Marin County
Community Development Agency

Alex Hinds, Director

NOTICE OF DECISION

Applicant's Name:	Pine Gultch Enhancement Project
Application (type and number):	Coastal Permit (CP 03-4) and Design Review Clearance (DC 03-24)
Assessor's Parcel Number:	188-090-15, 188-150-69, 188-170-45 and 193-010-19
Project Location:	Assorted addresses generally located west of Olema-Bolinas Road
For inquiries, please contact:	Jeremy Tejirian
Decision Date:	November 15, 2007
DETERMINATION:	**Approved with Conditions**

Minutes of the November 15, 2007, Deputy Zoning Administrator's hearing are attached specifying action and applicable conditions 1-17.

Marin County Community Development Agency

Johanna Patri
Hearing Officer

H2. **A. NEGATIVE DECLARATION OF ENVIRONMENTAL IMPACT: PINE GULTCH ENHANCEMENT PROJECT**
B. PINE GULTCH ENHANCEMENT PROJECT COASTAL PERMIT (CP 03-4) AND DESIGN REVIEW CLEARANCE (DC 03-24)

Hearing proposing to construct a total of five off-stream water storage ponds on the subject properties. The project sites are generally located west of Olema-Bolinas Road near Bolinas Lagoon in Bolinas, CA. The location, number, size and capacity of the ponds are summarized in the table below.

Operation/ Owner	Number of ponds to Meet Storage Need	Proposed Water Storage	Pond Site/ Capacity	Pond Surface Area	Pond Site Assessor's Parcel/ Address
Fresh Run Farms (Martinelli Family)	2	20.5 acre-ft	pond 1A (+ Tank) 3.5 acre-ft pond 1B 17 acre-ft	pond 1A 0.7 acre pond 1B 1.3 acres	APN 188-090-15 (615 Paradise Valley Road)
Paradise Valley Farm (New Land Fund)	1	5.5 acre-ft	pond 2 5.5 acre-ft	pond 2 0.83 acre	APN 188-150-69 (235 Paradise Valley Road)
Star Route Farms (Warren Weber)	2	35.4 acre-ft	pond 3B 9.4 acre-ft Pond 3A 26 acre-ft	pond 3B 1 acre Pond 3A 2.7 acres	APN 188-170-45 (850 Lauff Ranch Road) APN 193-010-19 (95 Olema-Bolinas Road)

In response to the Hearing Officer, staff summarized the letters received since the issuance of the staff report. Some of the correspondence expressed concerns with the sufficiency of the Initial Study. In response to a concern regarding illegal diversions of water from John O'Connor, staff noted that the State Water Board is responsible for inspections and enforcement of water flow issues, and substantial evidence of diversions have not been proven. In the absence of facts, we do not have the authority to change the recommendation. The Tomales Bay Association raised similar concerns and questioned possible harm to the Salmon. Staff responded that the effects will be beneficial and the habitat will be significantly improved. Riparian water can be withdrawn from the creek without permits, and this project will withdraw the water in the winter months and have it stored. In response to comments regarding the different agencies involved, staff noted that the County of Marin is involved with just the first step of the process, and the applicant will then have to go before the State Water Board and the Department of Fish and Game. The State will impose conditions of approval regarding water usage that the County cannot. In response to a suggestion from the applicant for a modification to a mitigation measure, staff responded that the Initial Study would have to be re-circulated and a peer review archeologist would have to re-review the Initial Study to see if the mitigation measures are satisfactory.

The Hearing Officer responded that after reviewing the two measures in question, she is not inclined to change them. She noted that the State Department of Fish and Game require a Streambed Alteration Agreement and the water rights approvals are required from the State Water Board. Should it be determined that a pre-historic site exists, a letter would be more of a clarification, and a registered archeologist would have to be hired by the County for a series of mitigations that would apply.

The public testimony portion of the hearing was opened.

Carol Whitmire, planning consultant for the owners, thanked staff of all the agencies that have worked with her for the past ten years. She introduced the three farmers involved and the attorney representing the project, the park service representative, and Nancy Scalari, Marin County RCD. She noted that Gorden Benett had to leave the hearing, but supports the project. She asked to withdraw the letter regarding the archeological concerns. Roger Roberts, Marin Conservation League, also expressed general support of the project.

John O'Connor supports the project, but expressed concerns with:

- Possible sale of the water if the farmers go out of business many years from now;
- Diversion issues;
- Lack of communication between the farmers;
- No assurance from the State Water Board as to how they would monitor;
- Water usage for Assessor's Parcel # 195-290-13;
- Water diversions in drought years;
- Assurance that water diversions rights are not transferable for any use but agriculture; and
- Timing of the water runs to not interfere with the salmon.

Barry Epstein, attorney for the project, noted that although this project requires a number of permits and approvals from a number of agencies, the Coastal Permit and Design Review are the only permits before us today. The State Water Board has extensive experience with water control issues and will monitor the water ponds and water rights, and it is up to them to enforce the violations should they occur on Assessor's Parcel # 195-290-13.

In response to the Hearing Officer, staff stated that he had no further comment.

The public testimony portion of the hearing was closed.

The Hearing Officer acknowledged that a great deal of sturdy has gone into this project and feels that diverting the water will enhance the habitat value for the fish and other wild life and the County is first in line for the permiting process. The County has no authority over the water rights or uses which are the purview of the State Water Board which will also do the enforcement of water usage. The Department of Fish and Game will do any permitting for any stream alteration and there will be much oversight for this project. She agrees with staff's analysis, findings, and Conditions of Approval. As called out in Condition of Approval #6, any changes or additions to the project shall be submitted to the Community Development Agency in writing for review and approval.

The Hearing Officer adopted the Negative Declaration of Environmental Impact.

The Hearing Officer approved the Pine Gulch Enhancement Project Coastal Permit and Design Review Clearance, based on the Findings and subject to the Conditions as set for the in the modified Resolution.

The Hearing Officer informed all parties of interest that this action may be appealed to the Marin County Planning Commission within five (5) working days, which will fall on Monday, November 26, 2007 because of the holiday.

MARIN COUNTY DEPUTY ZONING ADMINISTRATOR

RESOLUTION NUMBER 07-169

A RESOLUTION ADOPTING A MITIGATED NEGATIVE DECLARATION OF ENVIRONMENTAL IMPACT

THE PINE GULCH CREEK ENHANCMENT PROJECT COASTAL PERMIT AND DESIGN REVIEW CLEARANCE
(CP 03-4 and DC 03-24)

Fresh Run Farms, owned by the Martinelli family, represented by Peter Martinelli:
615 Paradise Valley Road
Assessor's Parcel (ponds 1A & 1B) 188-090-15

Paradise Valley Farm owned by New Land Fund, represented by Dennis Dierks:
235 Paradise Valley Road
Assessor's Parcel (pond 2) 188-150-69

Star Route Farms owned by Warren Weber:
95 Olema-Bolinas Road
Assessor's Parcel (pond 3B) 193-010-19
850 Lauff Ranch Road (north creek)
Assessor's Parcel (pond 3A) 188-170-45

* *

SECTION I: FINDINGS

I. **WHEREAS** the applicant, Carol Whitmire, on behalf of the owners of Fresh Run Farms, Paradise Valley Farm, and Star Route Farms, is requesting Coastal Permit and Design Review Clearance approval to construct a total of five off-stream water storage ponds on the subject properties. The project sites are generally located west of Olema-Bolinas Road near Bolinas Lagoon in Bolinas, CA. The location, number, size and capacity of the ponds are summarized in the table below.

Operation/ Owner	Number of ponds to Meet Storage Need	Proposed Water Storage	Pond Site/ Capacity	Pond Surface Area	Pond Site Assessor's Parcel/ Address
Fresh Run Farms (Martinelli Family)	2	20.5 acre-ft	pond 1A (+ Tank) 3.5 acre-ft	pond 1A 0.7 acre	APN 188-090-15 (615 Paradise Valley Road)
			pond 1B 17 acre-ft	pond 1B 1.3 acres	

Paradise Valley Farm (New Land Fund)	1	5.5 acre-ft	pond 2 5.5 acre-ft	pond 2 0.83 acre	APN 188-150-69 (235 Paradise Valley Road)
Star Route Farms (Warren Weber)	2	35.4 acre-ft	pond 3B 9.4 acre-ft	pond 3B 1 acre	APN 188-170-45 (850 Lauff Ranch Road)
			pond 3A 26 acre-ft	pond 3A 2.7 acres	APN 193-010-19 (95 Olema-Bolinas Road)

1. SUMMARY

Appropriated water storage volumes have been calculated to ensure that, under normal conditions, each farmer can meet his annual irrigation needs between July 1 and the end of the growing season. At Fresh Run Farms, two ponds will store approximately 20.5 acre-feet of water. At Paradise Valley Farm, one pond will store approximately 5.5 acre-feet of water. At Star Route Farms, two ponds will store approximately 35.4 acre-feet of water. The location of the ponds proposed for construction is shown in the Initial Study Exhibit.

2. FRESH RUN FARMS

Water Distribution System

Both existing and new pumps would draw surface water from Pine Gulch Creek through intake valves that would be covered with a screen to filter objects and sediment in conformance with the requirements of the State Department of Fish and Game. A combination of existing pipes, replacement pipes and new pipes would be used to convey the water from Pine Gulch Creek to the water storage ponds. A total of approximately 1,250 linear feet of new water pipes would be installed underground for the water distribution system. In addition, approximately 800 feet of buried irrigation pipe (4-inch PVC pipe with periodic risers) would be installed as part of the project. The Fresh Run Farms Specifications table in the attached Initial Study Exhibit provides a summary of the water facilities that would be used for the project, and those specifications are incorporated by reference into this project description.

Storage Ponds

Pond 1A, the Hilltop Pond, would be constructed in accordance with the submitted plans shown in the Initial Study Exhibit and the following specifications:

Pond 1A- Hilltop Pond

Work area	0.8 acres
Storage pond surface area	0.7 acres
Brush removal area	0.25 acres
Storage capacity	3.1 acre-feet
Storage capacity, below grade	0.5 acre-feet
Top width	12 feet
Maximum levee height	15 feet
Maximum water depth	12 feet
Total cut volume	3,000 cubic yards

Compacted fill volume	2,610 cubic yards
Cut/fill ratio	1.15/1.00 cubic feet
Volume of pond liner (foundation)	1,200 cubic yards

As shown in the schematic drawing of the water distribution system included in the Initial Study Exhibit, there is an existing pipe from the upper point of diversion from the creek up to the existing tank, which is adjacent to pond 1A; there would be a new pipe segment (approximately 50 feet) between the tank and pond 1A, and; there would be a new pipe from pond 1A down to the "Y" in the distribution system. There would be no spillway on pond 1A because water filling this pond would be pumped uphill very slowly and in small amounts. Pond 1A would be operated in conjunction with a tank located adjacent to the pond site. The combined storage capacity of the tank and pond 1A would be 3.5 acre-feet.

Pond 1B, the New Green Pond, would be constructed in accordance with the submitted plans shown in the Initial Study Exhibit and the following specifications:

Pond 1B- New Green Pond

Work area	1.5 acres
Storage pond surface area	1.3 acres
Brush removal area	0.25 acres
Storage capacity	17 acre-feet
Storage capacity, below grade	0.5 acre-feet
Top width	12 feet
Maximum levee height	25 feet
Maximum water depth	24 feet
Total cut volume	13,100 cubic yards
Compacted fill volume	2,610 cubic yards
Cut/fill ratio	1.24/1.00 cubic feet
Volume of pond liner (foundation)	8,000 cubic yards

Rock armored drainage ditches would direct sheet flow from the surrounding area into the pond. Spillways would be constructed for pond 1B by installing pipes on the southern side of the pond embankment and rock armor would be used to reinforce the pipe ditches and act as energy dissipaters down flow of the pipe outfalls. The spillway would empty into the existing Green Pond.

The dirt farm road that leads around the existing Green Pond would be relocated by re-grading an area approximately 50-feet upslope of the existing farm road and installing a rock armored drainage ditch (called a rock rolling dip) that would concentrate sheet flow, dissipate energy and be passable by farm vehicles.

3. PARADISE VALLEY FARM

Water Distribution

A new pump, with a 30 gallon per minute maximum capacity, would draw surface water from Pine Gulch Creek through an intake valve that would be covered with a screen to filter objects and sediment in conformance with the requirements of the State Department of Fish and Game. New pipes would be used to convey the water from Pine Gulch Creek to the water storage pond. A total of approximately 500 feet of new water pipes would be installed underground for the water distribution system. Existing pipes would be used for the irrigation. The Paradise Valley Farm Specifications table in the attached Initial Study Exhibit provides a summary of the water facilities that would be used for the Paradise Valley Farm component of the project, and those specifications are incorporated by reference into this project description.

Storage Pond

Pond 2, the Hillside Pond, is proposed to be built against the west-facing hill on the property that faces Pine Gulch Creek. Safety factors determine the height of the embankments of the pond and therefore the amount of storage that can be achieved on this property, as the risk to human habitation increases with increased pond size and volume.

The storage pond would be constructed in accordance with the submitted plans and the following specifications:

Pond 2- Hillside Pond

Work area	1.64 acres
Storage pond surface area	0.83 acres
Brush removal area	0.5 acres
Storage capacity	5.5 acre-feet
Storage capacity, below grade	4.1 acre-feet
Top width	12 feet
Maximum levee height	14 feet
Maximum water depth	10 feet
Total cut volume	7,600 cubic yards
Compacted fill volume	6,900 cubic yards
Cut/fill ratio	1.10/1.00 cubic feet
Volume of pond liner (foundation)	2,500 cubic yards

A rock armored ditch would direct flow from a drainage ditch on the hillside into the storage pond. Spillways would be constructed for the storage pond by installing two pipes on the southern side of the pond embankment and rock armor would be used to reinforce the pipe ditches and act as energy dissipaters down flow of the pipe outfalls, which would empty into the meadow below the pond.

4. STAR ROUTE FARMS

Water Distribution

Two new storage ponds would be constructed on the property, as well as the associated water distribution improvements. Pond 3B, the North Pond, would be smaller than pond 3A, the South Pond, which would be located in approximately the same place as the existing pond on the property. Two existing pumps would draw surface water from Pine Gulch Creek through intake valves that would be covered with screens to filter objects and sediment in conformance with the requirements of the State Department of Fish and Game. Existing pipes, along with approximately 300 feet of new buried pipe at pond 3A, would be used to convey the water from Pine Gulch Creek to the ponds. A total of approximately 300 feet of new water pipes would be installed underground for the water distribution system. Existing pipes would be used for the irrigation, with minor modifications to be made as needed to adjust to the expanded water storage capacity and approximately 300 feet of new irrigation distribution pipe in the north field. The Star Route Farms Specifications table in the attached Initial Study Exhibit provides a summary of the water facilities that would be used for the Star Route Farms component of the project.

Storage Ponds

Constructing pond 3B would entail removing 14 greenhouses, that each have approximately 1,625 square feet of growing area. Pond 3B would be constructed in accordance with the submitted plans and the following specifications:

Pond 3B: North Pond

Work area	1.50 acres
Storage pond surface area	1.00 acres
Brush removal area	0.5 acres
Storage capacity	9.4 acre-feet
Storage capacity, below grade	4.1 acre-feet
Top width	12 feet
Maximum levee height	9 feet
Maximum water depth	14 feet
Total cut volume	6,700 cubic yards
Compacted fill volume	6,000 cubic yards
Cut/fill ratio	1.15/1.00 cubic feet
Volume of pond liner (foundation)	3,300 cubic yards

A spillway would be constructed by installing a pipe though the pond embankment that would lead to a rock armored ditch to dissipate the energy and velocity of the flow. The water would then flow from the ditch into a vegetated swale and into an existing culvert with an outfall into Pine Gulch Creek.

Constructing pond 3A would entail demolishing a portion of the existing pond and constructing a new and larger pond in its place. Construction of this pond would also involve removal of approximately 400 eucalyptus trees from an existing grove. Pond 3A would be constructed in accordance with the submitted plans shown in the Initial Study Exhibit and the following specifications:

Pond 3A: South Pond

Work area	3.7 acres
Storage pond surface area	2.7 acres
Tree removal area	2 acres (approximately 400 eucalyptus trees)
Storage capacity	26 acre-feet
Storage capacity, below grade	6.5 acre-feet
Top width	15 feet
Maximum levee height	13 feet
Maximum water depth	12 feet
Total cut volume	18,600 cubic yards
Compacted fill volume	15,900 cubic yards
Cut/fill ratio	1.2/1.00 cubic feet
Volume of pond liner (foundation)	4,600 cubic yards

Spillways would be constructed by installing a pipe through the pond embankment that would lead to a rock armored ditch to dissipate energy and velocity of flow, which would then empty into the fields surrounding the pond.

CONCLUSION

The proposed development would enable the farmers to store water for longer periods of time, provided they receive the necessary approvals from the California Water Resources Control Board and California Department of Fish and Game. The Farmers would be subject to the requirements and conditions of the State with respect to water appropriation and use.

II. **WHEREAS** the Marin County Community Development Agency - Planning Division prepared an Initial Study for the project which determined that potential impacts relating to Geophysical, Biological Resources, and Cultural Resources, are avoided or mitigated to a point where no significant effects would occur because revisions in the project have been made by or agreed to by the applicant and there is no evidence that the project as revised may have a significant effect on the environment.

III. **WHEREAS** the Marin County Environmental Coordinator determined that, based on the Initial Study, a Mitigated Negative Declaration of Environmental Impact is recommended for the project pursuant to the California Environmental Quality Act (CEQA). All potentially significant adverse effects related to the project and appropriate mitigation measures have been discussed in the Initial Study. All required mitigation measures have been incorporated into conditions of project approval contained in the conditional approval Resolution.

IV. **WHEREAS** on August 25, 2007 a Mitigated Negative Declaration was completed and distributed to agencies and interested parties to commence a 30 day public review period for review and comment on the Mitigated Negative Declaration, and a Notice of the public review period and hearing date to consider approval of the Mitigated Negative Declaration was published in a general circulation newspaper pursuant to CEQA.

V. **WHEREAS** after the close of the public review period on September 24, 2007 the Marin County Deputy Zoning Administrator conducted a public hearing on November 15, 2007 to receive public testimony on the adequacy of the Mitigated Negative Declaration for approval.

VI. **WHEREAS** the Marin County Deputy Zoning Administrator has reviewed and considered the information contained in the Initial Study, Mitigated Negative Declaration and comments and responses thereto and finds that:

A. Notice of the public review period and hearing on the Mitigated Negative Declaration was given as required by law and said hearing was conducted pursuant to Sections 15073 and 15074 of the State CEQA Guidelines and the County CEQA process.

B. All individuals, groups and agencies desiring to comment on the Mitigated Negative Declaration were given the opportunity to address the Marin County Deputy Zoning Administrator.

C. The Mitigated Negative Declaration for the project consists of the Initial Study, Mitigated Negative Declaration document, and supporting information incorporated by reference therein.

D. The Mitigated Negative Declaration was completed in compliance with the intent and requirements of CEQA, the State CEQA Guidelines, and the County CEQA process.

SECTION II: APPEAL RIGHTS

NOW, THEREFORE BE IT RESOLVED that this decision is final unless appealed to the Planning Commission. A Petition for Appeal and a $600.00 filing fee must be submitted in the Community Development Agency - Planning Division, Room 308, Civic Center, San Rafael, no later than **4:00 p.m.** on November 26, 2007.

SECTION III: ACTION

PASSED AND ADOPTED at a regular meeting of the Deputy Zoning Administrator of the County of Marin, State of California, on the 15th day of November, 2007.

