biologist will determine if she will be relocated to suitable undisturbed nesting habitat or suitable aquatic habitat outside of the work area. All possible precautions will be taken to allow her to continue to nest and to avoid nest failure. <p>Refer to the 2024 Northwestern Pond Turtle Avoidance and Minimization Measures (USFWS 2024a) and Southwestern Pond Turtle Avoidance and Minimization Measure Recommendations (USFWS 2024b) for more details on relocation of western pond turtles.</p>
41	No Net Loss of Basking Habitat	USFWS-SPM-WPT-06	Maintain existing basking structures (e.g. logs, rocks, shorelines, emergent vegetation, algal mats, and substrate adjacent to aquatic habitat whenever possible. Avoid planting trees and shrubs that would shade suitable basking habitat and maintain an open riparian canopy to allow sufficient solar exposure for basking. Install basking structures as necessary for any basking habitat that is removed.
42	Avoid Excessively Shading Nesting Habitat	USFWS-SPM-WPT-07	Avoid planting trees and shrubs that would shade suitable nesting habitat if nesting habitat is limited near the project area.

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43	Removal of Nonnative Invasive Species	USFWS-SPM-AMP-08	<p>Removal of any individuals of nonnative invasive species (e.g., bullfrogs, nonnative crayfish, or nonnative fishes) is encouraged as practicable to facilitate conditions for project success. The Green Gulch Farm is responsible for ensuring that these activities comply with the California Fish and Game Code. Suspected hybrid California tiger salamander will not be removed without specific authorization from USFWS (and CDFW, in accordance with their requirements). More details on nonnative animal removal are provided below.</p> <ol style="list-style-type: none"> In federally-listed aquatic species occupied habitat, a USFWS-Approved Biologist will be present during removal activities. Less experienced personnel assisting with removal efforts will get confirmation of species identification of all vertebrates prior to collection and removal. All individuals participating in removal activities will have training in identification of Covered Species that might be present and nonnative species proposed for removal and proper techniques for all planned removal methods prior to the initiation of removal activities. Crew size, along with the amount of time spent in any given habitat area, will be kept to the minimum necessary. Repeated disturbance of any given area within a single year will be avoided unless necessary for eradication purposes. 4. To the extent feasible, both native and nonnative fauna will be examined for signs of diseases or parasites soon after capture, and any abnormalities will be photographed and documented. Prior to initiation of electrofishing activities in Covered Species habitat, the names and credentials of all electrofishing crew leaders will be submitted for review and approval by USFWS. The USFWS-approved electrofishing crew leader will provide training to the crew regarding potential risks associated with electrofishing and injury to Covered Species. The crew will also be trained to identify signs of injury and appropriate response. Electrofishing will be conducted using the minimum pulse rate and width that is effective. Only direct or pulsed direct current will be used. In shallow waters, undercut banks, near algal mats or other areas where Covered Species can be concentrated or are more likely to come into close contact with electrofishing equipment, the amount of time spent electrofishing will be minimized. If any Covered Species are immobilized by electrofishing activities, they will be carefully removed from the water body by a USFWS-Approved Biologist until activities are completed. These individuals will be held for the minimum amount of time necessary and monitored until they are completely mobile and then returned to the point of capture. Handling of individuals (e.g., arroyo toad, California red-legged frog) may occur if they are inadvertently collected by net or trap, in accordance with procedures for handling in AMP-11 and FISH 3. These individuals will be released at the place of capture or will be relocated to the nearest available suitable habitat. Gill nets will be used upstream and downstream of occupied stream stretches, but not in stream stretches where Covered Species might occur. Where gill nets are used, they will not be left unattended overnight If traps are used, they will be carefully monitored to minimize the potential for injury and mortality of nontarget species. Fish traps will be used under the following conditions: (a) fish traps will be checked a minimum of once a day; (b) fish traps will be set so that air will be available at the top of the trap; and (c) if predator tracks adjacent to or signs of predator tampering with fish traps occur, these traps will be closed for a period of time until predator activity is no longer detected.
44	Qualifications of the Qualified Biologist and USFWS-Approved Biologist	USFWS-SPM-ASP-01	<p>Biological monitoring and construction oversight will be provided by biologists at two different experience levels, depending on the activity. These two levels are described in this measure, below. In general, the Qualified Biologist will complete many tasks across species for a Proposed Restoration Project, and the USFWS-Approved Biologist will only be required for specific tasks that require additional species expertise. In some cases, the Qualified Biologist(s) may work under the guidance, direction, or supervision of the USFWS-Approved Biologist. Unless otherwise indicated in Section 2.1.5.3, Guild- and Species-Specific Protection Measures, general site surveys and biological monitoring can be conducted by a Qualified Biologist. Because the qualifications for the USFWS-Approved Biologist exceed those for the Qualified Biologist, any activity indicated as appropriate for the Qualified Biologist may also be completed by a USFWS-Approved Biologist.</p> <p>- Qualified Biologist: The Qualified Biologist is required to meet certain qualifications, as confirmed by the Green Gulch Farm. Resume review by the USFWS is not required for the Qualified Biologist. Minimum qualifications for the Qualified Biologist include a bachelor's degree in biological or environmental science, natural resources management, or related discipline; field experience in the habitat types that may occur at the project site; familiarity with the Covered Species (or closely related species) that may occur at the project site; and prior preconstruction survey, construction monitoring, or construction oversight experience (if and as relevant to the activity to be conducted).</p> <p>- USFWS-Approved Biologist: For some Covered Species, additional qualifications may be required for biologists who would be responsible for species handling or relocation, or other activities (Section 2.1.5.3, Guild- and Species-Specific Protection Measures). These activities would be completed by the USFWS-Approved Biologist when required by the protection measures. Resume(s) for the USFWS-Approved Biologist(s) with experience in the identification of all life stages and ecology of the applicable Covered Species (or closely related species) and their critical habitat will be submitted to the USFWS Field Office for review and approval at least 30 days prior to any activity for which the protection measures indicate that a USFWS-Approved Biologist is required. Because species handling and relocation of some species for proposed restoration projects would be authorized by USFWS through issuance of the PBO and associated ITS, it may not be a requirement for the USFWS-Approved Biologist to hold a federal Section 10(a)(1)(A) Recovery Permit to implement this role on an approved project under this program. However, it is noted that some presence/absence surveys that may be performed by a USFWS-Approved Biologist may require that the person conducting those surveys hold a Section 10(a)(1)(A) Recovery Permit. For any surveys, securing/confirming necessary 10(a)(1)(A) permits and other authorizations should be coordinated with the respective USFWS Field Office.</p>
45	Wildlife Passage Design	USFWS-SPM-AMP-01	<p>For projects that include the installation, repair, or replacement of permanent or temporary fencing (e.g., security, landscape, or privacy fencing) fencing will be designed to allow for permeability; it will incorporate a minimum 6-inch gap at regular intervals to allow for covered amphibians to disperse between upland and breeding habitat. This measure is not applicable to ESAF or WEF specified as part of construction activities to protect habitats or exclude wildlife from the work areas. Facilities such as curbs, drainages, culverts, and fence "footers" will be designed with gradually sloped sides or intermittent gaps to facilitate wildlife movement.</p>
46	Wildfire Prevention	USFWS-GPM-16	<p>With the exception of vegetation-clearing equipment, no vehicles or construction equipment will be operated in areas of tall, dry vegetation. A fire prevention and suppression plan will be developed and implemented for all maintenance and repair activities that require welding or otherwise have a risk of starting a wildfire.</p>
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48	Minimizing Disturbance to Riparian Vegetation	NMFS-CC-BO-RVM-01	<p>Green Gulch Farm shall retain as many trees and shrubs as feasible, emphasizing shade-producing and bank-stabilizing trees and brush.</p>
49	Access Points to Construction	NMFS-CC-BO-RVM-02	<p>Prior to construction, Green Gulch Farm will determine locations and equipment access points that minimize riparian disturbance. Pre-existing access points shall be used whenever possible. Avoid entering unstable areas, which may increase the risk of channel instability.</p>
50	Reducing Soil Compaction	NMFS-CC-BO-RVM-03	<p>Minimize soil compaction by using equipment with a greater reach or that exerts less pressure per square inch on the ground, resulting in less overall area disturbed or less compaction of disturbed areas.</p>
51	Chainsaw/Saw use in Riparian Areas	NMFS-CC-BO-RVM-04	<p>If riparian vegetation is to be removed with chainsaws, consider using saws currently available that operate with vegetable-based bar oil.</p>

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52	Revegetation Monitoring NMFS	NMFS-CC-BO-RVM-07	For projects where re-vegetation is implemented to compensate for riparian vegetation impacted by project construction, a re-vegetation monitoring report will be required after 2 years to document success. Success is defined as 80% survival of plantings or 80% ground cover for broadcast planting of seed after a period of 2 years. If revegetation efforts will be passive (i.e., natural regeneration), success will be defined as total cover of woody and herbaceous material equal to or greater than pre-project conditions. If at the end of 2 years, the vegetation has not successfully been re-established, the applicant will be responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice, to achieve these requirements. If success is not achieved within the first 2 years, the project applicant will need to prepare a follow-up report in an additional year's time.
53	Qualified Biologist for Fish Exclusion During Dewatering	NMFS-CC-BO-IWW-03 NMFS-CC-BO-IWW-04	Coordinate project site dewatering with a qualified biologist to perform fish and amphibian relocation activities. The qualified biologist(s) will possess all valid state and federal permits needed for fish relocation and will be familiar with the life history and identification of salmonids, state-listed fish, and listed amphibians within the action area. Prior to dewatering a construction site, qualified individuals will capture and relocate fish and amphibians to avoid direct mortality and minimize take. This is especially important if listed species are present within the project site.
54	Capture and Relocation of Salmonids Guidelines for a Qualified Biologist	NMFS-CC-BO-IWW-15	A qualified fisheries biologist shall perform all seining, electrofishing, and fish relocation activities. The qualified fisheries biologist shall capture and relocate salmonids and other native fish prior to construction of the water diversion structures (e.g., cofferdams). The qualified fisheries biologist shall note the number of salmonids observed in the affected area, the number of salmonids relocated, and the date and time of collection and relocation. The qualified fisheries biologist shall have a minimum of three years of field experience in the identification and capture of salmonids, including juvenile salmonids. The qualified biologist will adhere to the following requirements for capture and transport of salmonids: a) Determine the most efficient means for capturing fish. Complex stream habitat generally requires the use of electrofishing equipment, whereas in outlet pools, fish may be concentrated by pumping down the pool and then seining or dip netting fish. b) Notify the RC one week prior to capture and relocation of salmonids to provide RC or NMFS staff an opportunity to attend. c) Initial fish relocation efforts will be conducted several days prior to the start of construction. This provides the fisheries biologist an opportunity to return to the work area and perform additional electrofishing passes immediately prior to construction if there is water in the isolated construction area. In these instances, additional fish could be captured that eluded the previous day's efforts. If water is left in the construction area, dissolved oxygen levels sufficient for salmonid survival must be maintained. d) At project sites with high summer water temperatures, perform relocation activities during morning periods. e) Prior to capturing fish, determine the most appropriate release location(s). Consider the following when selecting release site(s): - Similar water temperature as capture location - Ample habitat for captured fish - Low likelihood of fish reentering work site or becoming impinged on exclusion net or screen. f) Periodically measure air and water temperatures and monitor captured fish. Temperatures will be measured at the head of riffle tail of pool interface. Cease activities if health of fish is compromised owing to high water temperatures, or if mortality exceeds three percent of captured salmonids.
55	Fish Relocation using Electrofishing	NMFS-CC-BO-IWW-16	The following methods shall be used if fish are relocated via electrofishing: 1. All electrofishing will be conducted according to NMFS' Guidelines for Electrofishing Waters Containing Salmonids Listed Under the Endangered Species Act (NMFS 2000). 2. The backpack electro-fisher shall be set as follows when capturing fish: Voltage setting on the electro-fisher shall not exceed 300 volts. Initial Maximum A) Voltage: 100 Volts 300 Volts B) Duration: 500 1/4s (microseconds) 5 ms (milliseconds) C) Frequency: 30 Hertz 30 Hertz 3. A minimum of three passes with the electro-fisher shall be utilized to ensure maximum capture probability of salmonids within the area proposed for dewatering. 4. Water temperature, dissolved oxygen, and conductivity shall be recorded in an electrofishing log book, along with electrofishing settings. 5. A minimum of one assistant shall aid the fisheries biologist by netting stunned fish and other aquatic vertebrates.
56	Fish Relocation using Seines	NMFS-CC-BO-IWW-17	The following methods shall be used if fish are removed with seines. 1. A minimum of three passes with the seine shall be utilized to ensure maximum capture probability of all salmonids within the area. 2. All captured fish shall be processed and released prior to each subsequent pass with the seine. 3. The seine mesh shall be adequately sized to ensure fish are not gilled during capture and relocation activities.
57	Relocation of Salmonids using either Electrofishing or Seining	NMFS-CC-BO-IWW-18	The following methods shall be used during relocation activities associated with either method of capture (electrofishing or seining): 1. Fish shall not be overcrowded into buckets, allowing no more than 150 0+ fish (approximately six cubic inches per 0+ individuals) per 5 gallon bucket and fewer individuals per bucket for larger/older fish. 2. Every effort shall be made not to mix 0+ salmonids with larger steelhead, or other potential predators, that may consume the smaller salmonids. Have at least two containers and segregate young-of-year (0+) fish from larger age classes. Place larger amphibians in the container with larger fish. 3. Salmonid predators, including other fishes and amphibians, collected and relocated during electrofishing or seining activities shall not be relocated so as to concentrate them in one area. Particular emphasis shall be placed on avoiding relocation of predators into the salmonid relocation pools. To minimize predation of salmonids, these species shall be distributed throughout the wetted portion of the stream to avoid concentrating them in one area. 4. All captured salmonids shall be relocated, preferably upstream, of the proposed construction project and placed in suitable habitat. Captured fish shall be placed into a pool, preferably with a depth of greater than two feet with available instream cover. 5. All captured salmonids will be processed and released prior to conducting a subsequent electrofishing or seining pass. 6. All native captured fish will be allowed to recover from electrofishing before being returned to the stream. 7. Minimize handling of salmonids. However, when handling is necessary, always wet hands or nets prior to touching fish. Handlers will not wear insect repellants containing the chemical N,N-Diethyl-meta-toluamide (DEET). 8. Temporarily hold fish in cool, shaded, aerated water in a container with a lid. Provide aeration with a battery-powered external bubbler. Protect fish from jostling and noise and do not remove fish from this container until time of release. 9. Place a thermometer in holding containers and, if necessary, periodically conduct partial water changes to maintain a stable water temperature. If water temperature reaches or exceeds those allowed by CDFW and NMFS, fish shall be released and rescue operations ceased. 10. In areas where aquatic vertebrates are abundant, periodically cease capture, and release at predetermined locations. 11. Visually identify species and estimate year-classes of fish at time of release. Count and record the number of fish captured. Avoid anesthetizing or measuring fish. Also identify hatchery (clipped adipose fin) and wild fish. 12. If more than 3 percent of the salmonids captured are killed or injured, the project permittee shall contact the RC (currently Joe Pecharich (707) 575-6095 or at joe.pecharich@noaa.gov). The RC will then contact NMFS within 24 hours. 13. The purpose of the contact is to review the activities resulting in take and to determine if additional protective measures are required. All salmonid mortalities must be retained, placed in an appropriately sized, zip-sealed bag, labeled with the date and time of collection, fork length, location of capture, and frozen as soon as possible. Frozen samples must be retained until specific instructions are provided by NMFS.
58	Instream Construction Location	NMFS-CC-BO-IWW-21	Where feasible, the construction shall occur from the bank, or on a temporary pad underlain with filter fabric.