JOHANNA PATRI, AICP
DEPUTY ZONING ADMINISTRATOR

Attest:

Joyce Evans
Deputy Zoning Administrator Secretary

MARIN COUNTY DEPUTY ZONING ADMINISTRATOR

RESOLUTION NUMBER 07-170

A RESOLUTION APPROVING WITH CONDITIONS

THE PINE GULCH CREEK ENHANCMENT PROJECT COASTAL PERMIT AND DESIGN REVIEW CLEARANCE
(CP 03-4 and DC 03-24)

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Star Route Farms owned by Warren Weber:
95 Olema-Bolinas Road
Assessor's Parcel (pond 3B) 193-010-19
850 Lauff Ranch Road (north creek)
Assessor's Parcel (pond 3A) 188-170-45

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I. **WHEREAS** the applicant, Carol Whitmire, on behalf of the owners of Fresh Run Farms, Paradise Valley Farm, and Star Route Farms, is requesting Coastal Permit and Design Review Clearance approval to construct a total of five off-stream water storage ponds on the subject properties. The project sites are generally located west of Olema-Bolinas Road near Bolinas Lagoon in Bolinas, CA. The location, number, size and capacity of the ponds are summarized in the table below.

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			pond 1B 17 acre-ft	pond 1B 1.3 acres	

Paradise Valley Farm (New Land Fund)	1	5.5 acre-ft	pond 2 5.5 acre-ft	pond 2 0.83 acre	APN 188-150-69 (235 Paradise Valley Road)
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			pond 3A 26 acre-ft	pond 3A 2.7 acres	APN 193-010-19 (95 Olema-Bolinas Road)

1. SUMMARY

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2. FRESH RUN FARMS

Water Distribution System

Both existing and new pumps would draw surface water from Pine Gulch Creek through intake valves that would be covered with a screen to filter objects and sediment in conformance with the requirements of the State Department of Fish and Game. A combination of existing pipes, replacement pipes and new pipes would be used to convey the water from Pine Gulch Creek to the water storage ponds. A total of approximately 1,250 linear feet of new water pipes would be installed underground for the water distribution system. In addition, approximately 800 feet of buried irrigation pipe (4-inch PVC pipe with periodic risers) would be installed as part of the project. The Fresh Run Farms Specifications table in the Initial Study Exhibit provides a summary of the water facilities that would be used for the project, and those specifications are incorporated by reference into this project description.

Storage Ponds

Pond 1A, the Hilltop Pond, would be constructed in accordance with the submitted plans shown in the Initial Study Exhibit and the following specifications:

Pond 1A- Hilltop Pond

Work area	0.8 acres
Storage pond surface area	0.7 acres
Brush removal area	0.25 acres
Storage capacity	3.1 acre-feet
Storage capacity, below grade	0.5 acre-feet
Top width	12 feet
Maximum levee height	15 feet
Maximum water depth	12 feet
Total cut volume	3,000 cubic yards
Compacted fill volume	2,610 cubic yards

Cut/fill ratio	1.15/1.00 cubic feet
Volume of pond liner (foundation)	1,200 cubic yards

As shown in the schematic drawing of the water distribution system included in the Initial Study Exhibit, there is an existing pipe from the upper point of diversion from the creek up to the existing tank, which is adjacent to pond 1A; there would be a new pipe segment (approximately 50 feet) between the tank and pond 1A, and; there would be a new pipe from pond 1A down to the "Y" in the distribution system. There would be no spillway on pond 1A because water filling this pond would be pumped uphill very slowly and in small amounts. Pond 1A would be operated in conjunction with a tank located adjacent to the pond site. The combined storage capacity of the tank and pond 1A would be 3.5 acre-feet.

Pond 1B, the New Green Pond, would be constructed in accordance with the submitted plans shown in the Initial Study Exhibit and the following specifications:

Pond 1B- New Green Pond

Work area	1.5 acres
Storage pond surface area	1.3 acres
Brush removal area	0.25 acres
Storage capacity	17 acre-feet
Storage capacity, below grade	0.5 acre-feet
Top width	12 feet
Maximum levee height	25 feet
Maximum water depth	24 feet
Total cut volume	13,100 cubic yards
Compacted fill volume	2,610 cubic yards
Cut/fill ratio	1.24/1.00 cubic feet
Volume of pond liner (foundation)	8,000 cubic yards

Rock armored drainage ditches would direct sheet flow from the surrounding area into the pond. Spillways would be constructed for pond 1B by installing pipes on the southern side of the pond embankment and rock armor would be used to reinforce the pipe ditches and act as energy dissipaters down flow of the pipe outfalls. The spillway would empty into the existing Green Pond.

The dirt farm road that leads around the existing Green Pond would be relocated by re-grading an area approximately 50-feet upslope of the existing farm road and installing a rock armored drainage ditch (called a rock rolling dip) that would concentrate sheet flow, dissipate energy and be passable by farm vehicles.

3. PARADISE VALLEY FARM

Water Distribution

A new pump, with a 30 gallon per minute maximum capacity, would draw surface water from Pine Gulch Creek through an intake valve that would be covered with a screen to filter objects and sediment in conformance with the requirements of the State Department of Fish and Game. New pipes would be used to convey the water from Pine Gulch Creek to the water storage pond. A total of approximately 500 feet of new water pipes would be installed underground for the water distribution system. Existing pipes would be used for the irrigation. The Paradise Valley Farm Specifications table in the attached Initial Study Exhibit provides a summary of the water facilities that would be used for the Paradise Valley Farm component of the project, and those specifications are incorporated by reference into this project description.

Storage Pond

Pond 2, the Hillside Pond, is proposed to be built against the west-facing hill on the property that faces Pine Gulch Creek. Safety factors determine the height of the embankments of the pond and therefore the amount of storage that can be achieved on this property, as the risk to human habitation increases with increased pond size and volume.

The storage pond would be constructed in accordance with the submitted plans and the following specifications:

Pond 2- Hillside Pond

Work area	1.64 acres
Storage pond surface area	0.83 acres
Brush removal area	0.5 acres
Storage capacity	5.5 acre-feet
Storage capacity, below grade	4.1 acre-feet
Top width	12 feet
Maximum levee height	14 feet
Maximum water depth	10 feet
Total cut volume	7,600 cubic yards
Compacted fill volume	6,900 cubic yards
Cut/fill ratio	1.10/1.00 cubic feet
Volume of pond liner (foundation)	2,500 cubic yards

A rock armored ditch would direct flow from a drainage ditch on the hillside into the storage pond. Spillways would be constructed for the storage pond by installing two pipes on the southern side of the pond embankment and rock armor would be used to reinforce the pipe ditches and act as energy dissipaters down flow of the pipe outfalls, which would empty into the meadow below the pond.

4. STAR ROUTE FARMS

Water Distribution

Two new storage ponds would be constructed on the property, as well as the associated water distribution improvements. Pond 3B, the North Pond, would be smaller than pond 3A, the South Pond, which would be located in approximately the same place as the existing pond on the property. Two existing pumps would draw surface water from Pine Gulch Creek through intake valves that would be covered with screens to filter objects and sediment in conformance with the requirements of the State Department of Fish and Game. Existing pipes, along with approximately 300 feet of new buried pipe at pond 3A, would be used to convey the water from Pine Gulch Creek to the ponds. A total of approximately 300 feet of new water pipes would be installed underground for the water distribution system. Existing pipes would be used for the irrigation, with minor modifications to be made as needed to adjust to the expanded water storage capacity and approximately 300 feet of new irrigation distribution pipe in the north field. The Star Route Farms Specifications table in the attached Initial Study Exhibit provides a summary of the water facilities that would be used for the Star Route Farms component of the project.

Storage Ponds

Constructing pond 3B would entail removing 14 greenhouses, that each have approximately 1,625 square feet of growing area. Pond 3B would be constructed in accordance with the submitted plans and the following specifications:

Pond 3B: North Pond

Work area	1.50 acres
Storage pond surface area	1.00 acres
Brush removal area	0.5 acres
Storage capacity	9.4 acre-feet
Storage capacity, below grade	4.1 acre-feet
Top width	12 feet
Maximum levee height	9 feet
Maximum water depth	14 feet
Total cut volume	6,700 cubic yards
Compacted fill volume	6,000 cubic yards
Cut/fill ratio	1.15/1.00 cubic feet
Volume of pond liner (foundation)	3,300 cubic yards

A spillway would be constructed by installing a pipe though the pond embankment that would lead to a rock armored ditch to dissipate the energy and velocity of the flow. The water would then flow from the ditch into a vegetated swale and into an existing culvert with an outfall into Pine Gulch Creek.

Constructing pond 3A would entail demolishing a portion of the existing pond and constructing a new and larger pond in its place. Construction of this pond would also involve removal of approximately 400 eucalyptus trees from an existing grove. Pond 3A would be constructed in accordance with the submitted plans shown in the Initial Study Exhibit and the following specifications:

Pond 3A: South Pond

Work area	3.7 acres
Storage pond surface area	2.7 acres
Tree removal area	2 acres (approximately 400 eucalyptus trees)
Storage capacity	26 acre-feet
Storage capacity, below grade	6.5 acre-feet
Top width	15 feet
Maximum levee height	13 feet
Maximum water depth	12 feet
Total cut volume	18,600 cubic yards
Compacted fill volume	15,900 cubic yards
Cut/fill ratio	1.2/1.00 cubic feet
Volume of pond liner (foundation)	4,600 cubic yards

Spillways would be constructed by installing a pipe through the pond embankment that would lead to a rock armored ditch to dissipate energy and velocity of flow, which would then empty into the fields surrounding the pond.

CONCLUSION

The proposed development would enable the farmers to store water for longer periods of time, provided they receive the necessary approvals from the California Water Resources Control Board and California Department of Fish and Game. The Farmers would be subject to the requirements and conditions of the State with respect to water appropriation and use.

II. **WHEREAS** the Marin County Deputy Zoning Administrator held a duly noticed public hearing on November 15, 2007 to consider the merits of the project, and hear testimony in favor of and in opposition to the project.

III. **WHEREAS** the Marin County Deputy Zoning Administrator has reviewed and considered testimony regarding a recommended Mitigated Negative Declaration and finds, subject to the mitigation and monitoring measures and the conditions of project approval contained herein, that this project will not result in any potentially significant environmental impacts, and qualifies for a Mitigated Negative Declaration of Environmental Impact in compliance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the County CEQA process.

IV. **WHEREAS** the Marin County Deputy Zoning Administrator finds that the proposed project is consistent with the Marin Countywide Plan (CWP), the Bolinas Community Plan (Community Plan), and the standards of the Marin County Interim Zoning Ordinance (Title I22) and Development Standards (Title 24) for the reasons discussed below.

For purposes of land use considerations, the CWP divides the County into three environmental corridors. The subject properties are located in the Coastal Recreation Corridor and have land use designations of C-AG-1 (Coastal, Agricultural, 1 unit per 31-60 acres), C-AG-2 (Coastal, Agricultural, 1 unit per 10-30 acres), and C-AG-3 (Coastal, Agricultural, 1 unit per 1-9 acres). These agricultural designations emphasize the importance of maintaining the properties for agricultural operations. The Bolinas Community Plan emphasizes protecting natural resources, encouraging agriculture, and enhancing the character of the local community.

The Pine Gulch Creek Enhancement Project represents a cooperative arrangement by the organic farmers in the watershed to develop an environmentally and agriculturally sustainable program to protect surface flow for salmonids, while maintaining viable organic farm operations. The solutions proposed in the application materials are based on substantial environmental research conducted over the past 10 years and may be applicable to many other coastal watersheds supporting salmonids. The proposed project identifies a viable solution to maintain organic farming while protecting summer surface flow in Pine Gulch Creek for the benefit of coho salmon and steelhead trout, which would not adversely affect the character of the local community. The project's relationship to various policies is further discussed below.

A. Visual Resources and Community Character

Policies

The CWP requires that visual qualities and view potential of the natural and built environment must be considered in reviewing development projects. In particular, preserving visual resources should be achieved by avoiding removal or damage to trees (Policy EQ-3.11).

In order to be consistent with CWP policies, development should preserve unique natural site amenities including hillsides, ridges, watercourses, stands of significant trees, rock outcroppings and other natural features that are distinguishing characteristics of the surrounding area. The visibility of new development should be minimized by using existing natural site characteristics for screening such as trees and topographic features.

Project

The proposed ponds would be located in secluded areas, distant from surrounding residential neighborhoods and main roads. Further, the maximum height of the embankments for all of the ponds except the pond 1B would not exceed 15 feet above grade. Pond 1B would have embankments that are 25 feet in height above grade, but this pond would be located in an isolated and remote location, and would not be visible from off-site locations. The only pond that would be easily visible from a public road would be pond 3A on Star Route Farms, and it would not exceed a height of 13 feet above grade. Pond 3A would be visible from Olema-Bolinas Road, but would not impede views and would have a visual backdrop of forest and hillsides. The pond's embankments would be of earthen construction and vegetated throughout the year. Further, water storage ponds are a typical element of a rural landscape, and would reinforce the agricultural character of the area. Therefore, the project would be consistent with the visual resources and community character policies contained in the CWP.

B. Geology and Landforms

Policies

The CWP requires new development to adhere to the standards of the Department of Public Works in order to minimize excavation, grading, and filling, while allowing for adequate access to developed properties (Policy EQ-3.16). The CWP also requires that new development be located and designed in a manner that minimizes hazards to the public in identified geologic hazard areas (Objective EH-3) and protects the public health and safety from ground rupture and seismic ground shaking (Objective EH-4 and EH-5).

Project

The proposed project would require earthwork to build the embankments for the ponds, but otherwise would avoid a substantial amount of grading and fill. The ponds are designed to only provide the necessary amount of water for irrigation. Geologic hazards related to seismicity are discussed in the Geophysical section VI.C of the Initial Study, and would result in potentially significant impacts to residences downslope of the proposed ponds. Mitigation measures C.1.1 and C.1.2 would reduce these impacts to less than significant levels by avoiding hazardous areas and channeling debris flows away from existing residences in the event of a major earthquake. Therefore, the project would be consistent with the geology and landform policies contained in the CWP.

C. Hydrology and Drainage

Policies

Hydrological and biological processes should be maintained (Policy EQ-3.4). In order to conform with CWP policies, development should be designed to minimize the extent of stormwater runoff and the project should incorporate post-construction drainage control measures identified in the "Start at the Source" guide. In accordance with Marin County's National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board, Best Management Practices (BMPs) should be incorporated into the project such as sedimentation basins, infiltration trenches, grassed swales, filter strips and buffers, and site and landscape management.

Project

The proposed project would not result in a substantial amount of impervious surfaces that could increase the velocity of stormwater runoff in the long term. Further, there would be a considerable distance (more than 100 feet) between the proposed ponds and Pine Gulch Creek, providing open areas and agricultural fields where stormwater would gradually infiltrate into the groundwater and avoid sedimentation into the creek. Standard erosion control requirements would apply to the project during the construction phases, in accordance with the requirements of the Department of Public Works. Hydrological impacts are discussed in more detail in the hydrology section of the Initial Study, and with the incorporation of the mitigation measure C.2.1, the project's potentially significant short term erosion impacts would be reduced to a less than significant level. Therefore, the project would be consistent with the hydrology and drainage policies contained in the CWP.

D. *Stream and Wetland Protection*

Policies

Within the Coastal Recreation Corridor, the Marin CWP policies call for a 100-foot wide Stream Conservation Area (SCA) buffer zone to be established between the top of stream banks and proposed development (E.Q.-2.3.), for streams shown as blue lines on USGS maps. In addition, an SCA should be established along any natural watercourse that supports riparian vegetation for a distance of at least 100 feet, and the SCA in these circumstances would require a buffer area that would extend 50 feet from the edge of the riparian plants or 100 feet from the top of stream bank, whichever is greater. The intent of County stream conservation policies is to maintain stream courses in their natural state to the greatest extent feasible for the purposes of water quality, wildlife habitat protection, flooding and erosion control, and aesthetics. The creation of new building sites within stream conservation areas is specifically discouraged (EQ-2.3A).

The LCP also contains policies on stream protection. These policies, listed on pages 19 and 20 of the LCP, specifically encourage the State resources agencies to conduct research on the biological importance of the Pine Gulch Creek, and establishes a riparian protection area that would extend at least 100 feet from a stream shown as a blue line on USGS maps, or 50 feet from the riparian vegetation surrounding such streams (LCP Stream Protection Policies 1-7).

The CWP contains policies regarding the protection of wetlands and requirements for wetland mitigation. These policies are listed in the Baylands Conservation Zone section of the CWP, but apply to all areas of unincorporated Marin. CWP policies discourage approving projects that would result in incursions into wetlands. When wetland incursion is necessary, these policies encourage on-site mitigation at a ratio of 2 acres of replacement wetlands to each acre of wetlands impacted by development (Policy E.Q.-2.43 and Programs E.Q.-2.43A through d). Replacement wetlands should provide equivalent types of habitat and should be created concurrently with the development of the project.

Unlike LCP Unit II, which applies to the northern area of Marin, LCP I does not contain policies specifically protecting wetlands or Environmentally Sensitive Habitat Areas (ESHAs). The California Coastal Act, which is implemented through the LCP, indicates that Environmentally Sensitive Habitat Areas (ESHAs), including wetlands, should be protected from disturbance (Coastal Act Sections 30240 a and b). The Coastal Act does not indicate a specific buffer distance that should be maintained from an ESHA. However, the Coastal Act indicates that the standard for review of development projects shall be the certified LCP for the area (Coastal Act Section 30603c).

Project

The overarching purpose of the project is to reduce agricultural diversions of water during periods of the year when waterflow is naturally low in any case, thereby improving the habitat that Pine Gulch Creek provides to steelhead trout and coho salmon. Therefore, the project is in essence for environmental restoration, which substantially advances the policies of the CWP and the LCP. The major component of the wetlands restoration is to increase the surface area, depth, and connectivity between the pools that provide in-stream wetland habitat for salmonids. The highest diversion location is on Fresh Run Farms, more than 3 miles upstream from the mouth of the creek. Project implementation would generally increase wetland habitat over a substantial area of the watershed, for a distance more than 3 miles from Bolinas Lagoon. While the precise amount of the increase of in-stream wetlands has not been quantified, it is important to note that calculating the surface area of additional in-stream wetlands would not capture their full ecological significance, because pool depth and connectivity during dry periods of the year play such a large role in the optimal functioning of the stream's ecosystem. Therefore, exact calculations of in-stream wetlands increases are not necessary to determine that the project would result in substantial beneficial environmental effects related to the Pine Gulch Creek ecosystem. Project implementation, incorporating the mitigation measures, would achieve this objective.

The LCP strongly supports protection of Pine Gulch Creek as a riparian protection area with a stream buffer area on both sides of the creek of 50 feet from the outer edge of riparian vegetation but not less than 100 feet from the banks of the stream. Encroachment into the 100 foot Streamside Conservation Area (SCA) is also discouraged by policies contained in the CWP. Additional LCP policies applicable to Pine Gulch Creek call for studies and programs involving California Department of Fish and Game and Soils Conservation Service (now the National Resource Conservation Service) supporting in-stream flows to maintain the steelhead and coho salmon, and, together with the landowners within the Pine Gulch Creek watershed, recommending agricultural uses and practices that would protect the water quality of the creek (and also Bolinas Lagoon). The Pine Gulch Creek watershed Enhancement Project, and the five ponds proposed to implement its recommendations, are the result of those studies.

As discussed in the Biological Resources section G.1 of the Initial Study, construction of the ponds would result in significant adverse impacts to existing open water and emergent wetlands, which would be replaced at a ratio in excess of two to one. Each of the ponds would provide habitat for the California red legged frog, a Federally listed endangered species, and can therefore be considered as an equivalent type of wetland habitat as the existing wetlands on site. Further, mitigation measure G.1.4 requires that the new wetlands would be created concurrently with the development of the project. The areas surrounding these wetlands would be planted with species that would enhance the ecological values associated with edge habitats. Biological impacts are discussed in more detail in the biological resources section of the Initial Study, and with the incorporation of the mitigation measures identified in that section, the project's impacts would be reduced to a less than significant level. Therefore, the proposed project would be consistent with the stream and wetland protection policies contained in the CWP.