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59	Heavy Equipment in Wetted Channels	NMFS-CC-BO-IWW-22	No heavy equipment will enter wetted channels.
60	Use or Storage of Petroleum Powered Equipment	NMFS-CC-BO-IWW-24	The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the state (Fish and Game Code 5650).
61	Erosion Control Methods	NMFS-CC-BO-WQHM-02 NMFS-CC-BO-04	Effective erosion control measures shall be in place at all times during construction. Do not start construction until all temporary control devices (straw bales with sterile, weed free straw, silt fences, etc.) are in place downslope or downstream of project site within the riparian area. The devices shall be properly installed at all location where the likelihood of sediment input exists. These devices shall be in place during and after construction activities for the purposes of minimizing fine sediment and sediment/water slurry input to flowing water and of detaining sediment-laden water on site. If continued erosion is likely to occur after construction is completed, then appropriate erosion prevention measures shall be implemented and maintained until erosion has subsided. Erosion control devices such as coir rolls or erosion control blankets will not contain plastic netting of a mesh size that would entrain, fish, reptiles or amphibians.
62	Sediment Contamination from Construction	NMFS-CC-BO-WQHM-04	Sediment-laden water created by construction activity shall be filtered before it leaves the right-of-way or enters the stream network or an aquatic resource area
63	Maintenance for Storm Events	NMFS-CC-BO-WQHM-05	The contractor/project applicant is required to inspect and repair/maintain all practices prior to and after any storm event, at 24-hour intervals during extended storm events, and a minimum of every two weeks until all erosion control measures have been completed.
64	Post Construction Minimization of Erosion	NMFS-CC-BO-WQHM-11	Immediately after project completion and before close of seasonal work window, stabilize all exposed soil with mulch, seeding, and/or placement of erosion control blankets. Remove all artificial erosion control devices after the project area has fully stabilized. All exposed soil present in and around the project site shall be stabilized within 7 days. Erosion control devices such as coir rolls or erosion control blankets will not contain plastic netting of a mesh size that would entrain reptiles and amphibians.
65	Bare and/or Disturbed Slopes Erosion Control	NMFS-CC-BO-WQHM-12	All bare and/or disturbed slopes (larger than 10' x 10' of bare mineral soil) will be treated with erosion control methods such as straw mulching, netting, fiber rolls, and hydro-seed as permanent erosion control measures.
66	Straw, Mulch, or Slash as Erosion Control	NMFS-CC-BO-WQHM-13	Where straw, mulch, or slash is used as erosion control on bare mineral soil, the minimum coverage shall be 95% with a minimum depth of two inches.
67	Seeding as Erosion Control	NMFS-CC-BO-WQHM-14	When seeding is used as an erosion control measure, only natives will be used. Sterile (without seeds), weed-free straw, free of exotic weeds, is required when hay bales are used as an erosion control measure.
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69	Native Vegetation Survey	PCI-NV-01	Complete a follow up survey in the year of construction in March or April for special-status Marin checker lily in the coastal shrubland within the project area.
70	Protect Native Trees	PCI-NV-02	Protect native trees. Native trees are present in or adjacent to some of the work areas. Some will need to be removed for project completion. For those not intended for removal, the project is designed to minimize disturbance within the root protection zone. Native trees are particularly susceptible to disturbance, especially within the root crown (the base of the trunk) and root zone commonly referred to as the root protection zone (RPZ, which is typically defined as one-third larger than the drip line radius measured from the trunk. To ensure minimal or no impacts within the RPZ:-Temporary protective fencing should be installed around RPZs or, at a minimum, the dripline perimeter of trees adjacent to work areas to help avoid soil compaction within protected tree perimeters during construction. - Heavy equipment, vehicles, and/or construction materials should not be parked or stored or operated within the delineated RPZ/dripline perimeter to the extent feasible. Where exactly are the RPZ's for this project. Staging and access are already identified – are there trees to worry about in these areas. The only area that comes to mind is reservoirs 3 and 4 – there are native willows and other spp around 4 and willows around 3. I think we could take some of this out, but we will probably need to work close to at least some willows. If more refinement needed, let's look at this together with photos/map I adjusted the language Vehicles are only parked at staging areas. Ideally yes, but that is not always how it goes on construction
71	California Giant Salamander Survey	PCI-CGS-01	To avoid impacts on California giant salamander, a preconstruction survey should occur prior to beginning work within 24 hours, and work should only occur in areas that have been surveyed; this should include all disturbance areas and 50-foot buffer around them. Any adults found within the project site should be relocated to suitable off-site habitat. During construction, the procedure for encounters described above for CRLF should be followed.
72	Burrowing Owl Protocol	PCI-BO-01	To avoid potential losses of overwintering burrowing owls, preconstruction surveys will be completed if work begins after August 31 and before March 1 (burrowing owl overwintering season). The preconstruction surveys will be conducted within two weeks prior to initiation of vegetation clearing, tree removal and trimming, or other construction related activities, including noise disturbance. The survey will be completed within the construction area and a 200-foot buffer. If the biologist finds no active overwintering activity, then work will proceed without restrictions. If occupied burrows are identified within 200 feet of the construction area a qualified biologist will determine whether construction activities may impact the owl. If it is determined that construction would not affect overwintering behavior, construction will proceed without restrictions. The determination of disruption will be based on the level of noise or construction disturbance and the line of sight between the burrow and the disturbance. If a qualified biologist determines that construction activities would likely disrupt overwintering activities, then a no-disturbance buffer will be placed around the burrow location. The no-disturbance buffer will include the burrow plus a 150-foot buffer. Construction activities in the no disturbance buffers will be avoided until the burrow has been vacated. If the site is left unattended for more than one week following the initial surveys or any time during construction during overwintering season, additional surveys will be completed.
73	Nesting Birds Protocol	PCI-NB-01 USFWS-SPM-ASP-02	To avoid impacts on nesting native birds from activities that disturb the ground or vegetation, preconstruction breeding bird surveys should be completed if work will occur between February 15 and August 15. The preconstruction surveys should be conducted within 7 days prior to initiation of vegetation clearing, grading, or other construction related activities, including noise disturbance. The survey should be completed within the construction area and a 200-foot buffer surrounding the site. If the biologist finds no active nesting or breeding activity, then work can proceed without restrictions. If active raptor or owl nests are identified within 200 feet of the construction area or active nests of other birds are identified within 50 feet of the construction area, a qualified biologist should determine whether construction activities may impact the active nest or disrupt reproductive behavior. If it is determined that construction would not affect an active nest or disrupt breeding behavior, construction can proceed without restrictions. The determination of disruption should be based on the species' sensitivity to disturbance (which can vary among species); the level of noise or construction disturbance and the line of sight between the nest and the disturbance. If a qualified biologist determines that construction activities would likely disrupt breeding or nesting activities, then a no-disturbance buffer should be placed around the nesting location. The no-disturbance buffer should include the active nest or breeding areas plus a 50-foot buffer for small songbirds and a 100-foot buffer for larger birds (e.g., raptors, owls) or as determined by the qualified biologist. Construction activities in the no disturbance buffers should be avoided until the nests have been vacated. If, during the nesting season, the site is left unattended for more than one week following the initial surveys, additional surveys should be completed. If State and/or federally listed birds are found breeding within the area, activities should be halted, and consultation with the CDFW and/or USFWS should occur to identify how to proceed.
74	Bats Protocol	PCI-BATS-01	To avoid impacts on special-status and common bat species within the project site, the following protection measures shall be implemented. ◀Prior to tree removal or trimming (for all trees greater than 6 inches in diameter at DBH), a qualified biologist should survey for bat roosts. If active bat roosts are identified, disturbance should not be allowed until the roost is abandoned or unoccupied. If the qualified biologist determines special-status bat species are present, CDFW consultation may be required. ▶If tree trimming or removal is postponed or interrupted for more than two weeks
75	Preconstruction Cultural Resource Awareness Training	ARCH-01	Green Gulch will have a Secretary of the Interior (SOI)-qualified Archaeologist provide a Cultural Resources Awareness Training (CRAT) prior to the start of ground-disturbing activities, and over the duration of the Project as needed to ensure that all members of the construction team overseeing or conducting Project-related ground-disturbing activities have received training. A CRAT brochure shall be developed by the SOI-qualified Archaeologist and provided to all attendees. The CRAT shall include relevant information regarding archaeological and tribal resources that could be encountered, applicable regulations, and protocols for discovery. The CRAT shall also describe appropriate avoidance and impact minimization measures for archaeological and tribal resources discovered during construction, and shall outline what to do and who to contact if any potential archaeological or tribal resources are encountered. The CRAT shall emphasize the requirement for confidentiality and culturally-appropriate treatment of any discovery of significance to Native Americans and shall discuss appropriate behaviors and responsive actions, consistent with Native American tribal values. After construction begins, additional CRATs shall be provided as needed to ensure that all members of the construction team overseeing or conducting Project-related ground-disturbingactivities have received the necessary training. Attendance rosters shall be submitted to verify the training.