E. Plant Communities and Protected Species

Policies

The CWP contains three policies that specifically address the protection and preservation of trees. The CWP requires that significant trees and oak woodland habitat shall be protected (Policy EQ-3.14) and encourages the retention of trees in a natural setting and a substantial area where natural litter and soils buildup can occur. Policy EQ-3.11 indicates that tree cutting and damage should be avoided wherever possible to maintain visual qualities of the natural and built environment. Significant oak trees that are removed for development purposes should be replaced at a ratio of two to one.

CWP policies also indicate that the protection of plant and animal species should be considered through the environmental review process (Policy EQ-2.87) and that vegetation and animal habitats should be preserved (Policy EQ-3.6). The CWP further indicates that the protection of species and habitat should be accomplished by mitigation measures and conditions of approval, and emphasizes the importance of maintaining edge habitats that are particularly important for wildlife (E.Q.-2.87e).

Project

The proposed ponds would be located in areas that lack a substantial number of trees that are defined as "protected trees" by the Marin County Zoning Ordinance. However, the construction of pond 1B on Fresh Run Farms would involve the relocation of a portion of a farm road to an upslope area adjacent to the proposed pond. The grading and construction of the new portion of the farm road would result in the removal of approximately 24 mature oaks, bay laurels, and madrones that have trunk diameters from 12 to 24 inches at breast height. These trees are within an area characterized by steep hillsides vegetated with an oak, bay, madrone forest. The removal of this limited number of native trees would not substantially reduce the habitat value of the surrounding area. However, in order to ensure consistency with the CWP, tree protection and replacement measures are required as mitigation measures. Mitigation measure G.2.1 would ensure that an arborist would trim roots and branches of trees adjacent to the new portion of the road to minimize damage, and would locate and oversee the planting of replacement trees. Protected trees removed by the road construction would be replaced at a two to one ratio with 5-gallon oak trees, clustered on the hillside northwest of the existing green pond and distributed around pond 1B. As mitigated, the project would be consistent with the tree protection policies contained in the CWP.

F. Archaeological and Historical Resources

Policies

CWP policies require development sites to be evaluated to ascertain if archaeological resources are present and to avoid such resources when they are identified (Policies EQ-3.30 and EQ-3.31). The CWP also requires that new development should be compatible with existing development that has recognized historic, architectural, or aesthetic value (Policies CD-2.10 and E.Q. 3.31).

Project

The proposed project is not within the boundaries of the historic area of downtown Bolinas and would not affect any existing buildings, except for several greenhouses and therefore, historic structures would not be effected. County records indicate that the subject property is located in an area of high archaeological sensitivity, and there are known archaeological resources in the vicinity of the proposed development. As discussed in section I of the Initial Study, the proposed project could potentially result in significant impacts to archaeological resources. Based on the

recommendations of a consulting archaeologist, mitigation measures have been incorporated into the project to ensure that impacts would be avoided. Therefore, the project would conform to the Archaeological and Historic Resources conservation policies contained in the CWP.

G. Open Space and Trails

Policies

The CWP encourages the creation and maintenance of open space through clustering development and creating conservation easements across undeveloped land. The CWP also encourages the creation and maintenance of public trails throughout Marin County (E.Q.-4.1).

Project

The Trails Element of the CWP contains maps identifying existing and proposed trails in the County, and the development areas would not be affected by future trail development. Further, the subject properties are in close proximity to open space lands owned and administered by the National Park Service. Therefore, the proposed project would conform to the trails and open space protection policies contained in the CWP.

H. Public Services and Utilities

Policies

The CWP requires that projects shall not cause significant adverse impacts to community services and facilities or on the social environment of the community (Policy EQ-3.9).

Project

General infrastructure for the property is provided by regional and local utilities, including gas, electric, telephone and other services. Utilities infrastructure would not have to be expanded beyond the existing connections because the project would not exceed the capacity of the existing utilities. Therefore, the proposed project would conform to the public services and utilities policies contained in the CWP.

I. Traffic and Circulation

Policies

The Department of Public Works, Land Use and Water Resources and Traffic sections, review development applications for consistency with the County's policies and regulations regarding roads, driveways, and parking. Marin County Title 24 contains regulations for parking, access and street development.

Project

The proposed project would not involve access improvements, with the exception of temporary access improvements for construction activities, and the existing roads, driveways and parking is adequate. The project would not entail any increase in population, or construction of residences, and no permanent access improvements would be required. Therefore, the proposed project would conform to the traffic and circulation policies contained in the CWP

Conclusion

As discussed above, the regulatory framework for Marin County includes various policies to protect the physical environment. The proposed project would potentially result in significant adverse impacts to natural and cultural resources, and the safety of the occupants of the farms. These potentially significant impacts would be mitigated by the measures listed in the Initial Study and included as conditions of project approval, and the project would therefore conform with the objectives and policies of the Marin Countywide Plan (CWP), the Bolinas Community Plan, and the standards of the Marin County Interim Zoning Ordinance (Title I22) and Development Standards (Title 24). Therefore, the proposed project would be consistent with this finding.

V. **WHEREAS** the Marin County Deputy Zoning Administrator finds that the proposed project is consistent with the Marin County Local Coastal Plan, Unit 1 (LCP), and the mandatory findings to approve the Coastal Permit application (Section I22.56.130 of Marin County Code) as specified below.

A. Water Supply:

The proposed project would not entail the installation or use of any water wells, and would be implemented for the purpose of maintaining an adequate water supply for the farms in an environmentally sound manner. Therefore, the proposed project would be consistent with this finding.

B. Septic System Standards:

The proposed project would not interfere with the proper functioning of any septic systems on the subject properties and no new septic systems would be entailed for the project. Therefore, the proposed project would be consistent with this finding.

C. Grading and Excavation:

The proposed project would require earthwork to build the embankments for the ponds, but otherwise would avoid a substantial amount of grading and fill. The ponds are designed to only provide the necessary amount of water for the farms. Geologic hazards related to seismicity are discussed in the Geophysical section VI.C of the Initial Study, and would result in potentially significant impacts to residences downslope of the proposed ponds. Mitigation measures C.1.1 and C.1.2 would reduce these impacts to less than significant levels by avoiding hazardous areas and channeling debris flows away from existing residences in the event of a major earthquake. Therefore, the proposed project would be consistent with this finding.

D. Archaeological Resources:

County records indicate that the subject property is located in an area of high archaeological sensitivity, and there are known archaeological resources in the vicinity of the proposed development. As discussed in section VI.I of the Initial Study, the proposed project could potentially result in significant impacts to archaeological resources. Based on the recommendations of a consulting archaeologist, mitigation measures I.1.1 and I1.2 have been incorporated into the project to ensure that impacts would be avoided. Therefore, the proposed project would be consistent with this finding.

E. Coastal Access:

The project site is located on the landward side of Olema-Bolinas Road, and is not adjacent to the beach or Bolinas Lagoon. The project would have no effect on coastal access, and therefore is consistent with this finding.

F. Housing:

The proposed project would not involve the demolition or construction of any residences. Therefore, it would have no impact upon the availability of affordable housing stock within the Bolinas community. Therefore, the proposed project would be consistent with this finding.

G. Stream and Wetland Resource Protection:

The overarching purpose of the project is to reduce agricultural diversions of water during periods of the year when waterflow is naturally low in any case, thereby improving the habitat that Pine Gulch Creek provides to steelhead trout and coho salmon. Therefore, the project is in essence for environmental restoration, which substantially advances the policies of the LCP. The major component of the wetlands restoration is to increase the surface area, depth, and connectivity between the pools that provide in-stream wetland habitat for salmonids from July through November. The highest diversion location is on Fresh Run Farms, more than 3 miles upstream from the mouth of the creek. Project implementation would generally increase wetland habitat over a substantial area of the watershed, for a distance more than 3 miles from Bolinas Lagoon. While the precise amount of the increase of in-stream wetlands has not been quantified, it is important to note that calculating the surface area of additional in-stream wetlands would not capture their full ecological significance, because pool depth and connectivity during dry periods of the year play such a large role in the optimal functioning of the stream's ecosystem. Therefore, exact calculations of in-stream wetlands increases are not necessary to determine that the project would result in substantial beneficial environmental effects related to the Pine Gulch Creek ecosystem. Project implementation, incorporating the mitigation measures, would achieve this objective. Further, as a restoration project, the development of the ponds would be consistent with section 30233 of the Coastal Act.

The LCP strongly supports protection of Pine Gulch Creek as a riparian protection area with a stream buffer area on both sides of the creek of 50 feet from the outer edge of riparian vegetation but not less than 100 feet from the banks of the stream. Additional LCP policies applicable to Pine Gulch Creek call for studies and programs involving California Department of Fish and Game and Soils Conservation Service (now the National Resource Conservation Service) supporting in-stream flows to maintain the steelhead and coho salmon, and, together with the landowners within the Pine Gulch Creek watershed, recommending agricultural uses and practices that would protect the water quality of the creek (and also Bolinas Lagoon). The Pine Gulch Creek Enhancement Project, and the five ponds proposed to implement its recommendations, is the result of those studies.

As discussed in the Biological Resources section G.1 of the Initial Study, construction of the ponds would result in significant adverse impacts to existing open water and emergent wetlands, which would be replaced at a ratio in excess of two to one. Each of the ponds would provide habitat for the California red legged frog, a Federally listed endangered species, and can therefore be considered as an equivalent type of wetland habitat as the existing wetlands on site. Further, mitigation measure G.1.4 requires that the new wetlands would be created concurrently with the development of the project. In accordance with mitigation measures G.1.1 and G.1.2, significant impacts to ESHAs would be mitigated by establishing a riparian enhancement area adjacent to Pine Gulch Creek and wetland

enhancement areas on the fringes of the ponds. These areas would be planted with species that would enhance the ecological values associated with edge habitats. Biological impacts are discussed in more detail in the biological resources section of the Initial Study, and with the incorporation of the mitigation measures identified in that section, the project's impacts would be reduced to a less than significant level.

Wetlands and riparian areas are considered ESHAs, where encroachment is discouraged in the coastal portions of Marin County. However, LCP Unit 1 does not discuss protecting ESHAs and does not establish specific buffers surrounding ESHAs as such, but does establish a 100-foot buffer area around streams. Encroachment into SCAs is also discouraged by policies contained in the CWP. All of these areas are protected because of their relatively high ecological value. Streams and wetlands provide important wildlife corridors, varied edge habitats, and suitable habitat for many forms of animal and plant life.

The project has been designed to minimize disturbance within the SCA surrounding Pine Gulch Creek and the 100-foot buffer zone from the creek established by the LCP. However, grading, placement of fill for construction of berms, excavation, truck traffic and other ground-disturbing activities could result in erosion and allow elevated levels of sediment in stormwater runoff to wash into Pine Gulch Creek, which would potentially result in impacts to fish and other aquatic wildlife species. A substantial increase in siltation in the creek would adversely affect its ecological value by reducing the surface area, depth and connectivity of the in-stream pools that provide habitat for anadromous fish. Access by construction vehicles and workers to locations in the vicinity of existing wetlands and riparian areas could result in increased erosion and indirect impacts to sensitive habitats. These potential impacts are especially relevant to the construction of pond 3A at Star Route Farms, which is planned adjacent to the 100-foot buffer zone surrounding the creek.

The requirement for the implementation of a Stormwater Pollution Prevention Plan (mitigation measure C.2.1), which identifies proper construction techniques and Best Management Practices (BMPs), would minimize adverse effects associated with these activities and protect Pine Gulch Creek from increased sedimentation and siltation impacts during pond construction.

The ponds would be located outside of the 100 foot LCP buffer zone for Pine Gulch Creek and the SCA as defined by the CWP. Only minor disturbance within the buffer zone and SCA for Pine Gulch Creek would be entailed, including the installation of pumps and pipes for water diversion. However, substantial grading and construction would occur within ESHAs elsewhere on the farms, including pond 3B on Star Route Farms, and pond 1B on Fresh Run Farms. Most significantly, construction of ponds 1B and 3B would occur within palustrine emergent wetlands fed by natural springs and runoff. This construction would significantly disrupt the habitat provided by these wetlands, while the installation of pumps and pipes to divert water from Pine Gulch Creek would result in less substantial, but still significant biological impacts to the environment. Since the project is dependent upon the water resources in Pine Gulch Creek, the pumps and pipes may be allowed to encroach into the riparian corridor.

In order to mitigate these impacts, a riparian enhancement area and wetland enhancement areas would be established, as described in the mitigation measures G.1.1 and G.1.2 below. The wetland areas would be restored and enhanced with native riparian and wetland species. In order to mitigate the impacts resulting from installing the pipes and pumps for the water diversion, red alders would be planted adjacent to the creek bank on Star Route Farms. Red alders are native riparian species that have spread along other portions of the creek, and have the advantage of growing quickly and falling into the creek when they die, which creates pools and riffles that enhance the in-stream habitat for

anadromous fish. Further, the fringes of the ponds would be seeded with wetland plant species to encourage their quick growth and enhance their ecological value.

Temporary construction activities could also result in significant and unnecessary impacts to sensitive habitats if they are not carefully planned and implemented. Truck traffic, materials stockpiling, and other activities typical of construction sites could inadvertently disturb wetland and riparian areas, resulting in significant impacts to sensitive habitats. Therefore, a construction management plan is required, which would ensure that temporary construction impacts are minimized and unnecessary construction impacts are avoided.

Implementation of the mitigation measures identified in the Initial Study would reduce the project's impacts to the SCA and ESHAs on the site to a less than significant level. Further, the restoration of the riverine wetland habitat Pine Gulch Creek provides for anadromous fish is the overarching purpose of the development. The major component of the wetlands restoration is to increase the surface area, depth, and connectivity between the pools that provide in-stream wetland habitat for salmonids. There are no feasible less damaging locations for the ponds because they are proposed to be located in areas where the sheetflow of stormwater during the winter months would provide a substantial portion of the water necessary to fill the ponds. Adequate function of the ponds is dependent on the water in these areas to reduce rates of diversion from Pine Gulch Creek. The project proponents conducted research on alternative locations for the ponds by analyzing the drainage patterns in the Pine Gulch Creek watershed and seasonal precipitation rates. Based on this analysis, the project proponents determined that constructing the ponds elsewhere on the properties would exacerbate water allocation problems during dry years and could reduce the winter bypass in Pine Gulch Creek to below 25 cubic feet per second during the winter months. This would result in significant adverse effects to anadromous fish because the increased withdrawals would reduce the surface area, depth, and connectivity between the pools in Pine Gulch Creek. Therefore, the project is consistent with Coastal Act section 30233.

The proposed project would not result in a substantial amount of impervious surfaces that could increase the velocity of stormwater runoff in the long term. Further, there would be a considerable distance (more than 100 feet) between the proposed ponds and Pine Gulch Creek, providing open areas and agricultural fields where stormwater would gradually infiltrate into the groundwater and avoid sedimentation into the creek. Standard erosion control requirements would apply to the project during the construction phases, in accordance with the requirements of the Department of Public Works. Hydrological impacts are discussed in detail in the hydrology section of the Initial Study, and with the incorporation of the mitigation measure C.2.1, the project's potentially significant short term erosion impacts would be reduced to a less than significant level. Therefore, the proposed project would be consistent with this finding.

H. Dune Protection:

The project site is not located in a dune protection area as identified by the Natural Resources Map the LCP, and would not affect any dunes. Therefore, the proposed project would be consistent with this finding.

I. Wildlife Habitat:

As discussed in the environmental setting section of the Initial Study, the mosaic of habitats present within the project area support a variety of plant and wildlife species. Four species listed as threatened or endangered under the Federal Endangered Species Act are known to occur in the immediate vicinity of the project area: coho salmon, steelhead trout, northern spotted owl, and California red-

legged frog. These species depend on the ecological communities present in the area, and significant impacts to these ecological communities would degrade their habitats and potentially reduce the population of these species.

Coho salmon and steelhead trout could be significantly impacted through implementation of this project due to the transport of sediment into Pine Gulch Creek during the construction process, or from inadvertent entrapment of fish in the intakes placed within Pine Gulch Creek and used to fill the irrigation ponds. The stream buffers and use of BMPs discussed in the Geophysical section C.2 of the Initial Study would mitigate any impacts of increased sedimentation in Pine Gulch Creek to insignificant levels. Also, intakes would be equipped with screens of prescribed mesh as required by CDFG and NMFS to ensure that pumping from the creek does not cause impacts to individuals of listed fish populations.

A northern spotted owl nest has recently been identified on a property located between Fresh Run Farms and Paradise Valley Farm. Direct impacts to northern spotted owl would not result from pond construction because nesting areas and foraging habitats would not be disturbed. The possibility for indirect impacts from proposed pond construction would likely be limited to audio or visual disturbance from construction or post-construction operations at the site, especially during the nesting season; and removal of trees or other habitat alterations within the activity area of the owl pair. Generally, USFWS has in the past considered that indirect auditory impacts to nesting Northern Spotted Owl are possible within 0.25-mile of a nest. The biological assessment determined that none of the pond construction sites are within 0.25-mile of a northern spotted owl pair on a property located between Fresh Run Farms and Paradise Valley Farm, so no impacts would occur. Based on a memo from the USFWS dated July 31, 2006 entitled "Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California", auditory harassment may generally take place within 200 meters of a nest and visual harassment may take place within 100 meters of a nest. Also based on these criteria, project impacts to nesting Northern Spotted Owl would not occur.

All five ponds constructed as part of the Pine Gulch Creek Watershed Enhancement Project are expected to provide habitat for the Federally listed California red-legged frog when completed. Project implementation would result in a long-term beneficial impact on the California red-legged frog through expansion of suitable habitat. In addition, the schedule of pumping and drawdown of the proposed ponds would result in low water levels in late summer when red-legged frogs are not present in the ponds, a process that would help to control populations of bullfrogs, which are predatory on red-legged frogs.

Studies and surveys pertaining to use of the project area by California red-legged frogs have been completed by Gary Fellers of the U.S. Geological Survey, Biological Resources Division (Fellers 2006). During his 2006 surveys, he found between four and ten red-legged frogs at the existing Star Route Farms pond 1A, and also found as many as three red-legged frogs at the existing Green Pond on the Fresh Run Farms property near the proposed pond 1B. Fellers also noted non-breeding habitat for red-legged frogs immediately north of the existing Green Pond, and found red-legged frogs within the section of Pine Gulch Creek itself near the location of the existing pond at Star Route Farms.

Since the red-legged frog is known to occur at the site of pond 1B on Fresh Run Farms and at the site of pond 3A on Star Route Farms, there is the potential for impacts to occur to individuals of the species during pond construction at these locations. Pond construction is planned to occur during low water levels late in the summer, which is during the non-breeding season for the California red-legged frog. Therefore, impacts to breeding frogs or egg masses in aquatic areas would not occur. Since the frogs move during the dry season to upland aestivation sites after breeding, there is the potential that

construction activity for ponds 1B and 3A could encounter individuals using the edges of the existing pond or aestivating frogs in upland areas. Therefore, the project would result in potentially significant impacts to the environment with respect to harming a special status species.

In order to mitigate potential impacts to red-legged frogs during pond construction, mitigation in the form of pre-construction surveys in both ponds and upland areas, and the presence of monitors during portions of the construction operations would be necessary. These surveys and monitoring activities would need to be provided by USFWS biologists or biologists licensed by the USFWS to handle individuals of the species, because any individuals encountered will need to be removed from construction areas and relocated to suitable nearby habitats. Relocation sites would likely be near Pine Gulch Creek in the vicinity of pond 3A, and the existing Green Pond in the vicinity of pond 1B construction. Implementation of the mitigation measure G.1.5 would reduce the potential impacts to red legged frogs to a less than significant level.

Construction of the ponds and the accompanying loss of vegetation associated with the grassland, scrub, wetland, agricultural and eucalyptus habitats on site will undoubtedly disrupt and displace small numbers of existing wildlife. Some limited bird roosting, nesting, and foraging areas could be eliminated, and reptiles, amphibians, and small mammals that utilize these areas would be displaced to remaining undisturbed areas. Open space areas near the project area should be capable of accommodating these species, therefore, impacts to wildlife populations would not be significant (for special status species, see Section G.1 above). Noise and other construction activities could indirectly impact wildlife populations within sensitive habitats, but construction noise would not result in significant impacts to animal populations because the noise would be temporary, limited to the construction hours permitted by the Marin County Noise Ordinance, and agricultural machinery that is typically used on the farms results in similar noise levels. Therefore, the project would be consistent with this finding.

J. Protection of Native Plant Communities:

Implementation of the proposed project would result in the removal of vegetation and existing habitats would be excavated to construct the proposed ponds. Impacts resulting from construction of pond 1B at Fresh Run Farms and pond 3B at Star Route Farms are discussed above under section G.1. On Fresh Run Farms, construction of pond 1A is proposed in an area of annual grassland adjacent to a forested area vegetated with Coast live oak and California bay, and given the prevalence of this type of grassland habitat in the region, this impact is not considered significant. Similarly, construction of pond 2 at Paradise Valley Farm would primarily occur within an area of scrub and grassland, which is also not considered significant because of the prevalence of grassland habitat in the region. Construction of pond 3A at Star Route Farms would displace an existing farm pond as discussed above, but most construction would occur within an existing grove of non-native eucalyptus trees and an area that is currently under cultivation. As discussed in section G.1 and the environmental settings section of the Initial Study, the eucalyptus grove does not provide habitat for monarch butterflies or northern spotted owls, and therefore removal of a portion of this grove (approximately 400 trees) would not result in significant impacts to the environment. From the standpoint of vegetation removal, the effects to grassland, scrub and eucalyptus habitats would not be considered significant.

However, the grading and construction of the new portion of the farm road would result in the removal of approximately 24 mature oaks, bay laurels, and madrones that have trunk diameters from 12 to 24 inches at breast height. The mature, native trees that would be impacted are within an area characterized by steep hillsides vegetated with an oak, bay, madrone forest. The removal of this limited number of native trees would not substantially reduce the size of the oak woodlands in the area because the hillsides surrounding the crop fields on the properties support extensive forests. However,

in order to ensure consistency with the CWP and the Marin County Interim Zoning Ordinance and to mitigate potentially significant biological impacts, tree protection and replacement shall be required. Healthy, mature, native trees removed by the road construction would be replaced at a two to one ratio with 5-gallon sized oak trees, clustered on the hillside northwest of the existing green pond and distributed around pond 1B. Implementation of mitigation measure G.2.1 would reduce this impact to a less than significant level. Therefore, the project would be consistent with this finding.

K. Shoreline Protection:

The project site is located on the landward side of Olema-Bolinas Road, and is not adjacent to the beach or Bolinas Lagoon. Therefore, the proposed project would not impact any shoreline resources and would be consistent with this finding.

L. Geologic Hazards:

The proposed project would require earthwork to build the embankments for the ponds, but otherwise would avoid a substantial amount of grading and fill. The ponds are designed to only provide the necessary amount of water for irrigation. Geologic hazards related to seismicity are discussed in the Geophysical section VI.C of the Initial Study, and would result in potentially significant impacts to residences downslope of the proposed ponds. Mitigation measures C.1.1 and C.1.2 would reduce these impacts to less than significant levels by avoiding hazardous areas and channeling debris flows away from existing residences in the event of a major earthquake. In addition, as a condition of approval, the owners shall execute and record waivers of liability holding the County, other governmental agencies, and the public harmless of any matter resulting from the existence of geologic hazards or activities on the subject property. The mitigation measures have been included as conditions of project approval. Therefore, the project would be consistent with this finding.

M. Public Works Projects:

The proposed project would not affect any existing or proposed public works project in the area. Therefore, the proposed project would be consistent with this finding.

N. Land Division Standards:

No Land Division or Lot Line Adjustment is proposed as part of this project. Therefore, the proposed project would be consistent with this finding.

O. Visual Resources:

The proposed ponds would be located in secluded areas, distant from surrounding residential neighborhoods and main roads. Further, the maximum height of the embankments for all of the ponds except the pond 1B would not exceed 15 feet above grade. Pond 1B would have embankments that are 25 feet in height above grade, but this pond would be located in an isolated and remote location, and would not be visible from off-site locations. The only pond that would be easily visible from a public road would be pond 3A on Star Route Farms, and it would not exceed a height of 13 feet above grade. Pond 3A would be visible from Olema-Bolinas Road, but would not impede views and would have a visual backdrop of forest and hillsides. The pond's embankments would be of earthen construction and vegetated throughout the year. Further, water storage ponds are a typical element of a rural landscape, and would reinforce the agricultural character of the area.

P. Recreation/Visitor Facilities:

The proposed project would not have any impact on recreation or visitor facilities because it would be developed on privately owned properties used for agricultural purposes, and the development would not occur in areas governed by the Village, Commercial, Residential zoning district. Therefore, the proposed project would be consistent with this finding.

Q. Historic Resource Preservation:

The project site is not located within any designated historic district boundaries as identified in the Marin County Historic Study for the LCP. Further, the proposed project would not affect any existing buildings, except for several greenhouses, and these are not historic structures. Therefore, the proposed project would not adversely affect historic resources and would be consistent with this finding.

VI. WHEREAS the Marin County Deputy Zoning Administrator finds that the proposed project qualifies for a Design Review Clearance (Section 22.82.030.D.I of the Marin County Code), as for the reasons discussed below:

The proposed work would result in ponds with a height, mass, and bulk proportionately appropriate to the site and would provide adequate setbacks from property lines and buildings on the subject and surrounding properties. The project would minimize drainage alterations, grading and excavation, and other adverse physical effects on the natural environment. Finally, the design of the ponds would be compatible with that of other improvements in the vicinity, would respect the surrounding natural environment, and would not diminish views from surrounding public viewing places.

SECTION II: CONDITIONS OF PROJECT APPROVAL

NOW, THEREFORE, BE IT RESOLVED that the Marin County Deputy Zoning Administrator hereby approves the Pine Gulch Creek Enhancement Project Coastal Permit and Design Review Clearance subject to the following conditions:

STANDARD CONDITIONS OF APPROVAL

1. Project Description
   This Coastal Permit and Design Review Clearance approval authorizes the owners of Star Route Farms, Paradise Valley Farm, and Fresh Run Farms (referred to collectively as the farmers) to develop the improvements described below, in conformance with the plans identified as "Exhibit A" and the specifications included in the Initial Study Exhibit.

   A. SUMMARY

   Appropriated water storage volumes have been calculated to ensure that, under normal conditions, each farmer can meet his annual irrigation needs between July 1 and the end of the growing season. At Fresh Run Farms, two ponds will store approximately 20.5 acre-feet of water. At Paradise Valley Farm, one pond will store approximately 5.5 acre-feet of water. At Star Route Farms, two ponds will store approximately 35.4 acre-feet of water. The location of the ponds proposed for construction is shown in the attached Initial Study Exhibit. The water storage plan is detailed in the table below.

Project Water Storage Plan

Operation	Ponds to Meet Storage Need	Proposed Storage	Pond Site/ Capacity	Pond Site Parcel
Fresh Run Farms (Peter Martinelli)	2	20.5 acre-ft	pond 1A + Tank (3.5 acre-ft) pond 1B (17 acre-ft)	APN 188-090-15
Paradise Valley Farm (Dennis Dierks)	1	5.5 acre-ft	pond 2 (5.5 acre-ft)	APN 188-150-69
Star Route Farms (Warren Weber)	2	35.4 acre-ft	pond 3B (9.4 acre-ft) pond 3A (26 acre-ft)	APN 188-170-45 APN 193-010-19

The proposed agricultural development on each of the properties is described below.

B. FRESH RUN FARMS

Water Distribution System

Both existing and new pumps shall draw surface water from Pine Gulch Creek through intake valves that shall be covered with a screen to filter objects and sediment in conformance with the requirements of the State Department of Fish and Game. A combination of existing pipes, replacement pipes and new pipes shall be used to convey the water from Pine Gulch Creek to the water storage ponds. A total of approximately 1,250 linear feet of new water pipes shall be installed underground for the water distribution system. In addition, approximately 800 feet of buried irrigation pipe (4-inch PVC pipe with periodic risers) shall be installed as part of the project. The Fresh Run Farms Specifications table in the attached Initial Study Exhibit provides a summary of the water facilities that shall be used for the project, and those specifications are incorporated by reference into this project description.

Storage Ponds

Pond 1A, the Hilltop Pond, shall be constructed in accordance with the submitted plans shown in the Initial Study Exhibit and the following specifications:

Pond 1A- Hilltop Pond

Work area	0.8 acres
Storage pond surface area	0.7 acres
Brush removal area	0.25 acres
Storage capacity	3.1 acre-feet
Storage capacity, below grade	0.5 acre-feet
Top width	12 feet
Maximum levee height	15 feet
Maximum water depth	12 feet
Total cut volume	3,000 cubic yards

Compacted fill volume	2,610 cubic yards
Cut/fill ratio	1.15/1.00 cubic feet
Volume of pond liner (foundation)	1,200 cubic yards

As shown in the schematic drawing of the water distribution system included in the Initial Study Exhibit, there is an existing pipe from the upper point of diversion from the creek up to the existing tank, which is adjacent to pond 1A; there shall be a new pipe segment (approximately 50 feet) between the tank and pond 1A, and; there shall be a new pipe from pond 1A down to the "Y" in the distribution system. There shall be no spillway on pond 1A because water filling this pond shall be pumped uphill very slowly and in small amounts. Pond 1A shall be operated in conjunction with a tank located adjacent to the pond site. The combined storage capacity of the tank and pond 1A shall be 3.5 acre-feet.

Pond 1B, the New Green Pond, shall be constructed in accordance with the submitted plans shown in the Initial Study Exhibit and the following specifications:

Pond 1B- New Green Pond

Work area	1.5 acres
Storage pond surface area	1.3 acres
Brush removal area	0.25 acres
Storage capacity	17 acre-feet
Storage capacity, below grade	0.5 acre-feet
Top width	12 feet
Maximum levee height	25 feet
Maximum water depth	24 feet
Total cut volume	13,100 cubic yards
Compacted fill volume	2,610 cubic yards
Cut/fill ratio	1.24/1.00 cubic feet
Volume of pond liner (foundation)	8,000 cubic yards

Rock armored drainage ditches shall direct sheet flow from the surrounding area into the pond. Spillways shall be constructed for pond 1B by installing pipes on the southern side of the pond embankment and rock armor shall be used to reinforce the pipe ditches and act as energy dissipaters down flow of the pipe outfalls. The spillway shall empty into the existing Green Pond.

The dirt farm road that leads around the existing Green Pond shall be relocated by re-grading an area approximately 50-feet upslope of the existing farm road and installing a rock armored drainage ditch (called a rock rolling dip) that shall concentrate sheet flow, dissipate energy and be passable by farm vehicles.

C. PARADISE VALLEY FARMS

Water Distribution

A new pump, with a 30 gallon per minute maximum capacity, shall draw surface water from Pine Gulch Creek through an intake valve that shall be covered with a screen to filter objects and sediment in conformance with the requirements of the State Department of Fish and Game. New pipes shall be used to convey the water from Pine Gulch Creek to the water storage pond. A total of approximately 500 feet of new water pipes shall be installed underground for the water distribution system. Existing pipes shall be used for the irrigation. The Paradise Valley Farm Specifications table in the attached Initial Study Exhibit provides a summary of the water facilities that shall be used for the Paradise Valley Farm component of the project, and those specifications are incorporated by reference into this project description.

Storage Pond

Pond 2, the Hillside Pond, is proposed to be built against the west-facing hill on the property that faces Pine Gulch Creek. Safety factors determine the height of the embankments of the pond and therefore the amount of storage that can be achieved on this property, as the risk to human habitation increases with increased pond size and volume.

The storage pond shall be constructed in accordance with the submitted plans and the following specifications:

Pond 2- Hillside Pond

Work area	1.64 acres
Storage pond surface area	0.83 acres
Brush removal area	0.5 acres
Storage capacity	5.5 acre-feet
Storage capacity, below grade	4.1 acre-feet
Top width	12 feet
Maximum levee height	14 feet
Maximum water depth	10 feet
Total cut volume	7,600 cubic yards
Compacted fill volume	6,900 cubic yards
Cut/fill ratio	1.10/1.00 cubic feet
Volume of pond liner (foundation)	2,500 cubic yards

A rock armored ditch shall direct flow from a drainage ditch on the hillside into the storage pond. Spillways shall be constructed for the storage pond by installing two pipes on the southern side of the pond embankment and rock armor shall be used to reinforce the pipe ditches and act as energy dissipaters down flow of the pipe outfalls, which shall empty into the meadow below the pond.

D. STAR ROUTE FARMS

Water Distribution

Two new storage ponds shall be constructed on the property, as well as the associated water distribution improvements. Pond 3B, the North Pond, shall be smaller than pond 3A, the South Pond, which shall be located in approximately the same place as the existing pond on the property. Two existing pumps shall draw surface water from Pine Gulch Creek through intake valves that shall be covered with screens to filter objects and sediment in conformance with the requirements of the State Department of Fish and Game. Existing pipes, along with approximately 300 feet of new buried pipe at pond 3A, shall be used to convey the water from Pine Gulch Creek to the ponds. A total of approximately 300 feet of new water pipes shall be installed underground for the water distribution system. Existing pipes shall be used for the irrigation, with minor modifications to be made as needed to adjust to the expanded water storage capacity and approximately 300 feet of new irrigation distribution pipe in the north field. The Star Route Farms Specifications table in the attached Initial Study Exhibit provides a summary of the water facilities that shall be used for the Star Route Farms component of the project.

Storage Ponds

Constructing pond 3B shall entail removing 14 greenhouses, that each have approximately 1,625 square feet of growing area. Pond 3B shall be constructed in accordance with the submitted plans and the following specifications:

Pond 3B: North Pond

Work area	1.50 acres
Storage pond surface area	1.00 acres
Brush removal area	0.5 acres
Storage capacity	9.4 acre-feet
Storage capacity, below grade	4.1 acre-feet
Top width	12 feet
Maximum levee height	9 feet
Maximum water depth	14 feet
Total cut volume	6,700 cubic yards
Compacted fill volume	6,000 cubic yards
Cut/fill ratio	1.15/1.00 cubic feet
Volume of pond liner (foundation)	3,300 cubic yards

A spillway shall be constructed by installing a pipe through the pond embankment that shall lead to a rock armored ditch to dissipate the energy and velocity of the flow. The water shall then flow from the ditch into a vegetated swale and into an existing culvert with an outfall into Pine Gulch Creek.

Constructing pond 3A shall entail demolishing a portion of the existing pond and constructing a new and larger pond in its place. Construction of this pond shall also involve removal of approximately 400 eucalyptus trees from an existing grove. Pond 3A shall be constructed in accordance with the submitted plans shown in the Initial Study Exhibit and the following specifications:

Pond 3A: South Pond

Work area	3.7 acres
Storage pond surface area	2.7 acres
Tree removal area	2 acres (approximately 400 eucalyptus trees)
Storage capacity	26 acre-feet
Storage capacity, below grade	6.5 acre-feet
Top width	15 feet
Maximum levee height	13 feet
Maximum water depth	12 feet
Total cut volume	18,600 cubic yards
Compacted fill volume	15,900 cubic yards
Cut/fill ratio	1.2/1.00 cubic feet
Volume of pond liner (foundation)	4,600 cubic yards

Spillways shall be constructed by installing a pipe through the pond embankment that shall lead to a rock armored ditch to dissipate energy and velocity of flow, which shall then empty into the fields surrounding the pond.

CONCLUSION

The approved development shall enable the farmers to store water for longer periods of time, provided they receive the necessary approvals from the California Water Resources Control Board and California Department of Fish and Game. The Farmers shall be subject to the requirements and conditions of the State with respect to water appropriation and use.

2. The applicant and property owners hereby agree to defend, indemnify, and hold harmless the County of Marin and its agents, officers, attorneys, or employees from any claim, action, or proceeding, against the County or its agents, officers, attorneys, or employees, to attack, set aside, void, or annul an approval of the

Pine Gulch Creek Enhancement Project, for which action is brought within the applicable statute of limitations.

3. Before Operations Authorization, the owners shall record Waivers of Public Liability holding the County of Marin, other governmental agencies, and the public harmless because of loss experienced by geologic actions.

4. Before the farmers commence grading or construction activities, the applicant must provide written evidence that all appropriate permits and authorizations have been secured for this project from the US Department of Fish and Wildlife, the California Department of Fish and Game, the California Water Resources Control Board, the Regional Water Quality Control Board, the California Coastal Commission, the California State Lands Commission, the Bay Area Air Quality Management District, and the United States Army Corps of Engineers. Staff is aware that the applicant will need authorizations from the California Department of Fish and Game and the California Water Resources Control Board, but is not positive of other authorizations that may be required.

5. The project sponsor shall submit a detailed written plan for mitigation measure compliance for review and approval by the Marin County Community Development Agency Director prior to each subsequent stage of project approval and development. The mitigation compliance plan shall serve a dual purpose of verifying compliance with required mitigation measures for the approved project and of generating information on the effectiveness of the mitigation measures. This plan should describe the steps the project sponsor (and project contractor) will take to assure compliance with project conditions and shall include the reporting checklist verifying compliance with required mitigation measures. County staff and/or hired consultants under contract to the County shall verify mitigation measure compliance through the reporting checklist. If necessary, the project sponsor shall agree to fund any additional County costs for mitigation compliance verification by registered professionals.

6. Any changes or additions to the project shall be submitted to the Community Development Agency in writing for review and approval before the contemplated modifications may be initiated. Construction involving modifications that do not substantially comply with the approval, as determined by the Community Development Agency staff, may be required to be halted until proper authorization for the modifications are obtained by the applicant.

MITIGATION AND MONITORING MEASURES

7. **Mitigation Measure C.1.1**

Future construction of buildings that would be inhabited are prohibited to be located directly downslope of the ponds, unless the property owner obtains a geotechnical report which indicates that the building would not be adversely affected by flooding or debris flow in the event the pond embankments are ruptured by seismic activity. Development allowed under this provision shall be constructed in a manner that avoids hazards through use of earthen berms that would channel flood debris away from the building, reinforcing the pond embankments to withstand a major earthquake, or implementing other measures that would protect the building from damage. This mitigation measure shall be implemented by avoiding locating inhabited buildings directly downslope of the ponds or preparation of grading and building permit plans that are subject to review by Department of Public Works staff. A copy of the conditions of project approval shall be recorded against the titles of the parcels subject to these restrictions to inform future property owners of these requirements.

Monitoring Measure C.1.1.1

Before issuing building permits for future residential structures on any of the riparian parcels on the farms, Public Works Department staff shall verify that a geotechnical report has been submitted which indicates that the building would not be adversely affected by flooding or debris flow in the event the pond embankments are ruptured by seismic activity, and that the grading and building permit plans are consistent with the findings of the geotechnical report and County standards. Before Operations Authorization, CDA staff shall verify that the project sponsor has recorded a copy of the conditions of project approval against the titles of the parcels subject to these restrictions.

8. **Mitigation Measure C.1.2**

The farmers shall construct the project in a manner that avoids flood inundation of downslope residences in the event of a breach of the pond embankments due to a major earthquake. A final flood mitigation plan for Paradise Valley Farm shall be prepared for the review and approval of the Marin County CDA and Department of Public Works, and shall be subsequently implemented as approved. The flood mitigation plan shall substantially conform to the plans submitted with the risk assessment prepared by Miller Pacific Engineering Group and received on April 18, 2007. The flood mitigation plan shall create flow patterns that would avoid the existing residences by channeling water with small earthen berms no higher than approximately 3 feet above grade and road cuts that would not exceed 2 feet in depth.