SF Zen Center Green Gulch Farm Avoidance and Minimization Measures

	A	B	C
1	Protection Measure Title	Measure Sources & Measure Number	Protection Measure Description and Requirements
76	Archaeological Monitoring Plan/Archaeological Monitoring	ARCH-02	Green Gulch Farm will have a SOI-qualified Archaeologist retained to prepare an Archaeological Monitoring Plan (AMP) and provide archaeological monitoring during Project-related ground-disturbing activities within the valley floor portion of the Project Area/APE near Green Gulch Creek. The AMP shall outline the specific locations where monitoring is needed, the types of archaeological resources that could be encountered, the qualifications and requirements of the staff conducting and overseeing archaeological monitoring, the methods to be undertaken during monitoring, and the procedures to follow in the event of an archaeological discovery. The Archaeological Monitoring Plan shall also include a provision allowing for a reduced level of monitoring in specific locations or for specific activities if the SOI-qualified Archaeologist determines that archaeological resources are not likely to be encountered. If monitoring is reduced to spot-checking, the spot-checking shall occur in areas of new ground-disturbance and/or when ground disturbance extends to depths not previously reached. Daily monitoring logs shall be completed by the archaeological monitor and a report shall also be prepared to document the findings after construction is complete.
77	Post-Review Discovery of Archaeological Resources	ARCH-03	If an archaeological resource is encountered during Project-related, ground-disturbing activities, all work within 50 feet of the discovery area shall be redirected until a SOI-qualified Archaeologist conducts a field inspection to determine the nature of the resource and assess its NRHP eligibility. If the resource is found to be potentially eligible for the NRHP, the Project applicant shall notify the lead federal agency to initiate the post-review discovery process outlined in 36 CFR Part 800.13, which states that if historic properties are discovered or unanticipated effects on historic properties are found after the Section 106 process is complete (i.e., post-review), the federal agency shall make reasonable efforts to avoid, minimize or mitigate "adverse effects" to such properties.
78	Discovery of Human Remains	ARCH-04	If human remains are encountered within the Project Area, all work must stop within 100-feet of the discovery area, the area and associated spoils shall be secured to prevent further disturbance, and the Marin County coroner must be notified immediately. It is important that the suspected human remains and the area around them are left undisturbed and that the proper authorities are called to the scene as soon as possible. The coroner will determine if the remains are precontact period Native American remains or of modern origin, and if further investigation by the coroner/sheriff is warranted. If the remains are suspected to be those of a precontact period Native American, the coroner shall contact the NAHC within 24-hours. The NAHC will immediately notify the person it believes to be the most likely descendant (MLD) of the remains. The MLD will have 48-hours to make recommendations to the landowner for the treatment or disposition of the human remains and associated artifacts. A Secretary of the Interior-qualified Archaeologist shall also conduct a field inspection to assess the significance of the discovery, and the Project applicant shall notify the lead federal agency and/or responsible entity to initiate the post-review discovery process outlined in 36 CFR Part 800.13.

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
Aesthetics	<p>Mitigation Measure AES-1: Minimize Degradation of Visual Quality</p> <ul style="list-style-type: none"> • Use compatible colors for proposed structural features, such as fish screens and storage tanks. Use earth tone paints and stains with low levels of reflectivity. • Minimize the vertical profile of proposed structures as much as possible. • Use vegetation plantings on proposed facility walls, such as climbing plants, espaliers, and other forms that soften the appearance of structures. • Provide vegetative screening to soften views of structures. Landscaping should complement the surrounding landscape. 	Green Gulch Farm	
Air Quality	<p>Mitigation Measure AIR-1: Minimize Conflicts with Applicable Air Quality Plans Proponents of restoration projects permitted under the Order and their construction contractors shall implement the following measures to minimize conflicts between project construction and applicable air quality plans:</p> <ul style="list-style-type: none"> • Use equipment and vehicles that comply with CARB requirements and emission standards for on-road and off-road fleets and engines. New engines and retrofit control systems should reduce NOX and PM emissions from diesel-fueled on-road and off-road vehicles and equipment. • Minimize idling times, either by shutting equipment off when not in use or by reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure, Title 13, Section 2485 of the California Code of Regulations). Clear signage should be posted for construction workers at all entrances to the site. • Maintain all equipment in proper working condition according to the manufacturer's specifications. • Use electric equipment when possible. Use lower emitting alternative fuels to power vehicles and equipment where feasible. • Use low-volatile organic compound (VOC) coatings and chemicals; minimize chemical use. <p>Mitigation measures for individual restoration projects would also include recommendations or requirements of the local air district(s). Project proponents would coordinate with local air district(s) regarding project-specific mitigation and implement applicable measures during construction. For example, the Bay Area Air</p>	Green Gulch Farm	

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
	<p>Quality Management District (BAAQMD) lists basic and additional mitigation measures to reduce emissions from project construction (BAAQMD 2010, 2017).</p> <p>The following basic construction mitigation measures are recommended for restoration projects permitted under the Order:</p> <ul style="list-style-type: none"> • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph). 		
Air Quality	<p>Mitigation Measure AIR-2: Minimize Construction Air Pollutant Emissions</p> <p>Air quality analyses prepared for future restoration projects shall evaluate human health risks from potential exposures of sensitive receptors to substantial pollutant concentrations from the projects. The need for a human health risk analysis should be evaluated using approved screening tools and discussed with the local air quality management district or air pollution control district during the preparation of the air quality analysis.</p> <p>If the project’s health risk is determined to be significant, control measures should be implemented to reduce health risks to levels below the applicable air district threshold.</p> <p>Implementation of one or more of the following requirements, where feasible and appropriate, would reduce the effects of construction:</p> <ul style="list-style-type: none"> • Use equipment with diesel engines designed or retrofitted to minimize DPM emissions, usually through the use of catalytic particulate filters in the exhaust. • Use electric equipment to eliminate local combustion emissions. 	Green Gulch Farm	

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
	<ul style="list-style-type: none"> • Use alternative fuels, such as compressed natural gas or liquefied natural gas. 		
Air Quality	<p>Mitigation Measure AIR-3: Minimize GHG Emissions Restoration projects permitted under the Order shall implement the GHG mitigation measures listed in the most recent air district guidance documents (e.g., CAPCOA 2010; BAAQMD 2011), as appropriate for the project site and conditions. Current versions of such guidance documents list the following for construction of projects:</p> <ul style="list-style-type: none"> • Use alternative fuels for construction equipment. • Use electric and hybrid construction equipment. • Limit construction equipment idling beyond regulatory requirements. • Institute a heavy-duty off-road vehicle plan. • Implement a construction vehicle inventory tracking system. • Use local building materials for at least 10 percent of total materials. • Recycle or reuse at least 50 percent of construction waste or demolition materials. <p>In addition, the California Attorney General’s Office has developed a list of measures and strategies to reduce GHG emissions at the individual project level. As appropriate, the measures can be included as design features of a restoration project, required as changes to the project, or imposed as mitigation (whether undertaken directly by the project proponent or funded by mitigation fees). The measures are examples; the list is not intended to be exhaustive. The following are best management practices to consider and implement (as applicable) during design, construction, and O&M of project facilities.</p> <p><i>Transportation and Motor Vehicles</i></p> <ul style="list-style-type: none"> • Limit idling time for commercial vehicles, including delivery and construction vehicles. • Use low- or zero-emission vehicles, including construction vehicles. • Institute a heavy-duty off-road vehicle plan and a construction vehicle inventory tracking system for construction projects. • Promote ridesharing. 	Green Gulch Farm	

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
	<ul style="list-style-type: none"> • Provide the necessary facilities and infrastructure to encourage the use of low- or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations). • Provide a shuttle service to public transit/work sites. • Provide information on all options for individuals and businesses to reduce transportation-related emissions. <p><i>SmartWay Truck Efficiency</i> This strategy involves requiring existing trucks/trailers to be retrofitted with the best available “SmartWay Transport” and/or CARB-approved technology. Technologies that reduce GHG emissions from trucks include devices that reduce aerodynamic drag and rolling resistance. Aerodynamic drag may be reduced using devices such as cab roof fairings, cab side gap fairings, cab side skirts, and on the trailer side, skirts, gap fairings, and trailer tail. Rolling resistance can be reduced using single wide tires or low-rolling resistance tires and automatic tire inflation systems on both the tractor and the trailer.</p> <p><i>Tire Inflation Program</i> The strategy involves actions to ensure that vehicle tire pressure is maintained to manufacturer specifications.</p> <p><i>Anti-Idling Enforcement</i> The strategy guarantees emissions reductions as claimed by increasing compliance with anti-idling rules, thereby reducing the amount of fuel burned through unnecessary idling. Measures include enhanced field enforcement of anti-idling regulations, increased penalties for violations of anti-idling regulations, and restriction on registrations of heavy-duty diesel vehicles with uncorrected idling violations.</p>		

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
Cultural Resources	<p>Mitigation Measure CUL-1: Conduct Inventory and Significance Evaluation of Architectural Resources Before implementation of any project permitted under the Order, the need for an inventory and significance evaluation of architectural resources in the project area shall be assessed, and, if necessary, based upon the type of restoration activity conducted and potential for built features to be present or disturbed. The assessment should consist of a review of maps and aerial photos to see if existing buildings dams, levees, roads, or other built features are in the CEQA project area. If so, and the age of these features is either unknown or is known to be older than 45 years old, then an inventory and evaluation should be completed by, or under the direct supervision of, a qualified architectural historian, defined as one who meets the U.S. Secretary of the Interior’s Professional Qualifications Standards for Historical History or History. This inventory and evaluation shall include the following:</p> <ul style="list-style-type: none"> • Map(s) and verbal description of the project CEQA Area of Potential Effects (C-APE) for cultural resources that delineates both the horizontal and vertical extents of where a project could result in impacts, including both direct and indirect, on cultural resources. • A records search at the appropriate repository of the California Historical Resources Information System for the C-APE and vicinity (typically areas within 0.25 or 0.5 mile, based on setting) to acquire records on previously recorded cultural resources in the C-APE and vicinity and previous cultural resources studies conducted for the C-APE and vicinity. • Background research on the history of the C-APE and vicinity for all projects determined to need additional historical architecture assessment. • If, after review, features of the built environment are determined to be less than 45 years old, a summary statement of their age and references for this determination will be included in the project area description. No further analysis is necessary. • If historic-era built resources are determined to likely be present, an architectural field survey of the C-APE, unless previous architectural field surveys no more than two years old have been conducted for the C-APE, in which case a new field survey is not necessary. Any architectural resources identified in the C-APE during the survey shall be recorded on the appropriate California Department of Parks and Recreation 523 forms (i.e., site record forms). 	Green Gulch Farm	Completed by EDS 02/28/2025

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
	<ul style="list-style-type: none"> • An evaluation of any architectural resources identified in the C-APE for California Register eligibility (i.e., whether they qualify as historical resources, as defined in State CEQA Guidelines Section 15064.5). • An assessment of potential project impacts on any historical resources identified in the C-APE. This should include an analysis of whether the project’s potential impacts on the historical resource would be consistent with the U.S. Secretary of the Interior’s Standards for the Treatment of Historic Properties and applicable guidelines. • A technical report meeting U.S. Secretary of the Interior’s Standards for architectural history technical reporting This report will document the mitigation measures taken and any study results, and following CEQA lead agency review and approval, completes the requirements of this mitigation measure. <p>If potentially significant impacts on historical resources are identified, an approach for reducing such impacts shall be developed before project implementation and in coordination with interested parties (e.g., historical societies, local communities). Typical measures for reducing impacts include:</p> <ul style="list-style-type: none"> • Modifying the project to avoid impacts on historical resources. • Documentation of historical resources, to the standards of and to be included in the Historic American Building Survey, Historic American Engineering Record, or Historic American Landscapes Survey, as appropriate. As described in the above standards, the documentation shall be conducted by a qualified architectural historian, defined above, and shall include large-format photography, measured drawings, written architectural descriptions, and historical narratives. The completed documentation shall be submitted to the U.S. Library of Congress. • Relocation of historical resources in conformance with the U.S. Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. • Monitoring construction-related and operational vibrations at historical resources. • For historical resources that are landscapes, preservation of the landscape’s historic form, features, and details that have evolved over time, in conformance with the U.S. Secretary of the Interior’s Guidance for the Treatment of Cultural Landscapes. • Development and implementation of interpretive programs or displays, and community outreach. 		

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
Cultural Resources	<p>Mitigation Measure CUL-2: Conduct Inventory and Significance Evaluation of Archaeological Resources</p> <p>Before implementation of any project permitted under the Order that includes ground disturbance, an archaeological records search and sensitivity assessment, inventory and significance evaluation of archaeological resources identified in the C-APE shall be conducted. The inventory and evaluation should be done by or under the direct supervision of a qualified archaeologist, defined as one who meets the U.S. Secretary of the Interior’s Professional Qualifications Standards for Archeology, and shall include the following:</p> <ul style="list-style-type: none"> • Map(s) and verbal description of the project C-APE for cultural resources that delineates both the horizontal and vertical extents of where a project could result in impacts, including both direct and indirect, on cultural resources. • A records search at the appropriate repository of the California Historical Resources Information System (CHRIS) for the C-APE and vicinity (typically areas within 0.25 or 0.5 mile, based on setting) to acquire records on previously recorded cultural resources in the C-APE and vicinity and previous cultural resources studies conducted for the C-APE and vicinity. This task can be performed by either the qualified archaeologist or the appropriate local CHRIS center staff. <p>Outreach to the California Native American Heritage Commission, including a request of a search of the Sacred Lands File for the C-APE, to determine if any documented Native American sacred sites could be affected by the project.</p> <ul style="list-style-type: none"> • Consultation with California Native American Tribes pursuant to PRC Section 21080.3 to determine whether any indigenous archaeological resource or tribal cultural resources could be affected by the project. Project proponents shall submit a Sacred Lands File & Native American Contacts List Request to the Native American Heritage Commission (NAHC) at the initial stages of project development (or as early as practicable) to determine if a project would have an impact on Native American cultural resources. The project proponent shall coordinate with the approving Water Board or other CEQA lead agency, if applicable, as soon as possible whenever tribes that are traditionally and culturally affiliated to a project area are identified. Any tribe identified by the NAHC will require notification of the proposed 	Green Gulch Farm	Completed by EDS 02/28/2025

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
	<p>project by the lead agency as soon as practicable during early design. Tribes will be consulted if a request is received after initial notification. Consultation will include discussion regarding project design, cultural resource survey, protocols for construction monitoring, and any other tribal concern. Construction of the project will not commence until the approving Water Board or other CEQA lead agency achieves compliance with the California Environmental Protection Agency Tribal Consultation Protocol (April 2018).</p> <ul style="list-style-type: none"> • If the C-APE is in or adjacent to navigable waterways, outreach to the California State Lands Commission to request a search of their Shipwrecks Database, to determine whether any submerged archaeological resources may be present in the C-APE. • Background research on the history, including ethnography and indigenous presence, of the C-APE and vicinity. • An archaeological sensitivity analysis of the C-APE based on mapped geologic formations and soils, previously recorded archaeological resources, previous archaeological studies, and Native American consultation. • If an archaeological study is not warranted based on the above review, a summary of the assessment and justification of the determination will be prepared. If the CEQA lead agency agrees with the determination, no further study is needed. <p>If a study is warranted, as a result of these archival studies and consultations, an archaeological field survey of the C-APE will be conducted. The field survey shall include, at a minimum, a pedestrian survey. If the archaeological sensitivity analysis suggests a high potential for buried archaeological resources in the C-APE, a subsurface survey shall also be conducted. If previous archaeological field surveys no more than two years old have been conducted for the C-APE, a new field survey is not necessary, unless their field methods do not conform to those required above (e.g., no subsurface survey was conducted but C-APE has high potential for buried archaeological resources). Any archaeological resources identified in the C-APE during the survey shall be recorded on the appropriate California Department of Parks and Recreation 523 forms (i.e., site record forms).</p> <ul style="list-style-type: none"> • An evaluation of any archaeological resources identified in the C-APE for California Register eligibility (i.e., as qualifying as historical resources, as defined in State CEQA Guidelines Section 15064.5) as well 		

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
	<p>as whether they qualify as unique archaeological resources, pursuant to PRC Section 21083.2. Such evaluation may require archaeological testing (excavation), potentially including laboratory analysis, and consultation with relevant Native American representatives (for indigenous resources).</p> <ul style="list-style-type: none"> • An assessment of potential project impacts on any archaeological resources identified in the C-APE that qualify as historical resources (per State CEQA Guidelines Section 15064.5) and/or unique archaeological resources (per PRC Section 21083.2). This shall include an analysis of whether the project’s potential impacts would materially alter a resource’s physical characteristics that convey its historical significance and that justify its inclusion (or eligibility for inclusion) in the California Register or a qualified local register. • A technical report meeting U.S. Secretary of the Interior’s Standards for archaeological technical reporting. This report will document the mitigation measures taken and any study results, and, following CEQA lead agency review and approval, completes the requirements of this mitigation measure. <p>If potentially significant impacts on archaeological resources that qualify as historical resources (per State CEQA Guidelines Section 15064.5) and/or unique archaeological resources (per PRC Section 21083.2) are identified, develop, before project implementation and in coordination with interested or consulting parties (e.g., Native American representatives [for indigenous resources], historical societies [for historic-era resources], local communities) an approach for reducing such impacts. If any such resources are on or in the tide and submerged lands of California, this process shall also include coordination with the California State Lands Commission. Typical measures for reducing impacts include:</p> <ul style="list-style-type: none"> • Modify the project to avoid impacts on resources. • Plan parks, green space, or other open space to incorporate the resources. • Develop and implement a detailed archaeological resources management plan to recover the scientifically consequential information from archaeological resources before any excavation at the resource’s location. Treatment for most archaeological resources consists of (but is not necessarily limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the resource to be affected by the project. • Develop and implement interpretive programs or displays and conduct community outreach. 		

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
Cultural Resources	<p>Mitigation Measure CUL-3: Implement Measures to Protect Archaeological Resources during Project Construction or Operation</p> <p>If archaeological resources are encountered during project construction or operation of any project permitted under the Order, all activity within 100 feet of the find shall cease and the find shall be flagged for avoidance. The lead agency and a qualified archaeologist, defined as one meeting the U.S. Secretary of the Interior’s Professional Qualifications Standards for Archeology, shall be immediately informed of the discovery. The qualified archaeologist shall inspect the discovery and notify the lead agency of their initial assessment. If the qualified archaeologist determines that the resource is or is potentially indigenous in origin, the lead agency shall consult with culturally affiliated California Native American Tribes to assess the find and determine whether it is potentially a tribal cultural resource.</p> <p>If the lead agency determines, based on recommendations from the qualified archaeologist and culturally affiliated California Native American Tribes, that the resource is indigenous, that the resource may qualify as a historical resource (per State CEQA Guidelines Section 15064.5), unique archaeological resource (per PRC Section 21083.2), or tribal cultural resource (per PRC Section 21074), then the resource shall be avoided if feasible. If avoidance of an identified indigenous resource is not feasible, the lead agency shall consult with a qualified archaeologist, culturally affiliated California Native American Tribes, and other appropriate interested parties to determine treatment measures to minimize or mitigate any potential impacts on the resource pursuant to PRC Section 21083.2 and State CEQA Guidelines Section 15126.4. If any such resources are on or in the tide and submerged lands of California, this process shall also include coordination with the California State Lands Commission. Once treatment measures have been determined, the lead agency shall prepare and implement an archaeological (and/or tribal cultural) resources management plan that outlines the treatment measures for the resource. Treatment measures typically consist of the following steps:</p> <ul style="list-style-type: none"> • Determine whether the resource qualifies as a historical resource (per State CEQA Guidelines Section 15064.5), unique archaeological resource (per PRC Section 21083.2), or tribal cultural resource (per PRC Section 21074) through analysis that could include additional historical or ethnographic research, evaluative testing (excavation), or laboratory analysis. 	Green Gulch Farm	

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Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
	<ul style="list-style-type: none"> • If it qualifies as a historical resource (per State CEQA Guidelines Section 15064.5) and/or unique archaeological resource (per PRC Section 21083.2), implement measures for avoiding or reducing impacts such as the following: <ul style="list-style-type: none"> • Modify the project to avoid impacts on resources. • Plan parks, green space, or other open space to incorporate resources. • Recover scientifically consequential information from the archaeological resource before any excavation at the resource’s location. This typically consists of (but is not necessarily limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the resource to be affected by the project. • Develop and implement interpretive programs or displays. • If it qualifies as a tribal cultural resource (per PRC Section 21074) implement measures for avoiding or reducing impacts such as the following: <ul style="list-style-type: none"> • Avoid and preserve the resource in place through measures that include but are not limited to the following: <ul style="list-style-type: none"> ○ Plan and construct the project to avoid the resource and protect the cultural and natural context. ○ Plan greenspace, parks, or other open space to incorporate the resources with culturally appropriate protection and management criteria. • Treat the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, through measures that include but are not limited to the following: <ul style="list-style-type: none"> ○ Protect the cultural character and integrity of the resource. ○ Protect the traditional use of the resource. ○ Protect the confidentiality of the resource. • Implement permanent conservation easements or other interests in real property, with cultural appropriate management criteria for the purposes of preserving or using the resource or place. 		

**Marin Resource Conservation District
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Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
Cultural Resources	<p>Mitigation Measure CUL-4: Implement Measures to Protect Human Remains during Project Construction or Operation</p> <p>If human remains are encountered during construction or operation and maintenance of any project permitted under the Order, all work shall immediately halt within 100 feet of the find and the lead agency shall contact the appropriate county coroner to evaluate the remains and follow the procedures and protocols set forth in State CEQA Guidelines Section 15064.5(e)(1). If human remains encountered are on or in the tide and submerged lands of California, the lead agency shall also contact the California State Lands Commission. If the coroner determines that the remains are Native American in origin, the appropriate county shall contact the California Native American Heritage Commission, in accordance with California Health and Safety Code Section 7050.5(c) and PRC Section 5097.98. Per PRC Section 5097.98, the project's lead agency shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the lead agency has discussed and conferred, as prescribed PRC Section 5097.98, with the most likely descendants and the property owner regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.</p>	Green Gulch Farm	
Geology and Soils	<p>Mitigation Measure GEO-1: Include Geotechnical Design Recommendations</p> <p>To minimize potential impacts from seismic events and the presence of adverse soil conditions, lead agencies shall ensure that geotechnical design recommendations are included in the design of facilities and construction specifications. Recommended measures to address adverse conditions shall conform to applicable design codes, guidelines, and standards.</p>	Prunuske Chatham	Completed 2/2/2025
Geology and Soils	<p>Mitigation Measure GEO-3: Conduct Individual Restoration Project Geotechnical Investigation and Report</p> <p>An individual restoration projects geotechnical investigation shall be performed and a geotechnical report prepared for any restoration project that would result in potentially significant grading activities. The geotechnical report shall include a quantitative analysis to determine whether excavation or fill placement would result in a potential for damage due to soil subsidence during and/or after construction. Project designs shall incorporate measures to reduce the potential damage to a less-than-significant level. Measures shall include but not be limited to:</p>	Prunuske Chatham and RGH Geotechnical Consultants	Completed 2/4/2024

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
	<ul style="list-style-type: none"> • Removal and recompaction of existing soils susceptible to subsidence • Ground improvement (such as densification by compaction or grouting, soil cementation) <ul style="list-style-type: none"> • Reinforcement of structural components to resist deformation due to subsidence The assessment of subsidence for specific projects shall analyze the individual restoration projects potential for and severity of cyclic seismic loading. A geotechnical investigation shall also be performed by an appropriately licensed professional engineer and/or geologist to determine the presence and thickness of potentially liquefiable sands that could result in loss of bearing value during seismic shaking events. Project designs shall incorporate measures to mitigate potential damage to a less-than-significant level. Measures shall include but not be limited to: • Ground improvement (such as grouting or soil cementation) • Surcharge loading by placement of fill, excavation, soil mixing with non-liquefiable finer-grained materials, and replacement of liquefiable materials at shallow depths • Reinforcement of structural components to resist deformation due to liquefaction <p>An analysis of individual restoration projects probable and credible seismic acceleration values, conducted in accordance with current applicable standards of care, shall be performed to provide for a suitable project design. Geotechnical investigations shall be performed and geotechnical reports shall be prepared in the responsible care of California licensed geotechnical professionals including professional civil engineers, certified geotechnical engineers, professional geologists, certified engineering geologists, and certified hydrogeologists, all of whom practice within the current standards of care for such work.</p>		
Geology and Soils	<p>Mitigation Measure GEO-4: Adhere to International Building Code Constructed facilities shall be required to adhere to the current approved version of the International Building Code (IBC), and to comply with the IBC for critical structures (e.g., levees).</p>	Prunuske Chatham	Completed 3/31/2025

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Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
Geology and Soils	<p>Mitigation Measure GEO-5: Conduct Expansive Clay Investigation In areas where expansive clays exist, a licensed professional engineer or geologist shall perform a hydrogeological/geotechnical investigation to identify and quantify the potential for expansion, particularly differential expansion of clayey soils caused by leakage and saturation beneath new improvements. Measures could include but are not limited to removing and recompacting problematic expansive soils, stabilizing soils, and/or reinforcing the constructed improvements to resist deformation from expansion of subsurface soils. Measures could include but are not limited to blending the soils most susceptible to landsliding with soils that have higher cohesion characteristics; installing slope stabilization measures; designing top-of-slope berms or v-ditches, terrace drains, and other surface runoff control measures; and designing slopes at lower inclinations.</p>	Prunuske Chatham and RGH Geotechnical Consultants	Completed 2/4/2024
	<p>Mitigation Measure GEO-8: Assess the Presence of Highly Organic Soils For projects that would result in a significant or potentially significant risk to structures because of the presence of highly organic soils, the lead agencies shall require a geotechnical evaluation before construction to identify measures to mitigate organic soils. The following measures may be considered:</p> <ul style="list-style-type: none"> • Over-excavation and import of suitable fill material. • Structural reinforcement of constructed works to resist deformation. • Construction of structural supports below the depth of highly organic soils into materials with suitable bearing strength. 	Prunuske Chatham and RGH Geotechnical Consultants	Completed 2/4/2024
Paleontological Resources	<p>Mitigation Measure GEO-9: Conduct a General Project-Level Analysis Restoration projects implemented by other public proponents under the Order would be required to do a desktop search on whether the project site would be located in a paleontological sensitive unit. If the project site was determined to be located on a paleontological sensitive unit, then Mitigation Measure GEO-9 (and Mitigation Measure GEO-10, below, as applicable) would be implemented. If restoration projects implemented under the Order fall outside a paleontological sensitive unit, GEO-9 (and Mitigation Measure GEO-10, below) would be not required. During project development and project-level analysis, a paleontological resource monitoring and recovery plan shall be developed and implemented for all actions determine by the project proponent to be located on a paleontological sensitive unit.</p>	Prunuske Chatham	Completed 2/4/2024