Monitoring Measure C.1.2.1

Before the farmers commence grading or construction activities for the construction of pond 2, CDA and Department of Public Works staff shall review the final flood mitigation plan for conformance with mitigation measure C.1.2, and shall subsequently conduct an inspection to verify that the plan has been properly implemented before Operations Authorization.

9. **Mitigation Measure C.2.1**

The farmers shall construct the project in a manner that avoids erosion from the project and prevents accumulation of silt in drainageways through measures such as placement of sterile straw, silt fencing, or other suitable barrier materials (e.g., filter fabric, ply wood) along construction limit boundaries. This mitigation measure shall be implemented through the preparation of a stormwater pollution prevention plan that is subject to the review and approval by Department of Public Works staff. The stormwater pollution prevention plan shall be submitted in conjunction with the construction management plan. The farmers shall implement the stormwater pollution prevention plan as approved.

Monitoring Measure C.2.1.1

Before the farmers commence grading or construction activities the farmers shall submit a stormwater pollution prevention plan that indicates the measures that would be employed to reduce stormwater runoff and sedimentation for the review and approval of Department of Public Works staff.

Monitoring Measure C.2.1.2

Before the farmers commence grading or construction activities, staff from the Department of Public Works shall inspect the site to verify that the erosion control measures have been properly implemented.

10. **Mitigation Measure G.1.1**

A riparian enhancement area shall be established between pond 3A and Pine Gulch Creek, as shown in the Mitigation Map in the attached Initial Study Exhibit. Within the riparian enhancement area, the understory of exotic species of groundcover, brush and eucalyptus trees that do not exceed a diamater at breast height of 4- inches, shall be removed to allow for revegetation with native freshwater wetland plant species. As many red alders shall be planted within the riparian enhancement area as would be likely to grow under the prevailing conditions. Deer fencing shall be installed surrounding the red alders for a minimum period of three years from the time of Operation Authorization to protect them from defoliation. Initiation of the diversion pumping into the ponds shall not occur until the CDA issues an Operations Authorization to the farmers.

Monitoring Measure G.1.1.1

Initiation of the diversion pumping into the ponds shall not occur until the CDA issues an Operations Authorization. The Operations Authorization shall not be issued until CDA staff has conducted a final inspection of the project to verify that mitigation measure G.1.1 has been implemented. This inspection may be conducted in consultation with staff from the Department of Public Works and the Marin County Resource Conservation District.

Monitoring Measure G.1.1.2

Approximately 3 years after Operations Authorization, CDA staff shall conduct a site inspection to determine that the mitigation plantings have become successfully established. This inspection may be conducted in consultation with staff from the Department of Public Works and the Marin County Resource Conservation District. If the red alders covering a substantial portion of the enhancement area have died, then additional replanting would be required, and would be reinspected the following year to ensure conformance with mitigation measure G.1.1.

11. **Mitigation Measure G.1.2**

Wetland enhancement areas shall be established on the fringes of each pond, and shall include the upper portions of the interior of each pond embankment where wetland vegetation can be supported by periodically saturated soils. In the wetland enhancement areas, existing wetland vegetation in the immediate vicinity of the development shall be transplanted to the fringes of all the ponds, or these areas shall be seeded in accordance with the below.

Mitigation Plant Materials

Location	Plant Species	Common Name
Wetland fringe species at irrigation ponds	*Typha latifolia*	Broad-leaf cattail
	Juncus effusus	Lanp rush
	Juncus patens	Spreading rush
	Cyperus eragrostis	Tall flat-sedge
	Holcus lanatus	Velvet grass
	Scirpus californicus	tules

If the wetland plants covering a substantial portion of the enhancement area have died, then additional replanting would be required, and would be reinspected the following year to ensure conformance with this mitigation measure.

Monitoring Measure G.1.2.1

Before Operations Authorization, CDA staff shall conduct a site inspection to verify that mitigation measure G.1.2 has been implemented.

Monitoring Measure G.1.2.2

Approximately 3 years after Operations Authorization, CDA staff shall conduct a site inspection to determine that the mitigation plantings have become successfully established.

12. **Mitigation Measure G.1.3**

Construction activities shall be timed and coordinated in a manner that minimizes disturbance to ESHAs, through the use of appropriate construction phasing, staging areas, transportation routes, and the temporary improvement and subsequent restoration of transportation routes. This mitigation measure shall be implemented through the development of a construction management plan that is subject to review and approval by CDA staff in consultation with Department of Public Works staff.

A construction management plan, which indicates the locations of vehicle access routes, equipment staging areas, excavated fill material stockpile areas, and timing of the construction shall be prepared for the review of staff from the CDA and Department of Public Works. Access to construction areas shall be planned to avoid affecting existing unimpacted wetland or riparian habitats. All vehicle and pedestrian access routes related to the construction shall be marked. Where necessary, access routes in close proximity to valuable habitat shall be temporarily upgraded with coarse aggregate to prevent soil displacement that could lead to future sedimentation and erosion problems. Construction vehicle access within a 100 foot buffer area from Pine Gulch Creek shall be minimized to the maximum degree feasible. Measures to prevent inadvertent deposition of soil excavated during pond construction into adjacent wetlands or stream habitats shall include placement of sterile straw, silt fencing, or other suitable barrier materials (e.g., filter fabric, ply wood) along construction limit boundaries. Wetland and riparian habitats adjacent to the construction areas shall be staked or fenced using orange construction fencing or flagging and construction equipment will be excluded from this area. The location of these areas shall be shown on the construction management plan. The construction management plan shall indicate that construction activities will only take place in the late summer and fall of the year, to avoid unnecessary impacts to California red-legged frogs. The construction management plan shall also indicate that after construction is complete, access routes will be restored to original grade by filling in ruts and disking the route to loosen any compacted surface soils. Appropriate erosion control measures shall be employed, including reseeding exposed soil with native grasses. The construction management plan shall be implemented as approved.

Monitoring Measure G.1.3.1

Before the farmers commence grading or construction activities, CDA staff, in consultation with staff from the Department of Public Works shall review the construction management plan for conformance with mitigation measure G.1.3.

Monitoring Measure G.1.3.2

Before the farmers commence grading or construction activities and periodically during construction, CDA or Department of Public Works staff shall conduct site inspections to determine whether all measures included in the construction management plan are being fully implemented. The property owners are required to allow access to the project site to staff from the CDA and Department of Public Works to conduct these inspections.

Monitoring Measure G.1.3.3

Before Operations Authorization, staff from the CDA or Department of Public Works shall conduct a site inspection to ensure that the access routes have been restored as necessary.

13. **Mitigation Measure G.1.4**

The farmers shall implement the pond construction as proposed to create 5.09 acres of new open water habitats and 1.14 acres of wetland fringe to provide self-mitigating wetlands at a ratio in excess of 2 to 1. The proposed construction and mitigation activities shall be phased in stages that ensure full mitigation of the impacts to wetlands. The stages of project implementation shall be described in the construction management plan required for the project by mitigation measure C.1.3, which shall indicate the sequential phases of wetland impacts, enhancement, and creation for each component of the project. The construction management plan shall be implemented as approved.

Monitoring Measure G.1.4.1

Before the farmers commence grading or construction activities, CDA staff shall review the construction management plan for conformance with mitigation measure G.1.4. This review may be conducted in consultation with staff from the Department of Public Works and the Marin County Resource Conservation District.

Monitoring Measure G.1.4.2

Before the farmers commence grading or construction activities and periodically during construction, staff from the Planning Division, Department of Public Works or Marin County Resource Conservation District shall conduct site inspections to determine whether all measures included in the construction management plan are being fully implemented. The property owners are required to allow access to the project site to staff from the CDA, Department of Public Works, and Marin County Resource Conservation District to conduct these inspections.

14. **Mitigation Measure G.1.5**

The project shall be constructed in a manner to avoid the impacts to the California red legged frog. This mitigation measure shall be implemented for construction of all the ponds, with the exception of pond 1A on Fresh Run Farms. The mitigation measures that would be employed include those activities related to worker training, pre-construction surveys and biological monitoring that are included in the January 26, 1999 U.S. Fish and Wildlife Service "Programmatic Formal Endangered Species Act Consultation on issuance of Permits under Section 404 of the Clean Water Act or Authorizations under the Nationwide Permit Program for Projects that May Affect the California Red-legged Frog" as follows:

A. The applicant or project proponent shall submit the name(s) and credentials of biologists who would conduct activities specified in the following measures with verification that that they have been approved by the USFWS for the project. No project activities shall begin until proponents have received written approval from the Service that the biologist(s) is qualified to conduct the work.

B. A USFWS-approved biologist shall survey the work site two weeks before the onset of activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist shall contact the USFWS to determine if moving any of these life-stages is appropriate. In making this determination the USFWS shall consider if an appropriate relocation site exists. If the USFWS approves moving animals,

the approved biologist shall be allowed sufficient time to move California red-legged frogs from the work site before work activities begin. Only USFWS-approved biologists shall participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.

C. Before any construction activities begin on a project, a USFWS-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the California red-legged frog and its habitat, the importance of the California red-legged frog and its habitat, the general measures that are being implemented to conserve the California red-legged frog as they relate to the project, and the boundaries within which the project may be accomplished. Brochures, books and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

D. A USFWS-approved biologist shall be present at the work site until such time as all removal of California red-legged frogs, instruction of workers, and habitat disturbance have been completed. After this time, the contractor or permittee shall designate a person to monitor on-site compliance with all minimization measures. The USFWS-approved biologist shall ensure that this individual receives the training outlined above, and in the identification of California red-legged frogs. The monitor and the USFWS-approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated by the Corps and USFWS during review of the proposed action. If work is stopped, the Corps, the USFWS and the County shall be notified immediately by the USFWS-approved biologist or onsite biological monitor.

Monitoring Measure G.1.5.1

Before the farmers commence grading or construction activities, the project biologist shall submit a letter verifying that the pre-construction surveys have been completed, the USFWS's requirements regarding frog relocation have been met, and the required worker training has occurred.

Monitoring Measure G.1.5.2

Before Operations Authorization, the project biologist shall submit a letter verifying that the biological monitoring and any necessary frog relocations have been carried out in conformance with mitigation measure G.1.5 and USFWS requirements.

15. **Mitigation Measure G.2.1**

An arborist shall trim roots and branches of trees adjacent to the new portion of the road passing pond 1B to minimize damage during construction, and would locate and oversee the installation of tree protection fencing around the driplines of trees to be preserved, and the planting of replacement trees for trees to be removed. The location of the tree protection fencing shall be shown on the construction management plan for the project. Healthy, mature, native trees removed by the road construction would be replaced at a two to one ratio with 5-gallon sized oak trees, clustered on the hillside northwest of the existing green pond and distributed around pond 1B. If a substantial number of the replacement trees have died, then additional replanting would be required, and would be reinspected the following year to ensure compliance with this mitigation measure.

Monitoring Measure G.2.1.1

Before the farmers commence grading or construction activities, the sponsor shall submit a construction management plan that shows the location of the tree protection fencing for the review and approval of CDA staff.

Monitoring Measure G.2.1.2

Before the farmers commence grading or construction activities, the project arborist shall submit a letter to the CDA verifying that the tree protection fencing has been installed.

Monitoring Measure G.2.1.3

Before Operations Authorization, the arborist shall submit a letter verifying that the roots and limbs of trees to be preserved have been trimmed according to arboricultural standards.

Monitoring Measure G.2.1.3

Before Operations Authorization, CDA staff shall conduct a site inspection to determine that the mitigation tree planting has been completed.

Monitoring Measure G.2.1.4

Approximately 3 years after Operations Authorization, CDA staff shall conduct a site inspection to determine that the mitigation plantings have become successfully established and are thriving.

16. **Mitigation Measure I.1.1**

The project shall be constructed in a manner that avoids disturbing archaeological resources. In the event that any human remains, artifacts, or other indicators of prehistoric or historic use of the parcel are encountered during site preparation or construction activities on any part of the project site, all work at the vicinity of the discovered site shall stop and the project sponsor shall contact the Marin County Environmental Coordinator immediately. If human remains are encountered, the County Coroner must also be contacted. A registered archaeologist, chosen by the County and paid for by the project sponsor, shall assess the site and shall submit a written evaluation to the Agency Director advancing appropriate conditions to protect the site and the resources discovered. State law identifies the procedures that must be followed if human remains are encountered. If the remains are deemed to be Native American and prehistoric, the Coroner must contact the Native American Heritage Commission so that a "Most Likely Descendant" can be designated. No work at the site may recommence without approval of the Agency Director. If it is determined that a prehistoric site exists the following measures shall be implemented:

A. No future development activity shall take place at or in close proximity to the prehistoric site within the development area.

B. The historical site(s) shall be filled to protect the resources there.

C. No additional excavation shall occur at these locations other than to remove surface organic material.

D. The applicant may be required to submit a revised project to protect the resource(s). No further work in the vicinity of the archaeological site may recommence without approval of CDA staff.

Monitoring Measure I.1.1.1

In the event of archaeological resource discovery, Marin County CDA staff shall verify that an appropriate archaeological report has been submitted and all construction work has been stopped. In the event that the

report indicates that any human remains, artifacts, or other indicators of prehistoric or historic use of the parcel are encountered during site preparation or construction activities on any part of the project site, Marin County CDA staff shall verify that a registered archaeologist has been retained to assess the site and has submitted a written evaluation to the Agency Director advancing appropriate conditions to protect the site and the resources discovered before work commences on the site. If human remains are encountered, CDA staff shall verify that the County Coroner has been contacted and that all future work is carried out in accordance with the mitigation measures.

17. **Mitigation Measure I.1.2**

The farmers shall construct the project in a manner that avoids disturbing the archaeological resources in proximity to pond 2 on Paradise Valley Farm and pond 3B on Star Route Farms. This mitigation measure shall be implemented for the specific cases of ponds 2 and 3B by having an archeological protocol prepared by a qualified archaeologist and submitted for the review and approval of CDA staff in conjunction with the construction management plan. The archaeological protocol shall identify the archaeological monitor, specify when archaeological monitoring will occur, and indicate the measures that will be implemented during construction to protect archaeological resources. The farmers shall implement the archaeological protocol as approved. The archaeological protocol shall include, at a minimum, the following measures:

A. Monitoring will consist of directly watching the major excavation process. Monitoring will occur during the entire workday, and will continue on a daily basis until a depth of excavation has been reached at which cultural resources could not occur. This depth is normally estimated as five feet below existing grade, but may require modification in specific circumstances, which will be determined by the monitoring archaeologist, based on observed soil conditions.

B. If prehistoric human interments (human burials) are encountered within the native soils of the parcel, all work shall be halted within the immediate vicinity of the find. The County Coroner, the project superintendent, and the Marin County Environmental Coordinator shall be contacted immediately. State and Federal law prescribe the procedures that must be followed subsequent to discovery of human interments.

C. If significant cultural deposits other than human burials are encountered, the project shall be modified to allow the artifacts or features to be left in place, or the archaeological consultant shall undertake the recovery of the deposit or feature. Significant cultural deposits are defined as archaeological features or artifacts that are associated with the prehistoric era, the historic era Mission and Pueblo periods and the American era up until approximately 1900. A representative of the Native American community must be contacted in all cases where prehistoric or historic era Native American resources are involved.

D. Whenever the monitoring archaeologist suspects that potentially significant cultural remains or human burials have been encountered, the piece of equipment that encounters the suspected deposit will be stopped, and the excavation inspected by the monitoring archaeologist. If the suspected remains prove to be insignificant or of non-cultural origin, work will recommence immediately. If the suspected remains prove to be part of a significant deposit, all work shall be halted in that location until removal has been accomplished. If human remains (burials) are found, the County coroner must be contacted.

E. Equipment stoppages will only involve those pieces of equipment that have actually encountered significant or potentially significant deposits, and should not be construed to mean a stoppage of all equipment on the site unless cultural deposit covers the entire building site.

F. During temporary equipment stoppages brought about to examine suspected remains, the archaeologist should accomplish the necessary tasks with all due speed.

After construction in these areas is complete, the consulting archaeologist shall provide CDA staff with a letter verifying that the archaeological protocol has been properly implemented.

Monitoring Measure I.1.2.1

Before the farmers commence grading or construction activities for ponds 2 or 3B, CDA staff shall review the archaeological protocol for conformance with mitigation measure I.1.2.

Monitoring Measure I.1.2.2

Before Operations Authorization, CDA staff shall confirm that a letter from the monitoring archaeologist has been submitted, which verifies that mitigation measure I.1.2 has been properly implemented.

SECTION III: VESTING, PERMIT DURATION, AND APPEAL RIGHTS

NOW, THEREFORE BE IT FURTHER RESOLVED that due to the complexity of the project and the permits required from other agencies, it shall be four years from the date of this approval before the farmers must vest the Pine Gulch Creek Enhancement Project Coastal Permit and Design Review Clearance. The project shall be vested upon grant of Operations Authorization. This vesting period and the rights granted in this approval shall lapse unless the applicant applies for an extension at least 10 days before the expiration date and it is approved by the Community Development Agency. An extension of up to four years may be granted for cause pursuant to Section 22.56.050I of the Marin County Code.

NOW, THEREFORE BE IT FURTHER RESOLVED that this decision is final unless appealed to the Planning Commission. A Petition for Appeal and a $600.00 filing fee must be submitted in the Community Development Agency - Planning Division, Room 308, Civic Center, San Rafael, no later than **4:00 p.m.** on November 27, 2007.

SECTION IV: ACTION

PASSED AND ADOPTED at a regular meeting of the Deputy Zoning Administrator of the County of Marin, State of California, on the 15th day of November, 2007.

JOHANNA PATRI, AICP
DEPUTY ZONING ADMINISTRATOR

Attest:

Joyce Evans
Deputy Zoning Administrator Secretary

State of California – The Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
(707) 944-5500
www.wildlife.ca.gov

EDMUND G. BROWN JR., *Governor*
CHARLTON H. BONHAM, *Director*

April 10, 2015

Ms. Nancy Scolari
Marin Resource Conservation District
PO Box 1146
Point Reyes Station, CA 94956

Subject: Final Lake or Streambed Alteration Agreement
Notification No. 1600-2010-0351-R3
Pine Gulch Creek

Dear Ms. Scolari:

Enclosed is the final Streambed Alteration Agreement ("Agreement") for the Pine gulch Creek Flow Enhancement Project ("Project"). Before the Department may issue an Agreement, it must comply with the California Environmental Quality Act ("CEQA"). In this case, the Department, acting as a responsible agency, filed a notice of determination ("NOD") on April 10, 2015 based on information contained in the Negative Declaration (SCH#2007082139) the State Water Resources Control Board prepared for the Project.

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

If you have any questions regarding this matter, please contact Corinne Gray, Senior Environmental Scientist (Specialist) at (707) 944-5526 or Corinne.gray@wildlife.ca.gov .

Sincerely,

Craig J. Weightman
Environmental Program Manager
Bay Delta Region

cc: Nancy Scolari; nancy@marinrcd.org
Lieutenant Jones

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
BAY DELTA REGION
7329 SILVERADO TRAIL
NAPA, CALIFORNIA 94558
(707) 944-5520
www.wildlife.ca.gov

STREAMBED ALTERATION AGREEMENT
NOTIFICATION NO. 1600-2010-0351-R3

PINE GULCH CREEK WATERSHED ENHANCEMENT PROJECT

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and the Marin Resource Conservation District and Nancy Scolari (Permittee).

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified CDFW on October 18, 2010, that Permittee intends to complete the project described herein.

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

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

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

PROJECT LOCATION

The project is located on Pine Gulch Creek, at the Fresh Run Farms, Paradise Valley Ranch and Star Route Farms in the County of Marin, State of California, Section 24, Township 1N, Range 8W, U.S. Geological Survey (USGS) map Bolinas; Mount Diablo base and meridian. APN#'s 188-090-15, 188-170-45 and 193-010-19.