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
Hazards and Hazardous Materials	<p>Mitigation Measure HAZ-1: Prepare and Implement a Health and Safety Plan and Provide Qualified Oversight of Fill Removal Related to Earthmoving Activities</p> <p>The following measures shall be implemented before and during construction of any restoration project permitted under the Order:</p> <ul style="list-style-type: none"> • A health and safety plan for the project shall be developed and implemented. This plan shall clearly notify all workers of the potential to encounter hazardous materials during ground-disturbing work and other construction activities. The plan shall identify proper handling and disposal procedures for contaminants expected to be on-site and shall provide maps and phone numbers for local hospitals and other emergency contacts. Construction workers shall comply with all protocols outlined in the health and safety plan throughout project implementation. • Any hazardous materials being stored in the project area and not needed for construction activities shall be removed and disposed of at appropriately permitted locations before construction. A qualified professional (e.g., geologist or engineer) shall oversee fill excavation activities and work in potential project areas that contain abandoned underground storage tanks requiring removal, to properly identify any contaminated soils that may be present. Excavation of underground storage tanks must comply with county ordinances and policies. If contaminated soils are found, Mitigation Measure HAZ-2 shall be implemented. • Removal of underground storage tanks associated with the restoration project shall include measures to ensure their safe transport and disposal. Remediation actions, if necessary, shall be defined in consultation with the local Regional Board and implemented during construction. 	Green Gulch Farm and Construction Manager	

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
Hazards and Hazardous Materials	<p>Mitigation Measure HAZ-2: Notify Appropriate Federal, State, and Local Agencies If Contaminated Soils Are Identified, and Complete Recommended Remediation Activities</p> <p>The following measures shall be implemented before construction of any restoration project permitted under the Order if contaminated soils are found on the project site:</p> <ul style="list-style-type: none"> • The appropriate federal, state, and local agencies shall be notified if evidence of previously undiscovered soil or groundwater contamination (e.g., stained soil, odorous groundwater) is encountered during construction activities. Any contaminated areas shall be cleaned up in accordance with the recommendations of the Regional Board, DTSC, or other appropriate federal, state, or local regulatory agencies. • A site plan shall be prepared for the remediation activities appropriate for the proposed land uses, including excavation and removal of on-site contaminated soils, and needed redistributions of clean fill material on the study area. The plan shall include measures to ensure the safe transport, use, and disposal of contaminated soil and building debris removed from the site. If ground-disturbing activities encounter contaminated groundwater, the construction contractor shall report the contamination to the appropriate agencies, dewater the area, and treat the groundwater to remove the contaminants before discharge into the sanitary sewer system. The construction contractor shall comply with the plan and applicable federal, state, and local laws. The plan shall outline specific procedures for handling and reporting of hazardous materials, and for disposing of hazardous materials removed from the site at an appropriate off-site facility. 	Green Gulch Farm and Construction Manager	
Hazards and Hazardous Materials	<p>Mitigation Measure HAZ-3: Notify Appropriate Federal, State, and Local Agencies If Accidental Discharges of Hazardous Materials</p> <p>Following an accidental discharge of a reportable quantity of a hazardous material or an unknown material, the appropriate federal, state, and local agencies shall be notified. Any contaminated areas shall be cleaned up in accordance with the recommendations of the Regional Board, DTSC, or other appropriate federal, state, or local regulatory agencies.</p>	Green Gulch Farm and Construction Manager	

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
Hazards and Hazardous Materials	<p>Mitigation Measure HAZ-6: Prepare and Implement a Vector Management Plan The following measures shall be implemented by restoration projects permitted under the Order to prevent public health hazards posed by vector habitat as applicable (e.g., restoration projects that result in standing water and are located near populated areas):</p> <ul style="list-style-type: none"> • Freshwater habitat management shall include management of water control structures, vegetation management, mosquito predator management, drainage improvements, and other best management practices. The agency implementing the restoration project shall coordinate with the California Department of Fish and Wildlife and local mosquito and vector control agencies regarding these strategies and specific techniques to help minimize mosquito production. • Permanent ponds shall be maintained to increase the diversity of waterfowl yet decrease the introduction of vectors through constant circulation of water, vegetation control, and periodic draining of ponds. • The project shall avoid ponding in tidal marsh habitat or in areas within the waterside of setback levees. Restoration projects shall be designed with methods to reduce mosquito breeding. 	Green Gulch Farm	
Wildfire	<p>Mitigation Measure FIRE-1: Develop and Implement a Fire Prevention Plan The following measures shall be implemented before and during construction of restoration projects permitted under the Order, where applicable:</p> <ul style="list-style-type: none"> • For restoration projects in areas designated as Very High or High Fire Hazard Severity Zones, a project-specific fire prevention plan for construction and operation of the project shall be prepared and submitted to the CEQA lead agency for review before the start of construction. • The draft copy of the fire prevention plan shall be provided to each fire agency (e.g., CAL FIRE and county or local municipal fire agencies) before the start of any construction activities in areas designated as Very High or High Fire Hazard Severity Zones. 	Green Gulch Farm and Construction Manager	

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
Noise	<p>Mitigation Measure NOISE-1: Minimize Noise Conflicts The following measures shall be implemented during construction of any restoration project permitted under the Order:</p> <ul style="list-style-type: none"> • Noise-generating activities shall follow the applicable general plan and/or noise ordinances for the jurisdiction located within the vicinity of the project. • Construction equipment shall be located away from sensitive receptors, to the extent feasible, to reduce noise levels below applicable local standards. • Construction equipment shall be maintained to manufacturers’ recommended specifications, and all construction vehicles and equipment shall be equipped with appropriate mufflers and other approved noise-control devices. • Idling of construction equipment shall be limited to the extent feasible to reduce the time that noise is emitted. • An individual traffic noise analysis of identified haul routes shall be conducted and mitigation, such as reduced speed limits, shall be provided at locations where noise standards cannot be maintained for sensitive receptors. <p>The project shall incorporate the use of temporary noise barriers, such as acoustical panel systems, between construction activities and sensitive receptors if it is concluded that they would be effective in reducing noise exposure to sensitive receptors.</p>	Green Gulch Farm and Construction Manager	
Transportation	<p>Mitigation Measure TRA-1: Prepare Construction Traffic Management Plan Before construction begins, the construction manager shall have a qualified professional prepare a construction traffic management plan. The plan shall provide the appropriate measures to reduce potential traffic obstructions or service level degradation at affected traffic facilities. The scope of the construction traffic management plan will depend on the type, size, and duration of the specific qualifying restoration project under the Order. The plan could include such measures as construction signage, flaggers for lane closures, and construction schedule and/or delivery schedule restrictions. The plan shall be submitted to the local public works department and implemented as appropriate throughout construction.</p>	Green Gulch Farm and Construction Manager	

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
Tribal Cultural Resources	<p>Mitigation Measure TCR-1: Conduct Inventory and Significance Evaluation of Tribal Cultural Resources with Tribes that are Culturally and Geographically Affiliated with the Project Vicinity Before implementation of any project permitted under the Order, the following shall be conducted: consultation with California Native American Tribes pursuant to PRC Section 21080.3; a cultural resources records search; a California Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search; and an inventory and significance evaluation of tribal cultural resources identified that could be impacted by the project. These tasks shall be conducted as follows.</p> <ul style="list-style-type: none"> • Project proponent shall submit an NAHC SLF & Native American Contacts List Request at the initial stages of project development (or as early as practicable) to determine if a project would have an impact on tribal cultural resources. • Project proponent shall coordinate with the approving Water Board or other CEQA lead agency, if applicable, as soon as possible to identify California Native American Tribes that are traditionally and culturally affiliated to a project area. The CEQA lead agency shall then conduct Tribal consultation, pursuant to PRC Section 21080.3, and as soon as practicable during early design, with such Tribes to determine whether any tribal cultural resources could be affected by the project. Consultation will include discussion regarding project design, cultural resources surveys, identification of tribal cultural resources, protocols for construction monitoring, and any other Tribal concerns. Construction of the project will not commence until the approving Water Board or other CEQA lead agency achieves compliance with the California Environmental Protection Agency Tribal Consultation Protocol (April 2018) and consultation pursuant to PRC Section 21080.3 has been concluded. If potential tribal cultural resources that may be impacted by the project are identified through consultation with California Native American Tribes that are traditionally and culturally affiliated to a project area, the following shall be conducted: • Documentation of any tribal cultural resources identified in the project area, which may require additional tasks such as ethnographic research and interviews. • If tribal cultural resources are identified in a project area, develop, before project implementation and in coordination California Native American Tribes that are traditionally and culturally affiliated to a project area, an approach for reducing such impacts. If any such tribal cultural resources are on or in the tide and submerged lands of California, this process shall also include coordination with the California State Lands Commission. 	Marin RCD and Green Gulch Farm	Complete

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
Tribal Cultural Resources	<p>Mitigation Measure TCR-2: Implement Measures to Protect Tribal Cultural Resources during Project Construction or Operation.</p> <p>These measures include, but are not limited to, those outlined in PRC Section 21084.3. If tribal cultural resources or indigenous archaeological resources that may qualify as tribal cultural resources are encountered during project construction or operation of any project permitted under the Order, all activity within 100 feet of the find shall cease and the find shall be flagged for avoidance. The lead agency, a qualified archaeologist, defined as one meeting the U.S. Secretary of the Interior’s Professional Qualifications Standards for Archeology, and California Native American Tribes that are traditionally and culturally affiliated to a project area shall be immediately informed of the discovery. The qualified archaeologist and representatives from the notified Native American Tribes shall inspect the discovery and notify the lead agency of their initial assessment.</p> <p>If the lead agency determines, based on recommendations from the qualified archaeologist and California Native American Tribes that are traditionally and culturally affiliated to a project area, that the resource may qualify as a tribal cultural resource (per PRC Section 21074), then the resource shall be avoided if feasible. If avoidance of the resource is not feasible, the lead agency shall consult California Native American Tribes that are traditionally and culturally affiliated to a project area to determine treatment measures to minimize or mitigate any potential impacts on the resource pursuant to PRC Section 21083.2 and State CEQA Guidelines Section 15126.4. If any such resources are on or in the tide and submerged lands of California, this process shall also include coordination with the California State Lands Commission. Once treatment measures have been determined, the lead agency shall prepare and implement a tribal cultural resources management plan that outlines the treatment measures for the resource. Treatment measures typically consist of the following steps:</p> <ul style="list-style-type: none"> • Determine whether the resource qualifies as a tribal cultural resource (per PRC Section 21074) through analysis that could include additional ethnographic research, archaeological investigations, or laboratory analysis. • If it qualifies as a tribal cultural resource (per PRC Section 21074) implement measures for avoiding or reducing impacts such as the following: 	Marin RCD and Green Gulch Farm	

**Marin Resource Conservation District
Green Gulch Farm Streamflow and Water Storage Improvement Project Mitigation Monitoring and Reporting Program**

Resource Area	Mitigation Measure	Monitoring Entity	Monitoring Compliance Record
	<ul style="list-style-type: none"> • Avoid and preserve the resource in place through measures that include but are not limited to the following: <ul style="list-style-type: none"> ○ Plan and construct the project to avoid the resource and protect the cultural and natural context. ○ Plan greenspace, parks, or other open space to incorporate the resources with culturally appropriate protection and management criteria. • Treat the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, through measures that include but are not limited to the following: <ul style="list-style-type: none"> ○ Protect the cultural character and integrity of the resource. ○ Protect the traditional use of the resource. ○ Protect the confidentiality of the resource. • Implement permanent conservation easements or other interests in real property, with cultural appropriate management criteria for the purposes of preserving or using the resource or place. 		

ACTION: Marin Permit Coordination Program

Board approval to open a 30-day review of the 2025 proposed projects into the Marin Coastal Permit Coordination Program (PCP) and accept the proposed projects on November 12, contingent upon receiving no public comment.

Urgency:

Somewhat. The projects listed for inclusion to the PCP are all part of the COW MILC grant with the State Water Board, which is approximately 1 year into a 3-year term. The projects are ready for final design and permitting, and several projects should be ready for some implementation by this winter to address potential water quality impacts.

Background:

Every project requiring state or local permits or funded by a public agency must comply with the California Environmental Quality Act (CEQA). In 2004 Marin RCD initiated its Permit Coordination Program, or PCP, to streamline CEQA by prescribing the use of NRCS Conservation Practices under certain conditions. The PCP has been updated four times since then. Its basis is an Initial Study/ Mitigated Negative Declaration [that can be found on the District's website](#).

The projects presented here are all from the Marin RCD's COW MILC grant with the State Water Board, and therefore represent projects from two watersheds: Stemple Creek and Drakes Bay. In Stemple Creek, projects ideas were solicited from all known dairies last December. In spring 2025 a Technical Advisory Group visited and reviewed the applications, scored and ranked all the projects, and with minor revisions recommended that all projects be awarded grant funds.

The grant was submitted and approved at a time when there was interest in improving the agricultural water quality impacts on Drakes Bay, but before the Point Reyes National Seashore issued its record of decision on the General Management Plan Amendment (GMPA) which resulted in the buyout of most of the park's agricultural operations, including the three dairies above Drakes Bay. Therefore, the grant funding allocation that had been intended for the tenants at Historic A, B and C dairies is being applied to help decommission the dairies' manure systems rather than risk forfeiture of those funds by amending the grant agreement. The proposed practices are included in the Seashore's GMPA and National Environmental Policy Act (NEPA) document, and the Technical Advisory Group will be consulted on the manure pond decommissioning design now that the dairies have mostly left their operations.

While the proposed projects are at different states of design, all will follow the PCP's NRCS conservation practice standards including the prescribed size limitations and other associated protections and mitigations. Biology and cultural resources consultants have been retained and have begun reviewing the projects.

With the Board's approval, to initiate a comment period, staff will submit a short description of the proposal to The Point Reyes Light for public viewing. The public can comment on the scope and objectives of the individual projects. If no comments are received, then the projects are

automatically adopted into the PCP on November 13th. Any comments received will be presented at the next regularly scheduled board meeting.

Actions:

Option 1: (Staff Recommendation) Board approval of initiating a 30-day public comment period for the attached 2025 project list and automatically including it into the PCP pending no public comment.

Option 2: Board does not approve of projects, or all of the projects, into the CEQA program, and requires staff to modify projects for another round of public review.

Impact:

This set of projects aims to improve water quality in the two watersheds with a focus on pathogen, nutrient and fine sediment contamination. At the dairies in Stemple Creek, the projects also tend to benefit farm operations and reduce costs for farmers.

Specific alliance with [RCD strategic plan](#) and grant goals are as follows:

GOAL 1: Active support of our district's agricultural economy, viability and cultural heritage

STRATEGY:

3. Improve and enhance natural resources on agricultural lands.
5. Secure more funding for dairy program implementation.
6. Secure financial incentives and cost share funding from a variety of funding options including grants, tax & bond measures, mitigation, cap & trade, conservation credits.
8. Provide streamlined California Environmental Quality Act compliance and permitting programs to reduce regulatory fees and encourage conservation activities.
9. Support ranchers in the Point Reyes National Seashore.

GOAL 2. Protect and improve water quality and quantity

STRATEGY:

2. Support landowners in the planning, design, permitting and implementation of construction projects that protect water quality and conserve water quantity.
3. Support dairy producers in complying with the San Francisco Bay and North Coast General Orders by providing assistance with planning and the implementation of water quality projects.
4. Support grazing operations in complying with the Tomales Bay Pathogen and Walker Creek Mercury Lagunitas/Walker Sediment Total Maximum Daily Loads by providing assistance with planning and the implementation of water quality projects.

Available Budget:

Yes, the COW MILC grant is primarily supporting the planning, permitting and implementation of these projects, with match from a combination of landowners, Marin County Measure A, MALT, and NRCS.

**Marin Coastal Watersheds Permit Coordination Program 2025 COW MILC Restoration Projects
10/8/2025, public comment period 10/8/2025 - 11/12/2025**

Site Number	Watershed	Envir. Setting and Vegetation	Project Goals	Proposed Practice(s)	Project Actions and Sizing	Expected Permits	Potential for Listed Species	Funding Source
2025-01	Stemple Creek	Open pasture in rolling hills bisected by a small intermittent stream. Recent headcut upstream, culvert crossing downstream.	1000 Linear feet of riparian restoration, including plantings, biotechnical channel headcut stabilization, exclusion fencing, and expansion of a culvert at the crossing.	Prescribed Grazing (528) Fence (382) Critical Area Planting (342) Riparain Forest Buffer (391) Mulching (484) Grade Stabilization Structure (410), Stream Crossing (578)	2,000 -3,000 feet of exclusion fence, erosion control methods such as biodegradable waddles and fabric, live staking and planting. 300 plants, 236 cages, replace existing culvert, widen by 15 feet for farm equipment	CDFW 1600, USACE Nationwide or 404 Maint Exempt, Water Board R1 Rural roads or dairy order, Coastal Zone AG Cat Excludable	CA Red Legged Frog (CRLF) low likelihood, badgers	Marin County Measure A, Water Board grant COW MILC
2025-02	Stemple Creek	Dairy along low terrace above a creek, below a rise to pastures. Work occurs on previously developed dairy facilities and an existing pasture access road.	Improve manure management system by diverting freshwater and upgrading manure catchment. Improve pasture access and reduce sediment runoff with access road regrading.	Access Road (560) Roof Runoff Structure (558) Waste Transfer (634) Waste Storage (313) Heavy Use Area Protection (561)	Manure management: <5,000 sf concrete flatwork, <2,000 lf pipe, <200 lf gutter. Access Road: regrade <15,000 square foot. Balance grading volume cut/fill if possible	County Grading Exemption, Coastal Zone AG Cat Non-Excludable	Low likelihood CA Red Legged Frog, Two Fork Clover, Golden Larkspur	319 COW MILC
2025-03	Stemple Creek	Existing dairy adjacent to a tributary to Stemple Creek. The manure pit is located at the top of the creek bank along a reach of the creek that is kept as mowed grass.	Improve manure management system performance and ensuring no interaction with adjacent stream by raising manure pit rim height and upgrading manure pump.	Waste Transfer (634) Structure for Water Control (587)	15 hp electric manure pump, cast in place concrete curbing around manure pit. <18" wide x 2' tall x 65' long	n/a (Coastal Zone AG Cat Non-Excludable)	Nesting Birds, CRLF	319 COW MILC
2025-04	Stemple Creek	Within and adjacent to existing barn within the pastures of dairy facility. A tributary to Stemple Creek is about 60 feet away and 25 feet lower than the edge of the pad.	Improve manure management with installation of electric automated barn scrapers. Reduce sediment runoff at turnaround adjacent to barn with paved heavy use area.	Heavy Use Area Protection (561) Waste Transfer (634)	7,500 sq ft concrete pad, 2 electric barn scrapers that can scrape 2 lanes each.	n/a	Burrowing owl (winter)	319 COW MILC
2025-05	Stemple Creek	Crossing near headquarters of a goat and sheep dairy. Annual and perennial grasses and forbes on hillside pastures and orchard. Riparian zone has trees upstream is thick himalayan blackberry and hemlock.	Replace a failed culvert at a stream crossing to restore functionality and protect water quality	Stream Crossing (578)	Remove existing disjointed pipe culvert sections and replace with existing 24"RCP /4ft lengths x3 for a 12' drive isle. Cast in place concrete headwalls at up and downstream.	CDFW 1600, USACE Nationwides, Water Board R1 Rural roads or dairy order, County Grading Exemption, Coastal Zone AG Cat Excludable	Nesting Birds, pond turtle in adjacent grasslands, CRLF	319 COW MILC
2025-06A	Drakes Bay	Historic dairy towards the end of the Point Reyes penninsula. Grasses and forbes in impacted pastures, around barns and on berms forming manure ponds	Decommission manure ponds safely and preserve beneficial habitat characteristics.	Grassed Water Way (412) Lined Water Way (468) Structure for Water Control (587) Grade Control Structure (410)	Grading spillways out of former manure ponds or flattening them entirely. <500 cubic yards of earthwork per grassed or lined waterway, <1000 cubic yards per water control structure	NEPA, all practices are in Park's GMPA	CRLF	319 COW MILC
2025-06B	Drakes Bay	Historic dairy towards the end of the Point Reyes penninsula. Grasses and forbes in impacted pastures, around barns and on berms forming manure ponds	Decommission manure ponds safely and preserve beneficial habitat characteristics.	Grassed Water Way (412) Lined Water Way (468) Structure for Water Control (587) Grade Control Structure (410)	Grading spillways out of former manure ponds or flattening them entirely. <500 cubic yards of earthwork per grassed or lined waterway, <1000 cubic yards per water control structure	NEPA, all practices are in Park's GMPA	CRLF	319 COW MILC
2025-06C	Drakes Bay	Historic dairy towards the end of the Point Reyes penninsula. Grasses and forbes in impacted pastures, around barns and on berms forming manure ponds	Decommission manure ponds safely and preserve beneficial habitat characteristics.	Grassed Water Way (412) Lined Water Way (468) Structure for Water Control (587) Grade Control Structure (410)	Grading spillways out of former manure ponds or flattening them entirely. <500 cubic yards of earthwork per grassed or lined waterway, <1000 cubic yards per water control structure	NEPA, all practices are in Park's GMPA	CRLF	319 COW MILC
2025-07	Stemple Creek	Existing dairy in a draw adjacent to a tributary to Stemple Creek. The manure pit is located between barns along the creek with blackberries and willow trees.	Improve manure management system performance by replacing manure pump, agitator and components of the fertigation system.	Waste Transfer (634)	New agitator and trailer mounted manure pump and hoses and fittings for reel-based sprinkler system.	n/a (Coastal Zone AG Cat Non-Excludable)	CRLF	CDFA's Alternative Manure Management Program (AMMP), 319 COW MILC

3C: PROGRAMS

Action:

- A. Board approval to award \$18,000 in matching Measure A funds for an emergency project to clear a creek obstruction along a tributary to Keys/Walker Creek. ~Sarah Skinker, Carbon Farming Program Manager

Urgency:

- A. Urgent. Downed trees will be obstructing stream flows once pending winter rains set in, causing erosion and sedimentation in the creek.

Background:



Linda Rogers (landowner) and Jim Jensen (lessee) discovered that 4-5 large eucalyptus trees had fallen over directly into a tributary to Keys/Walker Creeks on the property (See map below) in February 2025, dragging vines and debris with them and causing a major creek obstruction that covers an area approximately 200 linear feet. Previous creek enhancement work was completed with MALT funding in this reach.

Adjacent to this section of creek, the landowner is partnering with Fibershed to implement CDFA Healthy Soils Program riparian forest buffer plantings and compost application projects to increase native plant populations and enhance carbon sequestration and biodiversity. The planting will be completed directly upstream of the fallen trees, including native perennial

species selected by Point Blue STRAW such as Redflower Currant, California Live Oak, Pacific Dogwood and California Laurel.

The landowner has requested assistance from MRCD. MRCD is proposing to use Measure A funding to match CDFA project funds and clear the debris from the creek. The CDFA funding will also be used as a match to MRCD's Measure A funding.

The landowner has obtained a bid from Kevin Furlong for the tree removal, quoted at \$18,000. Additional work that will be necessary to clean up the site, such as chipping, will not be covered by MRCD funding.

MRCD staff (Sarah Skinker, Carbon Farming Program Manager) and MALT staff (Scott Dunbar, Stewardship Specialist and Tristan Brenner, Senior Stewardship Manager) have evaluated the site and recommend removal of the trees before impending rains cause additional erosion and potentially more trees to fall, along with other issues. Endangered California freshwater shrimp are found in the downstream pools, therefore erosion caused by these fallen trees would potentially contribute to large amounts of sediment filling in that habitat.

Sedimentation in downstream Keys and Walker Creeks has become an urgent natural resource concern. The tributary joins Keys and Walker Creeks in an area that has been aggrading over time. Prunuske Chatham's, 1998 Geomorphology of the Walker Creek Watershed study recommends the "reduction of fine sediment delivery from upstream reaches and tributaries" within this tidally influenced reach as a #1 priority. Highway 1 adjacent to Keyes Creek is prone to regular flooding and hazardous conditions; and in 2020, MRCD funded a sediment reduction project on two properties adjacent to the Highway to alleviate flooding. Furthermore, this project will address the San Francisco Bay Regional Water Quality Control Board's Tomales Bay Sediment Total Maximum Daily Load which is aimed at controlling sediment pollution from agricultural runoff, erosion, and other sources to protect its beneficial uses, such as oyster farming and marine habitats. Due to the urgency of this project, this project falls outside of MRCD's regular project selection process.

Unfortunately, other funding avenues like MALT and NRCS have been explored and are not an option for this project. The amount proposed for this project will not negatively impact other projects funded by Measure A, as this full amount is available in the budget. No permits are required for simply removing the trees off the creek, as long as no earthwork is conducted, therefore this project would not involve additional work for MRCD other than issuing a CEQA Categorical Exemption.

Past MRCD Actions:

- none

Actions: * staff recommendation

*Option 1: Board approves the match funding.

Option 2: Board approves partial match funding.

Option 3: Board does not approve match funding.

Impact:

Marin RCD has an opportunity to continue the important work of erosion control, support safe habitat for endangered species, and reduce sedimentation threats with this project.

Specific alliance with [RCD strategic plan](#) and grant goals:

GOAL 2. WATER QUALITY: Protect and improve water quality and quantity

STRATEGY:

2. Support landowners in the planning, design, permitting and implementation of construction projects that protect water quality and conserve water quantity.
3. Support grazing operations in complying with the Tomales Bay Pathogen and Walker Creek Mercury Lagunitas/Walker Sediment Total Maximum Daily Loads by providing assistance with planning and the implementation of water quality projects.
4. Improve road maintenance and drainage on private lands in order to reduce sediment flows into nearby creeks and wetlands.
5. Work with oyster growers to develop and implement strategies to improve water quality.
6. Support current Walker Creek studies and implementation projects.