PROJECT DESCRIPTION

The project is limited to construction and diversion of water at five Points of Diversion (POD) on Pine Gulch Creek, tributary to Bolinas Lagoon, Marin County as part of the Pine Gulch Creek Watershed Enhancement Project (project). Water is currently directly diverted form Pine Gulch Creek to irrigate crops for Fresh Run Farms, Paradise Valley Farms and Star Route Farms.

The Project will involve the construction of offstream storage to meet summer irrigation demand and to limit impacts to instream resources during sensitive life history stages. Diversion of water for irrigation will not occur between July 1 and December 15.

Fresh Run Farms Application 31752 (Permit 21249): Irrigation of 22.9 acres with 20.5 acre-feet (af) of water. Two new ponds will store approximately 20.5 acre feet (af) of water with a combined diversion rate of 0.8 cfs.

Paradise Valley Farms Application #31751 (Permit 21248): Irrigation of up to 8.7 acres with 5.5 af of water at a diversion rate of up to 0.22 cfs. One new pond will store approximately 5.5 af of water

Star Route Farms Application # 31749 and 31750 (Permit# 21246 and 21247): Irrigation of up to 41 acres with 35.4 af of water at a diversion rate of up to 1 cfs. Two new ponds will store approximately 35.4 af of water.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include: coho salmon (*Oncorhynchus kisutch*), steelhead (*O. mykiss*), foothill yellow-legged frog (*Rana boylii*), California red-legged frog (*Rana draytonii*), and western pond turtle (*Emys marmorata*).

The adverse effects the project could have on the fish or wildlife resources identified above include: activity site dewatering; increased sedimentation (episodic); temporary vegetation disturbance and removal; permanent impacts to wetlands; direct take of fish and other aquatic species from diversion and construction; and temporary changes in stream flow (Q) below the intake including flow depth, width and velocity.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

1.1 Documentation at Project Site. Permittee shall maintain records of the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents at all times. Permittee shall present records to CDFW personnel, or personnel from another state, federal, or local agency upon request.

1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on

the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.

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

1.4 Project Site Entry. Permittee agrees that CDFW personnel may enter the project site with reasonable notice to verify compliance with the Agreement. CDFW will coordinate property access with Permittee at least 48-hours in advance.

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

2. Avoidance and Minimization Measures

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

Work Periods and Planning

2.1 Instream Work Period – Construction work in the stream channel shall be confined to the period July 1 through October 15. Diversion of water for agricultural uses shall be confined to the period December 15 to June 30. Revegetation and diversion of water for domestic use is not confined to these time periods.

2.2 Work Period Modification. If Permittee needs more time to complete construction, work may be permitted outside of the work period and extended on a day-to-day basis by the CDFW representative who reviewed the project. Permittee shall submit a written request for a work period variance to CDFW. The work period variance request shall: 1) describe the extent of work already completed; 2) detail the activities that remain to be completed; 3) detail the time required to complete each of the remaining activities; and 4) provide photographs of both the current work completed and the proposed site for continued work. Work period variances are issued at the discretion of CDFW. Modification of the diversion season or bypass measures (Measures 2.3- 2.7) shall require separate authorization.

Diversion of Water

2.3 Season of Diversion. Under all basis of right, the season of diversion to storage shall be limited to December 15 to March 31 of each year. Direct diversion for irrigation may occur April 1 to June 30 of each year. Water for domestic purpose may be diverted all year.

2.4 Maximum Withdrawal. Under all basis of right,

2.4.1 The maximum instantaneous rate of withdrawal at all 3 PODs shall not exceed 2 cubic feet per second or 898 gallons per minute between December 15 and March 31 of each year.

2.4.2 The maximum instantaneous rate of withdrawal for all 3 POD's shall not exceed 0.3 cfs in April, 0.2 cfs in May and 0.1 cfs in June.

2.5 Domestic Use. Between July 1 and December 14, a maximum diversion rate of 0.025 cfs be used for domestic purposes.

2.6 Bypass Flows. Under all basis of right:

2.6.1 No water shall be diverted until a minimum of 25 cfs is bypassed around the point of diversion between December 15 and March 31.

2.6.2 No water shall be diverted until a minimum of 3 cfs is bypassed in April, 2 cfs in May and 1 cfs in June.

2.7 Screening. The diversion intake shall be fitted with screens meeting the size and flow criteria of the Department and National Oceanic and Atmospheric Association (NOAA) as stated below. For additional information for correct screen placement and criteria go to: http://swr.nmfs.noaa.gov/hcd/policies.htm

2.8 Screen Maintenance. Screens shall be kept clean and free of accumulated algae, leaves or other debris, which could block portions of the screen surface and increase approach velocities at any point on the screen. All screens shall be supported above the channel bottom.

2.9 Compliance and Effectiveness Monitoring Plan. Prior to Construction, the Permittee shall develop a Compliance and Effectiveness Monitoring Plan. The Plan will document and verify that project operations, including the bypass flows authorized in this Agreement, are being met and are achieving the stated resource

goals, providing sufficient water to maintain resources downstream of the diversion facilities in good condition. The plan shall at a minimum include the following elements:

2.9.1 A date on which an annual report will be submitted to CDFW.

2.9.2 The location of the nearest functioning gage and how the Permittee will monitor diversion operations to assure that the terms of this Agreement are met.

2.9.3 The methods and criteria used to evaluate critical areas to determine whether habitat value and/or passage ability has been met or improved.

2.9.4 Identification of monitoring points at critical passage areas, such as riffles or barriers which will be monitored to ensure that criteria have been achieved.

2.9.5 A description of possible additional measures that could achieve resource goals if the observed flows are not meeting criteria outlined in the plan.

Dewatering and Temporary Diversions for Construction

2.10 Coffer Dams. Prior to the start of construction, the Permittee shall divert the stream around the work area and the work area shall be isolated from the flowing stream. Coffer dams and the stream diversion system shall remain in place and functional throughout the construction period.

2.11 Dewater Work Site. The work site shall be dewatered once water has been diverted around the work area to provide an adequately dry work area. Any muddy or otherwise contaminated water shall be pumped to a settling pond prior to re-entering the stream. Work site dewatering can be accomplished using pumps and or siphons.

2.12 Screen According to Existing Standards. The inlets of the dewatering pump structure shall be fitted with fish screens meeting the "fry-size" criteria of CDFW and the National Marine Fisheries Service before water is pumped from within the coffer dams (see screening criteria at: http://swr.nmfs.noaa.gov/hcd/policies.htm.)

Wildlife Protection and Prevention

2.13 Invasive Species Plan. Prior to construction, a non-native invasive species plan shall be developed and submitted to CDFW for

approval. Permittee shall not stock and shall not allow others to stock fish in the reservoirs. Permittee shall monitor on a yearly basis to make sure that no fish, non-native, or other exotic aquatic predators such as bullfrogs are introduced to it.

2.14 California Red-Legged Frog. Prior to project activities, a focused survey for California Red Legged Frogs (CRLF) following agency approved protocol shall be conducted in the existing ponds and construction areas. If CRLF are found in the area, CDFW shall be notified immediately and all work shall cease until avoidance measures are implemented. Measures shall be developed in consultation with the Fish and Wildlife Service and shall include at a minimum:

2.14.1 If CRLF are found in the project area, any vehicle parked on site for more than 15 minutes shall be inspected by the biological monitor before it is moved to ensure that CRLF have not moved under the vehicle. Any parking areas must be checked in advance by the biological monitor or qualified biologist.

2.14.2 If CRLF enters the work area, all work shall stop until the qualified biologist relocates the animal or it leaves on its own. Only the qualified biologist can handle and relocate CRLF. Any sightings and/or injuries of this species shall be immediately reported to the CDFW.

2.15 Education Session. An education session shall be conducted about species that may be present at the site. The training shall consist of basic identification of CRLF, coho, and steelhead and, their basic habits, how they may be encountered in the work area, and procedures to follow when they are encountered. Any personnel joining the work crew later shall receive the same training before beginning work. The penalties for noncompliance of conditions in this Agreement shall be relayed to all project personnel. The education session shall be presented by the project biologist.

2.16 Listed species. The project site has been identified as an area that is potentially inhabited by species listed under the federal Endangered Species Act and/or the California Endangered Species Act. This agreement does not authorize for the take, or incidental take of any State or Federal listed threatened or endangered listed species. The Permittee is required, as prescribed in these laws, to consult with the appropriate agency prior to commencement of the

project. Any unauthorized take of such listed species may result in prosecution.

Habitat Avoidance and Mitigation Measures

2.17 Treat exposed areas. All exposed/disturbed areas and access points within the stream zone left barren of vegetation as a result of the construction activities shall be restored by seeding with a blend of native erosion control grass seeds. Seeded areas shall be mulched. All other areas of disturbed soil which drain toward the stream channel shall be seeded with erosion control grass seeds. Revegetation shall be completed as soon as possible after construction activities in those areas cease. Seeding placed after October 15 must be covered with broadcast straw, jute netting, coconut fiber blanket or similar erosion control blanket.

2.18 Revegetation. To ensure a successful revegetation effort, all plants shall be monitored and maintained as necessary for five years. All planting shall have a minimum of 80% survival at the end of 5 years and shall attain 70% cover after three years and 75% coverage after 5 years. If the survival and/or cover requirements are not meeting these goals, the Permittee is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice, to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements for five years after planting.

2.19 No Heavy Equipment in Stream. No heavy equipment shall operate in the stream during the term of this agreement.

2.20 No Excavation in Wetted Stream. No excavation in the portion of the stream bed where flowing water is present or anticipated during the term of this agreement.

2.21 No rip rap. No rip rap, broken concrete or other construction waste materials shall be used as rock slope protection.

2.22 No extraction. Rock, gravel, and/or other materials shall not be imported to, taken from or moved within the bed or banks of the stream except as otherwise addressed in this Agreement.

Erosion Control

2.23 Erosion Control Measures. Permittee shall utilize erosion control measures throughout all phases of operation where sediment runoff from exposed slopes threatens to enter a river, stream, or lake.

2.24 Silt Laden Runoff. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream. Erosion control measures, such as, silt fences, straw hay bales, gravel or rock lined ditches, water check bars, and broadcasted straw shall be used where ever silt laden water has the potential to leave the work site and enter the stream.

2.25 Erosion Control Maintenance. Permittee shall make modifications, repairs and improvements to erosion control measures whenever it is needed. Materials used to repair or improved erosion control measures shall not pose a risk to fish or wildlife.

Equipment and Vehicles

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

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

2.28 Clean Up Equipment. Clean up equipment such as extra boom, absorbent pads, skimmers, shall be on site prior to the start of work within the stream zone.

2.29 Equipment Maintenance and Fueling. No equipment maintenance or fueling shall be done within or near any stream channel or lake margin where petroleum products or other pollutants from the equipment may enter these areas.

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

Debris Materials and Waste

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

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

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

2.34 Clean-up. All construction debris and associated materials shall be removed from the work site upon completion of construction.

Spills and Emergencies

2.35 Spill Cleanup. Permittee shall begin the cleanup of all spills immediately. CDFW shall be notified immediately by the Permittee of any spills and shall be consulted regarding cleanup procedures. The Permittee shall have all spill clean-up equipment on site during construction.

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

3. Reporting Measures

Permittee shall meet each reporting requirement described below.

3.1 Commencement and completion of work. The Permittee shall notify the CDFW within ten (10) working days of beginning work within the stream zone or area covered in this agreement. In addition, the Permittee shall notify the CDFW within five (5) working days of the completion of work within the stream zone on this project.

3.2 Photographs. Prior to commencement of work within the stream zone, the Permittee shall photograph the project site. Upon completion of work and revegetation activities, the Permittee shall photograph the project site. Labeled copies of photographs shall be sent to the CDFW within 30 days of completion of the project.

3.3 Compliance and Effectiveness Monitoring Plan. Prior to Construction, the Permittee shall develop a Compliance and Effectiveness Monitoring Plan (Measure 2.9). The Plan will document and verify that project operations, including the bypass flows authorized in this Agreement, are being met and are achieving the stated resource goals, providing sufficient water to maintain resources downstream of the diversion facilities in good condition.

3.4 Invasive Species Plan. Prior to construction, a non-native invasive species plan (Measure 2.13) shall be developed and submitted to CDFW for approval.

3.5 Notification to the California Natural Diversity Database. If any special status species are observed in project surveys, Permittee or designated representative shall submit Natural Diversity Data Base (NDDB) forms to the NDDB for all preconstruction survey data within five (5) working days of the sightings, and provide to CDFW's Regional office three (3) copies of the NDDB forms and survey maps.

CONTACT INFORMATION

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

To Permittee:

Nancy Scolari
PO Box 1146
Point Reyes Station, CA 94956
Phone (415) 663-1170
nancy@marinrcd.org

To CDFW:

Department of Fish and Wildlife
Bay Delta Region
7329 Silverado Trail
Napa California 94558
Attn: Lake and Streambed Alteration Program – Corinne Gray
Notification #1600-2010-0351-R3
Phone: (707) 944-5526
Corinne.gray@wildlife.ca.gov

LIABILITY

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

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

SUSPENSION AND REVOCATION

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

Before CDFW suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

ENFORCEMENT

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

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

OTHER LEGAL OBLIGATIONS

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

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503

(bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

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

AMENDMENT

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

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

TRANSFER AND ASSIGNMENT

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

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

EXTENSIONS

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

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code, § 1605, subd. (f)).

EFFECTIVE DATE

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

TERM

This Agreement shall expire on December 31, 2018, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

AUTHORITY

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

AUTHORIZATION

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

CONCURRENCE

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

FOR MARIN RESOURCE CONSERVATION DISTRICT

Nancy Scolari — Date: 03-30-15

FOR DEPARTMENT OF FISH AND WILDLFIE

Craig J. Weightman — Date: 4/10/15
Environmental Program Manager

Prepared by: Corinne Gray
Senior Environmental Scientist (Specialist)

Date e-mailed: September 9, 2010
Date revised e-mailed July 3, 2014
Date revised e-mailed July 29, 2014

FOR DEPARTMENT USE ONLY				
Date Received	Amount Received	Amount Due	Date Complete	Notification No.
10/18/10	$ 750.00	$		1600-2010-0351-3

CK# 2012 Marin County RCD

STATE OF CALIFORNIA
DEPARTMENT OF FISH AND GAME

Gray Roberts

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

Fish & Game
OCT 18 2010
Yountville

1. APPLICANT PROPOSING PROJECT

Name	Marin Resource Conservation District		
Business/Agency			
Street Address	P.O. Box 1146/80 Fourth Street, Room 202		
City, State, Zip	Point Reyes Station, CA 94956		
Telephone	(415) 663-1170	Fax	(415) 663-0421
Email	nancy@marinrcd.org		

2. CONTACT PERSON (*Complete only if different from applicant*)

Name	Gary Deghi		
Street Address	828 Mission Avenue		
City, State, Zip	San Rafael, CA 94901		
Telephone	(415) 925-2000	Fax	(415) 925-2006
Email			

3. PROPERTY OWNER (*Complete only if different from applicant*)

Name	Three different property owners		
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

4. PROJECT NAME AND AGREEMENT TERM

A. Project Name	Pine Gulch Creek Watershed Enhancement Project
B. Agreement Term Requested	☑ Regular (*5 years or less*) ☐ Long-term (*greater than 5 years*)

C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (*year*)	Ending (*year*)	Start Date (*month/day*)	End Date (*month/day*)	
2011	2016	04/15	10/15	3.00

5. AGREEMENT TYPE

Check the applicable box. If box B, C, D, or E is checked, complete the specified attachment.		
A.	☐ Standard *(Most construction projects, excluding the categories listed below)*	
B.	☐ Gravel/Sand/Rock Extraction (*Attachment A*)	*Mine I.D. Number:* _____
C.	☐ Timber Harvesting (*Attachment B*)	THP *Number:* _____
D.	☑ Water Diversion/Extraction/Impoundment (*Attachment C*)	*SWRCB Number:* _____
E.	☐ Routine Maintenance (*Attachment D*)	
F.	☐ DFG Fisheries Restoration Grant Program (FRGP)	*FRGP Contract Number:* _____
G.	☐ Master	
H.	☐ Master Timber Harvesting	

6. FEES

Please see the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. ***Note: The Department may not process this notification until the correct fee has been received.***

	A. Project	B. Project Cost	C. Project Fee
1	Establishment of five points of water diversion	$1,000.00	$750.00
2			
3			
4			
5			
		D. Base Fee *(if applicable)*	
		E. TOTAL FEE ENCLOSED	$750.00

7. PRIOR NOTIFICATION OR ORDER

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?

☐ Yes (*Provide the information below*) ☐ No

Applicant: _____ Notification Number: _____ Date: _____

B. Is this notification being submitted in response to an order, notice, or other directive ("order") by a court or administrative agency (including the Department)?

☐ No ☑ Yes (*Enclose a copy of the order, notice, or other directive. If the directive is not in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.*)

☐ *Continued on additional page(s)*

8. PROJECT LOCATION

A. Address or description of project location.

(Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)

The project is located at three contiguous organic farms in the community of Bolinas, Marin County, California: Fresh Run Farms at 615 Paradise Valley Road; Paradise Valley Farm at 235 Paradise Valley Road; and Star Route Farms at 95 Olema-Bolinas Road. The farms are accessed from Olema-Bolinas Road and Horseshoe Hill Road and occur along Pine Gulch Creek, a small coastal stream with a 7.5 mile watershed in coastal Marin County. Pine Gulch Creek flows south along the San Andreas Fault and discharges into Bolinas Lagoon.

☐ *Continued on additional page(s)*

B. River, stream, or lake affected by the project.	Pine Gulch Creek
C. What water body is the river, stream, or lake tributary to?	Bolinas Lagoon
D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?	☐ Yes ☑ No ☐ Unknown
E. County	Marin

F. USGS 7.5 Minute Quad Map Name	G. Township	H. Range	I. Section	J. ¼ Section
Bolinas - ponds are separated by as much as 1.3 miles	1N	8W	24 (?)	

☐ *Continued on additional page(s)*

K. Meridian (*check one*) ☐ Humboldt ☑ Mt. Diablo ☐ San Bernardino

L. Assessor's Parcel Number(s)

APNs 188-090-15, 188-150-69, 188-170-45 and 193-010-19

☐ *Continued on additional page(s)*

M. Coordinates (*If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes)*

Latitude/Longitude	*Latitude:* 37.909 N	*Longitude:* 122.687 W	
	☐ Degrees/Minutes/Seconds	☑ Decimal Degrees	☐ Decimal Minutes
UTM	*Easting:*	*Northing:*	☐ Zone 10 ☐ Zone 11
Datum used for Latitude/Longitude or UTM	☐ NAD 27	☑ NAD 83 or WGS 84	

9. PROJECT CATEGORY AND WORK TYPE *(Check each box that applies)*

PROJECT CATEGORY	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR/MAINTAIN EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	☐	☐	☐
Bank stabilization – rip-rap/retaining wall/gabion	☐	☐	☐
Boat dock/pier	☐	☐	☐
Boat ramp	☐	☐	☐
Bridge	☐	☐	☐
Channel clearing/vegetation management	☐	☐	☐
Culvert	☐	☐	☐
Debris basin	☐	☐	☐
Dam	☐	☐	☐
Diversion structure – weir or pump intake	☑	☐	☐
Filling of wetland, river, stream, or lake	☐	☐	☐
Geotechnical survey	☐	☐	☐
Habitat enhancement – revegetation/mitigation	☐	☐	☐
Levee	☐	☐	☐
Low water crossing	☐	☐	☐
Road/trail	☐	☐	☐
Sediment removal – pond, stream, or marina	☐	☐	☐
Storm drain outfall structure	☐	☐	☐
Temporary stream crossing	☐	☐	☐
Utility crossing : Horizontal Directional Drilling	☐	☐	☐
Jack/bore	☐	☐	☐
Open trench	☐	☐	☐
Other *(specify)*:	☐	☐	☐

10. PROJECT DESCRIPTION

A. Describe the project in detail. Photographs of the project location and immediate surrounding area should be included.