Available Budget:

- A. A total of \$695,254.02 in Measure A funding has been secured this fiscal year, and \$448,187.21 is left over from last fiscal year, totaling \$1,143,441.23 in available funds. \$47,821 of Measure A has been spent thus far this fiscal year. \$947,000 is allocated as matching funds to other projects this fiscal year. \$196,441.23 in Measure A is unallocated of which \$18,000 is available to fund this project.

Map of Location



The property is located directly west of Tomales, with Keys/Walker Creek located just 4,800 feet away. The impacted section of creek is circled above.

Marin RCD Staff Report

September 1-30, 2025

District

- **ED Report**
 - District
 - Review of Strategic Plan information and arrangement of retreat venue
 - Begin slide deck for Measure A Oversight Committee Mtg in Nov
 - Personnel
 - Conducted 5 of 10 Annual Personnel Evaluations
 - Check ins with staff
 - Contracts - Reviewed/Authorized/Signed. New contracts above \$50k must go before the Board.
 - None approved
 - Finance
 - Completed Financial Subrecipient Form for partnership grant with UC Berkeley
 - Communications - Completed letters of support for FARE proposals.
 - Meetings/Conferences: RCD Staff Finance, Finance Committee, Sonoma-Marin Local Work Group Meeting, Measure A Oversight Co Prep Mtg, Grant Huddle, Strategic Plan Retreat
- **District Operations & Financials:** *(FC: Elise Suronen, Marcus Meggett, Nancy Scolari)*
 - Elise has concluded research on new HR, payroll and timekeeping platforms for Marin RCD. We've determined to go with Innovative Business Solutions, a local company. It will replace two other platforms and save us \$4,700 annually, and even more valuable is it'll free up Nancy's time. We are aiming to use the new system come Jan 2026, so we will spend Oct-Dec completing the migration and training.
 - Elise gathered staff feedback regarding Marin RCD internal operations to determine how she should prioritize her time based on their needs and suggestions. Her priorities are: 1) create a communications plan, 2) develop a dashboard of Marin RCD's Impacts, 3) Streamlining and improving internal platforms and 4) document Standard Operating Procedures
 - Elise has been providing support to Nancy, as needed, in weekly meetings.
 - The 2024 financial audit has begun and is expected to be completed by November.
 -
- **Staff Development**
 - A complete list of staff training and take-aways can be [found at this link](#).

- **Diversity Equity, Inclusion and Justice**
 - The Carbon Farming team hired David Escobar as a JEDI consultant, funded by the SCC grant. David has shared his final recommendations on the implementation steps, and the RCD staff and JEDI committee will review them together this fall.
 - MRCD Carbon Farm Team and Michelle Katuna developed a scope of work with FIGR that outlines a workflow between the two parties and other partners such as STRAW. The draft was approved at the August 2023 board meeting. The final draft is currently going through the FIGR legal team channels for approval. The team is scheduling another site visit with FIGR for October 3rd.
 - Through the North Coast Soil Hub, RCDs are collaborating on Spanish language education and outreach on soil health and climate-friendly ag and creating a regional outreach plan for small and underserved producers. *This is on hold due to some of our federal funding losses, need to touch base with other RCDs.*
 - Carbon Farming Staff visited Sembrando Vida, a brand new 1-acre Latinx crop farm incubator program located on Blue Marble Acres, to provide technical support. The goal of the program is to provide low-cost, culturally appropriate fresh food to the farmworker community in West Marin.

- **Media/ Messaging/Outreach**
 - **Newsletter:** (*Jerry Meral, Nancy Scolari and Elise Suronen*) Elise edited draft articles by Jerry Meral, and suggested the article layout
 - **Communications Plan:** Elise is creating a timeline and strategy with guidance from experts to create a simple Communications Plan grounded in our draft Strategic Plan; we have a grant to support this work. Elise is also engaging staff in a process of “Taking Back Marin RCD’s Narrative”, so we can share our impacts with our audiences. In order to do this Marin RCD’s data management systems need to evolve, so we can easily track and query up to date information on our impacts. And for us to determine, what are the impacts that we want to be reporting on?
 - **Website:** Elise is creating a video to publish on our website to communicate Marin RCD’s impact over the past 65 years. The GIS team, Preston and Fiona, are gearing up to create maps or graphics of our impact that’ll go on our website.

- **New Grants:** (*See [grant status spreadsheet](#) for a full list of out-standing grants*)
 - **A “Funding Opportunities for Working Lands” spreadsheet:** informs local producers about cost-share and grant programs they can apply to for conservation projects. For most programs on the list, you do not need to have a Carbon Farm Plan to apply or qualify. Spreadsheet will be updated semi-annually. [Find at this link](#) or on the Carbon Farming page at marinrcd.org.

See below for Marin RCD Studies, Programs & Project updates:

Walker Creek Study (Sarah Phillips, PM)

- **Lower Walker Creek Estuary Study (100% complete):** Closed on March 31, 2024. This grant from CA Dept of Fish & Wildlife (CDFW) was to study the Walker Creek estuary and evaluate opportunities for fisheries enhancement.
 - No report
-

Biomass Project (Chad White, PM)

The Marin Biomass Project was developed in response to increasing biomass flow generated by wildfire prevention activities and by landfill diversion efforts in the County overseen, respectively, by the Marin Wildfire Prevention Authority (MWPA) and by Zero Waste Marin (ZWM). It was also developed in response to the Marin Resource Conservation District (MRCD)'s work to advance carbon farming and advance climate-smart practices as a member of the Marin Carbon Project. MWPA's work generates biomass flows. ZWM's work guides diversion of biomass flows from landfill and Marin's compost procurement responsibilities. MRCD's staff work with agricultural producers in west Marin whose operations are potential sites of compost application to land. The project looks for synergy across the work of these organizations and the capacity to create a shared platform for sustainable utilization, rather than waste, of a range of biomass types: woody biomass from forests and woodlands, source-separated organics, and mixed construction and demolition materials, food scraps, yard trimmings, and agricultural biomass. The goal is to ensure that biomass utilization pathways support wildfire prevention and landfill diversion, while also reducing greenhouse gas (GHG) emissions.

The Project is designed to foster cooperation among stakeholders in biomass utilization, particularly the public authorities who oversee and the private organizations that manage biomass management infrastructure and processes. A forum called the "Marin Biomass Collaborative" was created to support rapid implementation of recommendations developed through the Study. The Marin Biomass Project is also in a cohort of five pilot projects selected in 2021 by the Governor's Office of Planning and Research (OPR), now

Land Use and Climate Investment (LCI). It has been awarded \$900,000 in grant funding to identify solutions that overcome barriers to biomass feedstock utilization. Technical analysis and project management funded under this grant have been awarded through RFPs for consulting contracts.

Activity in the last month:

- **Study Production. Biomass Project:** The Marin Biomass Project is finalizing its integrated Study and expects to release it in the next month.
- **Implementation of Recommendations.** Upon release of the Study, the team will emphasize work to implement Study's recommendations.

*Conserving Our Watersheds Program
Gerhard Epke PM*

- **COW (MILC) Phase VIII funded by 319(h) Water Board (~15 % complete)**
 - Water Board agreement executed and initiated in January 2025, ends fall 2027.
 - MRCD's scope includes Management Practices at dairies that support the attainment of the Stemple Creek-Estero de San Antonio watershed Sediment & Nutrients TMDL and towards enhancing the high water quality of Drakes Bay Watershed.
 - In December project solicitation postcards were sent to all the known dairies in the Stemple Creek watershed. Responses turned into six applications. In March the grant's Technical Advisory Group was assembled and began by reviewing project selection and ranking criteria developed in previous COW cycles, conducting site visits to all applicants, and ranking applications.
 - All six Stemple Creek were approved and have moved into the design phase.
 - In Point Reyes National Seashore, RCD and the Park are working together to design simple and cost-effective treatments to decommission the manure ponds at the three departing dairies within Drakes Bay watershed.
 - On September 4 RCD staff met with representatives from the natural resources agencies to discuss permitting requirements for projects that touch creeks and wetlands.

Marin Permit Coordination Program

The Marin Permit Coordination Program (PCP) refers primarily to an Initial Study- Mitigated Negative Declaration used by Marin RCD to conduct CEQA approval of projects. The PCP prescribes environmental protections for a suite of NRCS conservation practices, thereby streamlining the design and approval process for landowners and ranchers pursuing restoration projects. The term of this ten-year program ends in 2027 and staff are currently exploring possibilities for updating and extending its term. Other aspects of this program include being contracted as a CEQA lead agency for other restoration projects and assisting landowners with permits for public trust agencies.

- The 2025 PCP project list is expected to include COW MILC practices but has not yet been compiled.

- **Audubon Canyon Ranch (ACR) CA Vegetation Treatment Program Plan**
 - MRCD was contracted by ACR to act as CEQA lead on a vegetation management plan tiered off of the CalFire Vegetation Treatment Plan Environmental Impact Report (EIR). MRCD scope of work is limited to CEQA document drafting, review and submission.
 - ACR has drafted their Project Specific Analysis and MRCD staff are reviewing it before it comes to the board..
 - A recent emergency proclamation from the governor suspending CEQA and Coastal Act and litigation against the State Board of Forestry may impact RCD's scope.

- **Green Gulch Streamflow Enhancement Project**
 - MRCD was contracted by Green Gulch to act as CEQA Lead on a streamflow enhancement project funded by the Wildlife Conservation Board and managed by Green Gulch and Prunuske Chatham Inc (PCI). The project restores instream flows in a coho stream by constructing additional storage and reallocating riparian to appropriate water rights. It involves a Section 1707 Water Rights change, pond installation, pond enhancement and pond decommissioning/ restoration. All permitting will be conducted by PCI.
 - The July board meeting included a presentation by PCI staff on the current project design and use of the Water Board's Statewide Restoration General Order to comply with CEQA.
 - They are expected to return as an action item by this board in the form of a CEQA

determination next month.

Carbon Farming Program (Sarah Skinker, Lee Farese, Preston Duncan, Fiona O'Neill)

- **Restore CA by Zero Foodprint (ZFP):** ZFP's Restore CA program will generate funds from restaurants charging diners with a 1% donation to support regenerative agriculture. Local producers can apply for the grant on their own, but must designate a local RCD as their technical assistance provider. Past applications have been ranked by the "total carbon removal per dollar" which is calculated as the requested grant amount divided by the total metric tons of modeled CO₂e (calculated using COMET Planner). Priority also given to historically underserved applicants. Zero Foodprint now also runs a Compost Connector program. [More information can be found here.](#)
 - No report

- **Marin Carbon Project (ongoing):** The MCP, managed by Orlena Yee (MCP Coordinator) now has a new Strategic Plan and Charter to guide overall coordination of carbon farming activities in the county and beyond.
 - MCP has created a Compost Working Group to ID barriers to composting. She is also identifying funding sources to support compost systems.
 - Working on a proposal to work with county partners to collect, calculate and submit GHG metrics to the county to meet goals of Climate Action Plan.
 - Team just submitted a proposal to Renewable Natural Resources Foundation to work with Berkeley researchers in Whendee Silver lab and Straus on research: "Compost applications for a circular carbon and nutrient economy on rangelands".

- **State Coastal Conservancy – SCC (85% complete):** This grant funds the Carbon Farming (CF) technical support team for the RCD while building county-wide capacity to accelerate adoption of the Marin County CF Program. The RCD and eight partners will expand Marin County's existing CF Program by: implementing 15-20 shovel-ready CF practices on 6–8 ranches, designing 15–20 more CF practices (planning for future implementation), and writing 6 new CF plans (CFPs) on newly participating farms (planning).
 - Carbon Farm Planning and Design update(s)
 - 7 Carbon Farm Plans have been completed. Final drafts have been submitted to and approved by CDFA. The Carbon Farm team is following

up with producers to review plans and prioritize projects for implementation.

- 4 projects were selected to meet the design deliverable for this grant. STRAW is almost finished with these designs.
- Tribal collaboration Buffy McQuillen and Matthew Johnson attended October 2023s board meeting for an open discussion about the collaboration. The CF Team met with STRAW and FIGR representatives in late June 2024 to discuss upcoming opportunities for collaboration. On May 9th, 2025 MRCD and STRAW staff reconnected with land owners and managers, and Tribal staff and citizens to re-visit implemented collaborative riparian restoration design projects at Toluma and Straus, and to receive input on new designs. The team is planning another site visit with new MRCD and Tribal members for October 2025.
- 4 of 6 WCB design recipients were implemented in 2023/24: TrueGrass, Straus, Toluma, Cohen. Planting has begun. Mahrt is not moving forward with implementation due to the current avian flu conditions. Torliatt has chosen not to move forward with implementation in this grant, but rather implemented herself last winter. Maintenance and monitoring continues at the implemented sites.
- **WCB 2022 (50% complete):** MRCD staff will collaborate with PB STRAW to implement and maintain 3-5 hedgerow/windbreak projects, work with Walker Creek Ranch to construct an ADA accessible pollinator and planting garden, and complete 1 Carbon Farm plan.
 - Carbon farm plan complete
 - Hedgerow/windbreak implementation complete. STRAW continues to maintain and monitor these projects.
 - Sarah continues to meet with Walker Creek Nursery team, including WCR naturalists and contract designers.
 - WCR is going to reapply for the FARE grant this summer for a naturalist that would staff the new space.
 - Sarah met with WCR nursery designer onsite in March 2025 to review designs. They are being reworked to meet the updated staffing challenges at WCR.
 - Educational resources will be developed in coordination with Emilie and regional RCDs (North Coast Soil Hub)

- **USDA Climate Smart Commodities – SMACCC (15% complete):** *We are currently not billing this grant due to the federal funding freeze. Work has paused until we receive more clarity from USDA on how to move forward.*
- **No-Till Drill**
 - Rentals of the No-Till Drill will resume in the fall of 2025. We are grateful that it is housed at Mike Moretti’s place.
 - In an attempt to get more users, we reduced the cost in 2024 from \$250/day to \$200/day, a rate consistent with other local RCDs.
 - The drill was under-utilized in the fall of 2024. We are adjusting our outreach strategy in 2025 to contact more producers.
 - No report for September
- **Technical Capacity Building and Training**
 - No report

North Coast Soil Hub & Carbon Farming Network (Emilie Winfield)

- **National Association of Conservation Districts (5th year is 50% complete) and NRCS Cooperative Agreement (50% complete) - North Coast Regional Soil Hub**

The Soil Hub created a revised Strategic Plan for 2025-2029. Shasta Valley RCD has joined the North Coast Soil Hub. One additional RCD, Lava Beds Butte Valley, has expressed interest in joining the Soil Hub. Emilie finished drafting an updated proposal for continued hub development, a revision of an earlier 2020 proposal for the North Coast Hub.

Outreach/communications/events:

- Coordinating outreach and education deliverables for the region through WCB Implementation Grant, NRCS Grazing Lands Conservation Initiative grant, and UC SAREP CA Farm Demonstration Network grant.
- Working on education and outreach for the Soil Hub. Currently developing a series of case studies for carbon farming practices. The goal is to have a series of stories showcasing regional implementation activities for the purpose of informing other farmers and ranchers and being a source of inspiration and empowerment. Hedgerow case study is underway with a Mendocino grower and a mulch case study with a Sonoma grower.

- Completing an article on NRCS CSP program for North Coast farmers and ranchers that will be published in October 2025.
- Working with Fiona on a new Soil Hub website template for sharing information about regional field trials and demonstration sites on the Soil Hub website.

Technical Assistance

- There are funds in the new NACD contract for activities associated with the NRCS EQIP program - EW and members of the carbon farming team will be utilizing the hours.
 - EW is working with the Petaluma NRCS office to assist with soil health testing and hedgerow projects for EQIP. EW is working on a nutrient management practice with a grower in Sonoma.

Partnerships and working groups:

- Facilitating a North Coast carbon farm planning peer learning group with regional RCDs to build technical capacity for CF planning and soil health management planning. Held one meeting in August focused on soils data collection and monitoring.
- Facilitating an RCD Ag Program Leadership Peer Group for program managers to share resources related to program design and orientation, needs assessment, program evaluation, resource and team management, SOPs, etc. Held one meeting in August focused on assessing needs within districts and developing program-level vision.
- Participating in statewide ag and climate hubs cohort group with other regional coordinators and CARCD. Attending biweekly meetings.
- Participating in statewide policy workgroup for RCD Ag & Climate program advancement that is developing a program proposal for an agriculture version of Department of Conservation's Regional Forest and Fire Capacity Building Program.
- Attended CA Farm Demonstration Network Meetings and meetings about web-based soil health report tools with UC Davis and statewide partners.
- Serving on the Conservation Innovation and Practice Adoption working group for the statewide C2P2 (CA Conservation Planning Partnership).
- Attended CDFA's Technical Assistance Provider Conference for the Office of Agricultural Resilience and Sustainability.

Technical capacity building and training:

- Partnered with NRCS Petaluma to host a training for RCD planners on the Conservation Stewardship Program (CSP) in August. The aim of the training was to increase comfort and familiarity with the CSP program and to better align RCD carbon farm planning processes to allow producers to access implementation funds through NRCS.

Hub Governance:

- Attending monthly North Coast Durable Collaboration meetings.
- Held Hub governance meeting in September.

Regional Opportunities Assessment:

- Starting to analyze implementation data from public sources to determine rates of adoption and outstanding opportunities. Time to work on opportunities assessment was low this month.

Funding opportunities:

1. North Coast RCDs are exploring ag-focused regional grant proposals in 2025 to access Prop 4 Climate Bond dollars and other funds. Emilie is coordinating North Coast proposals to SCC, WCB, CDFA, and NFWF. In June EW hosted 7 regional meetings for grant proposal planning and development.
 - a. NFWF Conservation Partners program will support increased TA on grazing lands in the region; proposal submitted in July.
 - b. In conversation about a regional proposal to SCC; differing timelines may result in RCDs submitting separate proposals to the agency.
 - c. Working on a regional proposal to WCB for hedgerow implementation.
 - d. Planning to submit a regional proposal to the CDFA Healthy Soils Block Grant Program; the solicitation is expected to be available in early 2026 based on communication with CDFA.
2. Emilie is working with the statewide Regional Hub Coordinators to develop a proposal to secure funding for regional coordination. The plan is to approach private foundations with support from Carbon Cycle Institute.

Urban Streams Program (Gerhard Epke temp PM for Sarah Phillips)

- A steady stream of inquiries continue to trickle their way across Sarah’s desk to other RCD staff. In the last month, several entities have requested help with fish counting, fish relocation for in-stream construction, and fish passage barrier information.
- Mill Valley Streamkeepers are applying for funding to remove a migration barrier in Old Mill Park after several salmon went viral trying to swim up a 35-foot concrete spillway last year.
- In Kentfield, the County of Marin has begun a long-awaited project to restore sections of the concrete channel by removing vertical walls, laying back the bank, improving resting pools for migratory fish as well as some grading and infrastructure for flood mitigation.

Stemple Creek Project (Preston Duncan)

Department of Conservation Riparian Restoration at Lazy R Ranch (100% complete): Marin RCD, in collaboration with Point Blue Conservation Science’s Students and Teachers Restoring a Watershed (STRAW) program, received funding from the Department of Conservation to restore approximately 4,260 linear feet of degraded riparian area along Stemple Creek at the Lazy R Ranch (Righetti). STRAW is a key subcontractor and will be responsible for implementation, plant establishment, and monitoring.

- Third year of monitoring and maintenance has begun.
- Grant is closed but is funded for a 3rd year of monitoring by Measure A

Pine Gulch Project (Gerhard Epke, Sarah Phillips)

RCD staff continue to work with MALT to secure funding for the repair of a leaky irrigation pond. The RCD and farmers along Bolinas’s Pine Gulch creek undertook an early water rights forbearance project, like Green Gulch, whereby instream flows are protected by developing offstream storage filled in winter. Peter Martinelli of Fresh Run Farms is still trying to seal the leak under his main storage pond. The current design is for a plastic liner buried across the bottom of the pond.

Fire and Forestry (Preston Duncan, Lee Farese, Gerhard Epke)

- **State Coastal Conservancy – SCC Fire and Forest Resiliency:** This Block grant, hosted by Humboldt RCD, funds capacity building for MRCD staff, outreach and education, and

implementation in partnership with Audubon Canyon Ranch's (ACR) Fire Forward Program.

- Contract and MOU has been signed between participating RCDs.
- Capacity Building:
 - Lee, Preston, and Sarah P. have up-to-date Firefighter Type II certifications, allowing them to participate in burns across the region.
 - Staff attended "Learn and Burn" days at Pepperwood Preserve this spring to increase knowledge. Lee and Preston participated in two Sonoma County grassland burns coordinated by the Good Fire Alliance in June
- Staff has been meeting with ACR to develop a work plan and a path forward to getting more fire implemented in the region.
- The Carbon Farming team integrated this topic into plans, and have been seeing interest from producers for weed management, shrub encroachment, forest resilience. There is a growing list of interested producers, and MALT has begun tracking this as well.
- Insurance needs have been investigated by Marcus, and are deemed sufficient to continue work. Preston is working on reaching out to other RCD's to be sure that liabilities are addressed in the Contract before completing and signing
- Work plan and budget is almost complete to share with HCRCD/SCC for final approval.

Monitoring and Project Tracking (Preston Duncan)

- **PRNS Monitoring:**
 - Final RDM window within this contract is complete. Preston is going to submit an invoice as soon as possible (when government shutdown ends).
- **Project Tracker:**
 - Fiona has been updating Project Tracker entries 🛫
- **Wildlife Monitoring:**
 - Preston has continued to attend Marin Monarch Working Group meetings when possible
- **GIS:**
 - Preston is working with regional RCDs in a GIS working group to hopefully get more coordination and consistency across district lines.
 - Preston is devising GIS data re-structure to better fit into planning templates in development.
 - CFP team is meeting as-needed for GIS workshopping.

- Preston has been meeting with MALT to identify areas where we can get standardized and consistent data structures to more easily share data across organizations.
- Preston is building out more system updates to increase our efficiencies on the user end- Fiona is assisting with standardizing our data and narrowing down our data fields to be more useful
- Preston and Fiona are coordinating with Nancy/Elise to help make reporting numbers more available and easy to access, initiating work on this in October, including data restructure, publishing to Arc Online, and building dashboards and other relevant resources for staff to access.
- **Conservation plan (CFP) Monitoring, support, and reporting:**
 - Preston networking and getting assessment of regional interest to develop standardized protocols for County Climate Action Plan reporting.
 - Preston and team are reaching out to producers with CFPs that haven't been contacted in a while to coordinate some needs and updates. The hope is to build a yearly or bi-yearly monitoring window, coordinating with MALT staff when relevant and possible, to accomplish CFP check-ins and make sure people are supported in implementation and goals.
 - Several CFPs do not have tables with Carbon Quantifications currently, so Preston is looking to get numbers solidified for those plans

Staff serving on committees or attending regular meetings

Nancy Scolari

- Marin Carbon Project Steering Committee, Implementation Working Group
- MRCD Finance Committee
- North Coast RCD Durable Collaboration
- Sonoma-Marin Climate Smart Commodities / Advancing Markets for Producers
- North Coast RCD Soil Hub Executive Committee

Marcus Meggett

- MRCD Finance Committee (Facilitator)
- MRCD Staff Finance Meetings (Facilitator)

Sarah Phillips

- Tomales Bay Technical Advisory Group
- Marin Prescribed Fire Collaborative
- Lagunitas Technical Advisory Committee (Chair)
 - Large Woody Debris Subcommittee
 - Membership Subcommittee (Chair)
 - Aquatic Toxicology Subcommittee

- Marin Water's TUCP (Temporary Urgency Change Petition) Subcommittee
- Marin Water Stewardship Plan Subcommittee
- Prop 68 Lagunitas Watershed Enhancement Study Subcommittee
- Sonoma-Marín Weed Management Area Meetings
 - WMA Steering Committee
- Marin County Project Coordination Program (permitting)
- Gallinas Watershed Council (Advisor)
- Technical Advisory Group San Geronimo Commons Restoration (former golf course)
- MKAT (Marin Knotweed Action Team)

Sarah Skinker

- A-Team
- North Coast Soil Hub
- Marin Carbon Project (MCP) Implementation Working Group
- SMACCC Implementation and TAC Working Groups
- California Farm Demonstration Network

Gerhard Epke

- Regional Water Quality Control Board Grazing Waiver Technical Advisory Committee
- Tomales Bay Foundation Advisory Committee
- Sonoma Farm Bureau Animal Resource Committee
- Marin Prescribed Fire Collaborative
- Lagunitas Technical Advisory Committee (Alternate MRCD Rep to SP)
- Marin County Project Coordination Meeting
- A-Team

Preston Duncan

- A-Team
- Lagunitas Technical Advisory Committee (Alternate MRCD Rep for Sarah P)
- North Coast Soil Hub
- Marin Monarch Working Group
- Marin Prescribed Fire Collaborative
- Carbon Farm Planning Portal Advisory Group
- Good Fire Alliance (North Bay's Prescribed Burning Association) Steering Committee

Emilie Winfield

- North Coast Soil Hub (Coordinator)
- CARCD Ag Technical Assistance Task Force
- California Farm Demonstration Network
- RCD Statewide Ag & Climate Hubs Coordinators Cohort
- RCD Ag & Climate Hubs Partnership Policy Workgroup
- Bay Area Regional Climate Action Plan: NWL Technical Stakeholder Group

- C2P2 Conservation Innovation and Practice Adoption Working Group

Chad White (special consultant)

- Marin Biomass Steering Committee/Collaborative (Project Manager)

Orlena Yee (special consultant)

- Marin Carbon Project (Coordinator)

Lee Farese

- Sonoma-Marine Weed Management Area Meetings
- A-Team
- North Coast Soil Hub
- Marin Carbon Project (MCP) Implementation Working Group
- Marin Prescribed Fire Collaborative

Fiona O'Neill

- A-Team
- North Coast Soil Hub
- California Farm Demonstration Working Group