- Include any structures (e.g., rip-rap, culverts, or channel clearing) that will be placed, built, or completed in or near the stream, river, or lake.
- Specify the type and volume of materials that will be used.
- If water will be diverted or drafted, specify the purpose or use.

Enclose diagrams, drawings, plans, and/or maps that provide all of the following: site specific construction details; the dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; an overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, and where the equipment/machinery will enter and exit the project area.

See attached supplemental text. The farmers at Fresh Run Farms (owned and operated by Peter Martinelli), Paradise Valley Farms (managed by Dennis Dierks), and Star Route Farms (owned and operated by Warren Weber) form a vital component of West Marin agricultural production. These farmers propose to modify their water operations to support sustainable agriculture and enhance aquatic habitat supporting coho salmon and steelhead trout. The project proposes construction of off-stream irrigation storage ponds to meet much of the summer irrigation demand. The farmers have obtained approval of applications to the State Water Resources Control Board for the appropriation of winter runoff to storage and the dedication of their summer riparian diversions for commercial irrigation to instream flow.

The purpose of the Pine Gulch Creek Watershed Enhancement Project is to eliminate diversions of water for irrigation during periods of the year when water flow is naturally low in any case, thereby improving the habitat that Pine Gulch Creek provides to steelhead trout and coho salmon while maintaining commercial agricultural production. The proposed project will allow a modification of water operations at three farms in Bolinas to support sustainable agriculture and enhance aquatic habitat supporting coho salmon and steelhead trout.

Engineering diagrams for the construction of the five ponds are shown in Attachment 2. Points of diversion of water storage volumes from Pine Gulch Creek are shown on the engineering diagrams. At all three farms existing or new pumps placed alongside the creek at the point of diversion would draw surface water from Pine Gulch Creek through intake valves that would be covered with a screen (mesh smaller than 5 mm as required by the Safe Harbor Agreement) to filter objects and sediment in conformance with the requirements of California Department of Fish and Game. A combination of existing pipes, replacement pipes and new pipes would be used to convey the water from Pine Gulch Creek to the water storage ponds. These water conveyance pipes would extend up the creek bank and would primarily follow existing farm roads between the creek and the new ponds. Water from the ponds will be distributed with a water distribution system at least partially consisting of new underground pipes.

☑ *Continued on additional page(s)*

B. Specify the equipment and machinery that will be used to complete the project.

Existing or new pumps placed alongside Pine Gulch Creek at the points of diversion would draw surface water from the creek through intake valves that would be covered with a screen to filter objects and sediment. A combination of existing pipes, replacement pipes and new pipes would be used to convey the water from Pine Gulch Creek to the water storage ponds.

☐ *Continued on additional page(s)*

C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).	☑ Yes ☐ No (*Skip to box 11*)
D. Will the proposed project require work in the wetted portion of the channel?	☑ Yes (*Enclose a plan to divert water around work site*) ☐ No

11. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

Impacts with the channel of Pine Gulch Creek would be minimal and associated only with placement of an intake pipe within the creek at each of the five points of diversion of surface water from the stream and installation of a pipe to deliver water up and beyond the stream bank.

☐ *Continued on additional page(s)*

B. Will the project affect any vegetation? ☐ Yes (*Complete the tables below*) ☑ No

Vegetation Type	Temporary Impact	Permanent Impact
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)

☐ *Continued on additional page(s)*

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

☑ Yes *(List each species and/or describe the habitat below)* ☐ No ☐ Unknown

☑ *Continued on additional page(s)*

D. Identify the source(s) of information that supports a "yes" or "no" answer above in Box 11.C.

☑ *Continued on additional page(s)*

E. Has a biological study been completed for the project site?

☑ Yes (*Enclose the biological study*) ☐ No

Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.

F. Has a hydrological study been completed for the project or project site?

☑ Yes (*Enclose the hydrological study*) ☐ No

Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.

12. MEASURES TO PROTECT FISH, WILDIFE, AND PLANT RESOURCES

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.

Placement of a pipe for purposes of establishing a diversion of surface water and the operation of these facilities is not anticipated to generate significant levels of sediment with Pine Gulch Creek.

☐ *Continued on additional page(s)*

B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

Five points of diversion along Pine Gulch Creek are necessary to support the five approved appropriative water storage ponds. Points of diversion are noted in the project engineering diagrams of Attachment 2; specific locations for pumps and pipes will be selected in the field such that no impacts to streamside vegetation would occur.

☐ *Continued on additional page(s)*

C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

Five points of diversion along Pine Gulch Creek are necessary to support the five approved appropriative water storage ponds. Points of diversion are noted in the project engineering diagrams of Attachment 2; specific locations for pumps and pipes will be selected in the field such that no impacts to streamside vegetation would occur.

☐ *Continued on additional page(s)*

13. PERMITS

List any local, state, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

A.	U.S. Army Corps of Engineers Nationwide Permit 27	☑ Applied	☐ Issued
B.	Section 401 water quality certification	☑ Applied	☐ Issued
C.	County Coastal Development Permit and Mitigated Negative Declaration	☐ Applied	☑ Issued

D. Unknown whether ☐ local, ☐ state, or ☐ federal permit is needed for the project. (*Check each box that applies*)

☐ *Continued on additional page(s)*

14. ENVIRONMENTAL REVIEW

A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA), National Environmental Protection Act (NEPA), California Endangered Species Act (CESA) and/or federal Endangered Species Act (ESA)?

☑ Yes (*Check the box for each CEQA, NEPA, CESA, and ESA document that has been prepared and enclose a copy of each*)

☐ No (*Check the box for each CEQA, NEPA, CESA, and ESA document listed below that will be or is being prepared*)

☐ Notice of Exemption	☑ Mitigated Negative Declaration	☐ NEPA document (*type*): _____
☑ Initial Study	☐ Environmental Impact Report	☐ CESA document (*type*): _____
☐ Negative Declaration	☑ Notice of Determination *(Enclose)*	☐ ESA document (*type*): _____
☐ THP/ NTMP	☐ Mitigation, Monitoring, Reporting Plan	

B. State Clearinghouse Number (*if applicable*)			
C. Has a CEQA lead agency been determined?	☑ Yes (*Complete boxes D, E, and F*)	☐ No (*Skip to box 14.G*)	
D. CEQA Lead Agency	County of Marin		
E. Contact Person	Jeremy Tejerian	F. Telephone Number	(415) 499-6269

G. If the project described in this notification is part of a larger project or plan, briefly describe that larger project or plan.

See attached supplemental text related to item No. 10.

☐ *Continued on additional page(s)*

H. Has an environmental filing fee (Fish and Game Code section 711.4) been paid?

☑ Yes (*Enclose proof of payment*) ☐ No (*Briefly explain below the reason a filing fee has not been paid)*

Note: If a filing fee is required, the Department may not finalize a Lake or Streambed Alteration Agreement until the filing fee is paid.

15. SITE INSPECTION

Check one box only.

☐ In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.

☑ I request the Department to first contact (*insert name*) Gary Deghi at (*insert telephone number*) (415) 925-2000 to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.

16. DIGITAL FORMAT

Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?

☐ Yes (Please enclose the information via digital media with the completed notification form)

☑ No

17. SIGNATURE

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.

Gary Deghi

Signature of Applicant or Applicant's Authorized Representative

9/30/10

Date

Gary Deghi

Print Name

NOTICE OF DETERMINATION

TO: Office of Planning and Research
Post Office Box 3044
Sacramento, California 95812-3044

FROM: California Department of Fish and Wildlife
Bay Delta Region
7329 Silverado Trail
Napa, California 94558

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code

PROJECT TITLE: Pine Gulch Creek Watershed Enhancement Project

STATE CLEARINGHOUSE NUMBER: 2007082139

LEAD AGENCY: State Water Resources Control Board
CONTACT: Jennifer Dick-McFadden, (916) 322-8568

RESPONSIBLE AGENCY: California Department of Fish and Wildlife
CONTACT: Corinne Gray, Senior Environmental Scientist (Specialist), (707) 944-5526

PROJECT DESCRIPTION / LOCATION: The project is limited to construction and diversion of water at five Points of Diversion (POD) on Pine Gulch Creek, tributary to Bolinas Lagoon, Marin County as part of the Pine Gulch Creek Watershed Enhancement Project (project). Water is currently directly diverted form Pine Gulch Creek to irrigate crops for Fresh Run Farms, Paradise Valley. The California Department of Fish and Wildlife is executing a Lake and Streambed Alteration Agreement Number 1600-2010-0351-3 pursuant to Section 1602 of the Fish and Game Code to Nancy Scolari, Marin Resource Conservation District.

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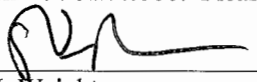
This is to advise that the California Department of Fish and Wildlife as a Responsible Agency approved the project described above on April 10, 2015 and has made the following determinations regarding the above described project pursuant to section 15096 (i).

1. The project will not have a significant effect on the environment.
2. CDFW considered the Negative Declaration as previously prepared for this project by the lead agency.

This is to certify that a copy of the Negative Declaration prepared for this project is available to the general public and may be reviewed at: State Water Resources Control Board, Post Office Box 2000, Sacramento, California 95812-2000. Please contact the lead agency person specified above.



April 10, 2015

Craig J. Weightman
Environmental Program Manager
Bay Delta Region

Date

Date Received for Filing:_____

April 4, 2014
CIWQS Reg. Meas. 395250
CIWQS Place ID 759631

Sent via electronic mail: No hard copy to follow

Marin Resource Conservation Service
P.O. Box 1146 / 80 4th St.
Point Reyes Station, CA 94956
Attn.: Ms. Nancy Scolari
Email: nancy@marinrcd.org

Subject: Water Quality Certification for Pine Gulch Watershed Enhancement Project, Marin County

Dear Ms. Scolari:

The Marin Resource Conservation Service (Applicant) has applied to the San Francisco Bay Regional Water Quality Control Board (Water Board) for Clean Water Act (CWA) Section 401 water quality certification (Certification) that the Pine Gulch Watershed Enhancement Project (Project) will not violate State water quality standards. The Applicant has also applied to the U.S. Army Corps of Engineers (USACE), Regulatory Branch for a permit to discharge dredge and fill materials to waters of the United States pursuant to Section 404 of the CWA of 1972, as amended (33 USC 1344).

The Water Board received the initial application for Certification for the Project on October 6, 2010. On December 17, 2013, the Water Board received an analysis of stream benefits provided by the Project, an estimate of the quantity and quality of wetlands in the watershed, and an assessment of the quality of wetlands onsite. On February 19, 2014, the Water Board received more details on the alternatives analysis and information regarding an easement to protect agriculture and natural areas at Fresh Run Farms. This information amended the initial application and shall henceforth be referred to along with the initial application as the Amended Application.

Project: The Project is located in unincorporated Marin County in the community of Bolinas at three organic farms along Pine Gulch Creek (Fresh Run Farms, Paradise Valley Farm, and Star Route Farms). Fresh Run Farms is located at 37.92309 latitude, -122.70102 longitude. Paradise Valley Farm is located at 37.92309 latitude, -122.70221 longitude. Star Route Farms is located at 37.91647 latitude, -122.69690 longitude.

The purpose of the Pine Gulch Creek Watershed Enhancement Project is to eliminate commercial agricultural diversions of water for irrigation during the summer, when water flow is naturally low, thereby improving coho salmon and steelhead trout habitat in Pine Gulch Creek while maintaining commercial agricultural production.

To accomplish this, the Applicant seeks to construct five off-stream ponds to meet the summer irrigation demand of the farmers at Fresh Run Farms, Paradise Valley Farms and Star Route Farms. The farmers will, in turn, modify their water operations to enhance coho salmon and steelhead trout habitat in Pine Gulch Creek. To accomplish this, the farmers have obtained water rights from the State Water Resources Control Board for the appropriation of winter runoff to storage in the ponds and dedication of their historic summer riparian diversions to instream flow.

Impacts: The Project could indirectly impact waters of the State during and after construction. During construction, ground disturbing activities may impact water quality by increasing erosion and sedimentation. In addition, accidental releases of both hazardous and non-hazardous materials may impact water quality during construction.

The Project will also permanently convert 2.99 acres of seasonal wetland to pond habitat, but will have a net benefit to the watershed by enhancing instream habitat for coho salmon and steelhead trout and increasing red-legged frog breeding habitat (see Mitigation discussion below).

Mitigation: To avoid and minimize potential water quality impacts from ground disturbing activities, the Applicant will implement best management practices (BMPs) to avoid and minimize erosion, sedimentation, and pollutant transport to waters of the State during construction.

The enhancement of 5.65 acres and 4.8 miles of riparian and creek habitat and creation of 5.45 acres of pond habitat (of which 2.46 acres are in uplands) will compensate for conversion of 2.99 acres of seasonal wetlands to ponds. The creek will be enhanced by dedicating summer flows to instream habitat thereby benefiting coho salmon and steelhead trout and by replacing a 0.64 acre eucalyptis forest with a native riparian forest comprised of coast live oaks (*Quercus agrifolia*), California bays (*Umbellularia californica*), and red alders (*Alnus rubra*). The ponds themselves will be maintained to provide breeding habitat for red-legged frogs and contain at least 1.13 acres of fringe wetlands around their peripheries.

The Applicant will also prepare a regulatory guidance manual for similar projects in the future. The purpose of the guidance manual will be to inform future project proponents of regulatory requirements, so the projects can be designed in a manner that facilitates permitting and maximizes ecological benefits. Water Board staff is prepared to work with the Applicant and other interested parties to identify pertinent laws and regulations and describe the regulatory processes involved in undertaking projects seeking to improve instream habitat by developing off stream water storage capacity.

California EcoAtlas: It has been determined through regional, state, and national studies that tracking of mitigation/restoration projects must be improved to better assess the performance of these projects, following monitoring periods that last several years. In addition, to effectively carry out the State's Wetlands Conservation Policy of no net loss to wetlands, the State needs to closely track both wetland losses and

mitigation/restoration project success. Therefore, we require that the applicant use the California Wetlands Form to provide Project information related to impacts and mitigation/restoration measures (see Condition No. 6 of this Certification). An electronic copy of the form and instructions can be downloaded at: http://www.waterboards.ca.gov/sanfranciscobay/certs.shtml. Project information concerning impacts and mitigation/restoration will be made available at the web link: http://ecoatlas.org/regions/ecoregion/bay-delta/projects.

California Environmental Quality Act (CEQA): Marin County Parks, as lead agency for CEQA, certified the Mitigated Negative Declaration (MND) for the Project on November 15, 2007. The Water Board, as a responsible agency under CEQA, has considered the MND and finds that the Project's significant environmental effects that are within the Water Board's purview and jurisdiction have been identified and will be mitigated to less-than-significant levels. Specifically, significant impacts pertaining to aquatic habitat and water quality will be mitigated to less-than-significant levels through implementation of mitigation measures identified in the MND and this Certification.

Certification: I hereby certify that any discharge from the referenced Project will comply with the applicable provisions of Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification" which requires compliance with all conditions of this Certification. The following conditions are associated with this Certification:

1. The Project shall be constructed in conformance with the Project description provided in the Amended Application. Any changes to information provided in the Amended Application must be submitted to the Water Board and receive Executive Officer approval before implementing the changes.

2. The Water Board shall be notified in writing, at least five working days prior to the commencement of ground disturbing activities, with details regarding the construction schedule.

3. No construction related wastes shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into waters of the State. When operations are completed, any excess material shall be removed from the work area and any areas adjacent to the work area where such material may be washed into waters of the State.

4. This certification does not allow for the take, or incidental take, of any special status species.

5. No fueling, cleaning, or maintenance of vehicles or equipment shall take place within any areas where an accidental discharge to waters of the State may occur. No equipment shall be operated in stream channels or other waters where there is flowing or standing water.

6. The Applicant is required to use the standard California Wetlands Form to provide Project information within 30 days from the date of this certification and any amendments to this certification. An electronic copy of the form can be downloaded at: http://www.waterboards.ca.gov/sanfranciscobay/certs.shtml. The completed form either be submitted electronically to habitatdata@waterboards.ca.gov or be submitted as a hard copy to both (1) the Water Board (see the address on the letterhead), to the attention of EcoAtlas and (2) the San Francisco Estuary Institute, 4911 Central Avenue, Richmond, CA 94804, to the attention of EcoAtlas.

7. To compensate for conversion of 2.99 acres of seasonal wetlands to ponds, the Applicant shall implement the Pine Gulch Creek Watershed Enhancement Project Biological Mitigation Plan (Mitigation Plan) dated January 24, 2007, except that the Applicant shall plant 60 trees at the riparian enhancement site, and the monitoring requirements and functional goals for 5.45 acres of pond creation and 0.65 acre of riparian enhancement shall be as follows:

   a. Created Pond Monitoring Requirements and Functional Goals

      - To verify that at least 20 percent of each pond is occupied by hydrophytic vegetation[1], the Applicant shall perform visual assessments and photographic documentation annually for a minimum of five years after completing the Project. The visual assessments shall consist of estimating the percentage of pond occupied by hydrophytic vegetation and taking field notes on the condition of these plants and general observations of pond functioning, including, but not limited to, red-legged frog sightings. Photographic documentation shall consist of taking photographs of the entire pond and close ups of the vegetated and open water portions of the pond from at least four locations equidistant around the perimeter of the pond.
      - To verify that creation of the ponds results in 5.45 acres or more of aquatic habitat with at least 1.13 acres of this habitat consisting of wetlands around the periphery of the ponds, the Applicant shall perform a formal delineation of the ponds five years after creating ponds. The delineation shall be performed in accordance with the latest USACE Wetlands Delineation Manual[2,3]. Field

[1] Hydrophytic vegetation are plants adapted for a life in saturated soil conditions and includes any plant on *The National Wetland Plant List* available at http://rsgisias.crrel.usace.army.mil/NWPL/.
[2] U.S. Army Corps of Engineers. 1987. *Corps of Engineers Wetlands Delineation Manual*. TR Y-87-1, Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station, Environmental Laboratory.
[3] U.S. Army Corps of Engineers. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)*, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-3. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

indicators of hydric soils are not anticipated to be present by Year 5 in the created wetlands because hydric soils typically develop over longer periods of time (e.g., tens to hundreds of years). As such, the protocol outlined in Section F "Atypical Situations," Subsection 4 "Man-Induced Wetlands" of the describing the use of two parameters (hydrology and plants) or an equivalent protocol shall be followed.

- The condition of the ponds shall be evaluated using the California Rapid Assessment Method[4] in the third and fifth year following completion of the Project to provide an indication of the overall condition of the ponds.

b. Riparian Enhancement Monitoring Requirements and Functional Goals

- To verify the recovery of 0.65 acre of native riparian woodland, the Applicant shall measure the percent survival of planted trees for five years after completing the Project. In Year 1, the functional goal shall be 90 percent survival of planted trees. In Year 2, the functional goal shall be 85 percent survival of planted trees. In Year 3, the functional goal shall be 80 percent survival of planted trees. In Year 4, the functional goal shall be 75 percent survival of planted trees. In Year 5, the functional goal shall be 75 percent survival of planted trees.
- To verify that invasive species have been eradicated and are not recolonizing the riparian enhancement site, the Applicant shall measure the absolute cover of invasive species[5] annually for five years after remains less than 5 percent by estimating the absolute cover.

In addition, the Applicant shall submit a planting plan for the riparian enhancement to the Water Board and receive written approval from the Water Board's Executive Officer before starting construction. Lastly, any revision to the Mitigation Plan, beyond those initiated in response to this Certification, must be submitted to the Water Board and receive written approval from the Executive Officer before implementing the revision(s).

8. Monitoring reports shall be submitted by January 31 following each monitoring year with the first monitoring year commencing one year after the completing the Project. These reports shall include detailed observations from and the findings of the visual inspections, photographs of the site, and monitoring data to document whether functional goals are being achieved. If functional goals are not being achieved, the reports shall describe adaptive management measures to be undertaken to ensure that the goals will be achieved, including, but not limited to, excavation to establish

[4] Information on the California Rapid Assessment Method is available on-line at http://www.cramwetlands.org/.

[5] Invasive species are species rated high or included as a red alert species by the California Invasive Species Council (http://www.cal-ipc.org/), high priority species listed by the Bay Area Early Detection network (http://www.baedn.org/), and any highly invasive non-native species (Tier 1) listed in Appendix I of the Water Board's Fact Sheet for Wetland Projects (http://www.waterboards.ca.gov/sanfranciscobay/certs.shtml).

appropriate pond hydrology, additional planting, and/or extension of the monitoring period as warranted. If additional plants are installed, the replacement plants shall be subject to the same functional goals as the initial plantings and shall be monitored for an additional 5 years from the date of replanting. In addition, if supplemental watering (i.e., irrigation) is necessary to ensure establishment of the vegetation species, the monitoring period shall be extended for a minimum of three years after cessation of supplemental watering.

Monitoring reports shall be submitted either by uploading them to California EcoAtlas website at http://ecoatlas.org/regions/ecoregion/bay-delta/projects or via mail (see the address on the letterhead). If these reports are submitted by uploading them to the California EcoAtlas, the Applicant shall notify the Water Board that the reports have been uploaded via e-mail to Xavier Fernandez at xafernandez@waterboards.ca.gov, or the current Water Board staff member assigned to the Project.

9. The Applicant shall ensure that the Marin Agricultural Land Trust establishes the proposed easement on the entire 238-acre Martinelli Ranch (Fresh Run Farm) by November 1, 2014. The easement shall contain a 118-acre Habitat Protection Zone, a 23-acre Creek Conservation Area Management Zone, and a 97-acre Agricultural Management Zone. Within 90 days of issuance of this Certification and prior to finalizing the easement, a copy of the draft easement shall be submitted to the Water Board for review. The draft easement shall include, but not be limited to, long-term management plans for the three zones, prohibited uses, and remedies to violations of the conservation easement. In addition, the management plan for the Habitat Protection Zone shall include pond operations and maintenance. After receiving written approval of the draft easement from the Water Board's Executive Officer and no later than one year from the date of this Certification, the Applicant shall ensure that the final easement is filed with the County of Marin.

10. Within 1 year of issuance of this Certification, the Applicant shall also submit to the Water Board a regulatory guidance manual acceptable to the Water Board's Executive Officer. The regulatory guidance manual shall provide information to assist with undertaking similar projects in the future. At a minimum, the guidance manual shall describe the process for complying with the U.S. Environmental Protection Agency's (USEPA's) *Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredge or Fill Material* (40 CFR Part 230), USACE's *Final Rule Compensatory Mitigation for Losses of Aquatic Resources* (40 CFR Parts 325 and 332), and the Porter-Cologne Water Quality Control Act.

11. This Certification is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section 13330 and Section 3867 of the California Water Code (CWC), Title 23 of the California Code of Regulations (23 CCR).

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

13. Certification is conditioned upon total payment of the full fee required in State regulations (23 CCR Section 3833) and owed by the Applicants. The fee for the proposed project has been paid in full.

This Certification applies to the Project as proposed in the Amended Application and Supplemental Information materials. Please be advised that failure to implement the Project as proposed is a violation of this Certification. Violation of water quality certification is a violation of state law and is subject to administrative civil liability pursuant to CWC Section 13350. Failure to meet any condition of this Certification may subject you to civil liability imposed by the Water Board to a maximum of $5000 per day of violation or $10 for each gallon of waste discharged in violation of the certification. Also, any requirement for a report made as a condition to this action (i.e., Condition Nos. 6, 8, 9, and 10) is a formal requirement pursuant to CWC Section 13267, and failure to submit, late or inadequate submittal, or falsification of such technical report(s) is also subject to civil liability pursuant to CWC Section 13268.

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

If you have any questions, please contact Xavier Fernandez of my staff by e-mail at xafernandez@waterboards.ca.gov or via phone at (510) 622-5685.

Sincerely,

Shin-Roei Lee acting for
Shin-Roei Lee
2014.04.04 11:35:24 -07'00'

Bruce Wolfe
Executive Officer

Cc: SWRCB, DWQ, stateboard401@waterboards.ca.gov
CDFW, Gail Seymour, Gail.Seymour@wildlife.ca.gov
SCC, Michael Bowen, mbowen@scc.ca.gov
NMFS, William Hearn, william.hearn@noaa.gov
USEPA, Region IX, WTR-8, 401 Mailbox, r9-wtr8-mailbox@epa.gov
USACE, SF Regulatory Branch:
Bryan Matsumoto, bryan.t.matsumoto@usace.army.mil
Laurie Monarres, laurie.a.monarres@usace.army.mil

Jane Hicks, jane.m.hicks@usace.army.mil

DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94103-1398

REPLY TO

DEPARTMENT OF THE ARMY PERMIT

PERMITTEE: Marin Resource Conservation District

PERMIT NO.: SPN-2000-25428N

ISSUING OFFICE: San Francisco District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate District or Division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below:

PROJECT DESCRIPTION: The project includes the construction of five off-stream irrigation storage ponds. All five ponds will be constructed above ground using fill material to construct berms to contain water for irrigation purposes. Pond 1A is designed to hold 3.1 acre-feet of water (Fresh Run Farms), Pond 1B will hold 17 acre-feet (Fresh Run Farms), Pond 2 will hold 5.5 acre-feet (Paradise Valley Farm), Pond 3A will hold 26 acre-feet, and Pond 3B would hold 9.4 acre-feet (Star Route Farms). Ponds will generally be located in areas where sheet flow storm water during the winter months will provide a portion of the water necessary to fill them. In addition, at all three farms, existing or new pumps placed alongside the creek at the point of diversion will draw surface water from Pine Gulch Creek through intake valves. The end of each intake valve will be covered with a screen to filter objects and sediment. A combination of existing pipes, replacement pipes, and new pipes will be used to convey the water from the creek to the irrigation ponds. These pipes will extend up the creek bank and will primarily follow existing farm roads between the creek and the new irrigation ponds. Water from the irrigation ponds will be distributed with a water distribution system at least partially consisting of new underground pipes. Pumping of water and draw down of water will vary year to year, but will generally be managed to improve habitat for the federally listed threatened California red-legged frog (*Rana draytonii*).

The construction of Pond 1A will not result in impacts to Corps of Engineers jurisdiction, however, the construction of Ponds 1B, 2, 3A, and 3B will result in the permanent loss of 1.10 acre, 0.41 acre, 0.03 acre, and 1.45 acre respectively, for a total of 2.99 acres of jurisdictional seasonal wetlands impacts from the construction of pond berms.

The project will result in the overall enhancement of approximately 5 miles of Pine Gulch Creek and its riparian habitat, along with the creation of 5.45 acres of pond habitat (1.13 acres of wetland and 4.32 acres of open water). The creek will be enhanced through the dedication of summer flows to Pine Gulch Creek thereby benefitting federally listed threatened Central California Coast steelhead (*Oncorhynchus mykiss*), and endangered Central California Coast coho salmon (*Oncorhynchus kisutch*), and by replacing a 0.64 acre of eucalyptis forest with a native riparian forest comprised of coast live oaks (*Quercus agrifolia*), California bays (*Umbellularia California*), and red alders (*Alnus rubra*). As stated above, the ponds will be maintained to provide breeding habitat for the federally listed threatened California red-legged frog. In addition, Fresh Run Farms will contain three management zones: a 118-acre Habitat Protection Zone, a 23-acre Creek Conservation Area Management Zone, and a 97-acre Agricultural Management Zone that will be placed into a conservation easement held by the Marin Agricultural Land Trust (MALT).

The ponds will be constructed as shown on the attached project drawings titled "Pine Gulch Creek Enhancement Project," sheet C1, "PGC Pond 1A: 3.1 Acre-feet, Irrigation Reservoir, Plan, Profile, Details," sheet C2, "PGC Pond 1B: 17 Acre-feet, Irrigation Reservoir, Plan, Profile, Details," sheets C3 and C4, "PGC Pond 2: 5.5 Acre-feet, Irrigation Reservoir, Plan, Profile, Details," sheets C5 and C6, "PGC Pond 3A: 26 Acre-feet, Irrigation Reservoir, Plan, Profile, Details," sheets C07 and C08, "PGC Pond 3B: 9.4 Acre-feet, Irrigation Reservoir, Plan, Profile, Details," sheets C09 and C10, all dated June 28, 2010, "PGC Pond 3A: 26 Acre-feet, Irrigation Reservoir, POD1," sheet POD1, "PGC Pond 3A: 26 Acre-feet, Irrigation

Reservoir, POD 1," sheet POD1, "PGC Pond 3B: 9.4 Acre-feet, Irrigation Reservoir, POD 2 Details," sheet POD2, and "Pine Gulch Creek, Fresh Run Farms, POD 4, POD 5," sheet POD 4, 5, all dated April 4, 2013 (Enclosure 1).

PROJECT LOCATION: The project is located at three contiguous farms in the community of Bolinas, Marin County, California. Fresh Run Farms is located at 615 Paradise Valley Road (APN 188-090-15); Paradise Valley Farm is located at 235 Paradise Valley Road (APN 188-150-69); and Star Route Farms is located at 95 Olema-Bolinas Road (APNs 188-170-45 and 193-010-19) (37.909 degrees N-122.687 degrees W).

PERMIT CONDITIONS:

GENERAL CONDITIONS:

1. The time limit for completing the work authorized ends on May 20, 2019. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

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

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. A conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached (Enclosure 2).

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

7. You understand and agree that, if future operations by the United States require the removal, relocation or other alteration of the structure or work authorized herein, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, you will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

SPECIAL CONDITIONS:

1. You shall adhere to the *Pine Gulch Creek Watershed, Marin County, Programmatic Safe Harbor Agreement for California Red-Legged Frog*, signed by the FWS on January 26, 2010.

2. To compensate for the loss of 2.99 acres of seasonal wetlands, the Applicant shall implement the Pine Gulch Creek Watershed Enhancement Project Biological Mitigation Plan (Mitigation Plan) dated January 24, 2007, except that the Applicant shall plant 60 trees at the riparian enhancement site, and the monitoring requirements and functional goals for 5.45 acres of pond creation and 0.65 acre of riparian enhancement shall be as follows:

Created Pond Monitoring Requirements and Functional Goals:

To verify that at least 10 percent of each pond is occupied by hydrophytic vegetation, the Applicant shall perform visual assessments and photographic documentation annually for a minimum of five years after completing the Project. The visual assessments shall consist of estimating the percentage of pond occupied by hydrophytic vegetation and taking field notes on the condition of these plants and general observations of pond functioning, including, but not limited to, red-legged frog sightings. Photographic documentation shall consist of taking photographs of the entire pond and close ups of the vegetated and open water portions of the pond from at least four locations equidistant around the perimeter of the pond.

To verify that creation of the ponds results in 5.45 acres or more of aquatic habitat with at least 1.13 acres of this habitat consisting of wetlands around the periphery of the ponds, the Applicant shall perform a formal delineation of the ponds five years after creating ponds. The delineation shall be performed in accordance with the latest USACE Wetlands Delineation Manual. Field indicators of hydric soils are not anticipated to be present by Year 5 in the created wetlands because hydric soils typically develop over longer periods of time (e.g., tens to hundreds of years). As such, the protocol outlined in Section F "Atypical Situations," Subsection 4 "Man-Induced Wetlands" of the Manual describing the use of two parameters (hydrology and plants) or an equivalent protocol shall be followed.

The condition of the ponds shall be evaluated using the California Rapid Assessment Method in the third and fifth year following completion of the Project to provide an indication of level of ecological function provided by the ponds.

Riparian Enhancement Monitoring Requirements and Functional Goals:

To verify the recovery of 0.65 acre of native riparian woodland, the Applicant shall measure the percent survival of planted trees for five years after completing the Project. In Year 1, the functional goal shall be 90 percent survival of planted trees. In Year 2, the functional goal shall be 85 percent survival of planted trees. In Year 3, the functional goal shall be 80 percent survival of planted trees. In Year 4, the functional goal shall be 75 percent survival of planted trees. In Year 5, the functional goal shall be 75 percent survival of planted trees.

To verify that invasive species have been eradicated and are not recolonizing the riparian enhancement site, the Applicant shall measure the absolute cover of invasive species annually for five years after remains less than 5 percent by estimating the absolute cover. In addition, the Applicant shall submit a planting plan for the riparian enhancement to the Corps and the Water Board and receive written approval from the Corps and the Water Board's Executive Officer before starting construction. Lastly, any revision to the Mitigation Plan, beyond those initiated in response to this authorization, must be submitted to the Corps and Water Board and receive written approval from the Corps and Water Board Executive Officer before implementing the revision(s).

3. Monitoring reports shall be submitted by January 31 following each monitoring year with the first monitoring year commencing one year after the completing the Project. These reports shall include detailed observations from and the findings of the visual inspections, photographs of the site, and monitoring data to document whether functional goals are being achieved. If functional goals are not being achieved, the reports shall describe adaptive management measures to be undertaken to ensure that the goals will be achieved, including, but not limited to, excavation to establish appropriate pond hydrology, additional planting, and/or extension of the monitoring period as warranted. If additional plants are installed, the replacement plants shall be subject to the same functional goals as the initial plantings and shall be monitored for an additional 5 years from the date of replanting. In addition, if supplemental watering (i.e., irrigation) is necessary to ensure establishment of the vegetation species, the monitoring period shall be extended for a minimum of three years after cessation of supplemental watering. Monitoring reports shall be submitted directly to the Corps via hard copy or email.

4. The Applicant shall ensure that the Marin Agricultural Land Trust establishes the proposed easement on the entire 238-acre Martinelli Ranch (Fresh Run Farm) by November 1, 2014. The easement shall contain a 118-acre Habitat Protection Zone, a 23-acre Creek Conservation Area Management Zone, and a 97-acre Agricultural

Management Zone. Within 90 days of permit issuance and prior to finalizing the easement, a copy of the draft easement shall be submitted to the Corps and Water Board for review. The draft easement shall include, but not be limited to, long-term management plans for the three zones, prohibited uses, and remedies to violations of the conservation easement. In addition, the management plan for the Habitat Protection Zone shall include pond operations and maintenance. After receiving written approval of the draft easement from the Corps and Water Board's Executive Officer and no later than one year from the date of this authorization, the Applicant shall ensure that the final easement is filed with the County of Marin.

5. Within 1 year of permit issuance, the Applicant shall, in coordination with the Corps and the Regional Water Quality Control Board, also prepare a regulatory guidance manual that assists with undertaking similar projects in the future. At a minimum, the guidance manual shall describe the process for complying with the U.S. Environmental Protection Agency's (USEPA's) Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredge or Fill Material (40 CFR Part 230), USACE's Final Rule Compensatory Mitigation for Losses of Aquatic Resources (40 CFR Parts 325 and 332), and the Porter-Cologne Water Quality Control Act.

6. Archaeological sites CA-Mrn-382 and CA-Mrn-383 shall be completely avoided.

7. All material and debris generated as a result of project construction shall be removed from the site and disposed of in an appropriate location outside of USACE jurisdiction.

8. All staging, maintenance, and storage of heavy machinery shall be conducted in such a location and manner that no fuel, oil, or other petroleum products may run off or be washed by rainfall into the jurisdictional areas.

9. All stated and other appropriate best management practices shall be implemented throughout the project site.

10. Any change in the project, materials, or construction methods, must be approved by USACE in writing.

FURTHER INFORMATION:

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

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

2. Limits of this authorization:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 C.F.R. Section 325.7 or enforcement procedures such as those contained in 33 C.F.R. Sections 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 C.F.R. Section 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

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

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

[signature]	06-11-14
(PERMITTEE)	(DATE)

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

John K. Baker, P.E. Lieutenant Colonel, US Army District Engineer	(DATE)

7/14/14

John C. Morrow
Lieutenant Colonel, US Army
District Engineer

(DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEREE)

(DATE)

DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
1455 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94103-1398

OCT 20 2015

Regulatory Division (1145b)

SUBJECT: Permit No. 2000-254280

LETTER OF MODIFICATION

Ms. Nancy Scolari
Marin Resource Conservation District
Post Office Box 1145
Point Reyes Station, California 94956

Dear Ms. Scolari:

This letter is in response to your request dated July 22, 2015, for a modification of permit No. 2000-254280. Your project was authorized under Individual Permit # 2000-254280 pursuant to Section 404 of the Clean Water Act of 1972, as amended (33 U.S.C. § 1344 *et seq.*), to construct five off-stream irrigation storage ponds, located at three contiguous farms in the community of Bolinas, Marin County, California. Fresh Run Farms is located at 615 Paradise Valley Road (APN 188-090-15); Paradise Valley Farm is located at 235 Paradise Valley Road (APN 188-150-69); and Star Route Farms is located at 95 Olema-Bolinas Road (APNs 188-170-45 and 193-010-19) (37.909 degrees N-122.687 degrees W).

Your request proposes a modification of your permit to permanently impact 2.82 acres of jurisdictional wetlands through the placement of fill material for the construction of 5.4 acres of pond habitat (1.08 acres of wetland and 4.32 acres of open water). Work shall be performed as described in the original permit application, and subsequently modified in the request for permit modification letter dated July 22, 2015.

The following Special Condition is hereby added to this modification, to further avoid and minimize adverse impacts to aquatic resources, and shall be implemented:

1. Within three months of receiving this modification, you shall work in cooperation with the San Francisco Bay Regional Water Quality Control Board and the Corps to develop a monitoring plan for remaining wetlands at the Pond 1B site.

Permit No. 2000-254280 is hereby modified under the provisions of 33 CFR § 325.7(b) to modify the construction of the previously permitted ponds. Except for the above modification, all terms and conditions of the original permit authorization remain in effect.

Should you have any questions regarding this matter, please contact Bryan Matsumoto of our Regulatory Division at 415-503-6786 or by email: Bryan.T.Matsumoto@ usace.army.mil. Please address all correspondence to the Regulatory Division and refer to the File Number at the head of this letter.

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

Sincerely,

ORIGINAL SIGNED
BY
Tori White
ACTING CHIEF, REG. DIVISION

John C. Morrow
Lieutenant Colonel, U.S. Army
District Engineer

PINE GULCH WATERSHED, MARIN COUNTY
PROGRAMMATIC SAFE HARBOR AGREEMENT FOR
CALIFORNIA RED-LEGGED FROG

1. INTRODUCTION

This programmatic Safe Harbor Agreement (Agreement) is entered into between Marin County Agricultural Commissioner (Program Administrator) and the U.S. Department of Interior, Fish and Wildlife Service (Service); hereinafter collectively called the Parties. The purposes of this Agreement are: (1) to create additional habitat and enhance existing habitat for the California red-legged frog (*Rana aurora draytonii*) in the Pine Gulch Watershed in Marin County, California and (2) to provide certain regulatory assurances to landowners participating in such habitat creation and enhancement. This Agreement follows the Service's Safe Harbor Agreement policy (FR 64:32717) and regulations (FR 64:32706), which implement this policy.

Upon approval, this Agreement will serve as the basis for the Service to issue an Enhancement of Survival Permit (Permit) under Section 10(a)(1)(A) of the Endangered Species Act (Act). The Permit authorizes the incidental taking of the California red-legged frog associated with Covered Activities (as hereinafter defined), which include creation and enhancement of habitat, routine maintenance, agricultural activities, the potential future return to pre-agreement condition (baseline), and any otherwise lawful activities on any property subject to a Cooperative Agreement. Under this Agreement, the Program Administrator will issue a Certificate of Inclusion to each property owner (Cooperator) whose property is subject to a Cooperative Agreement (Enrolled Property). Each Cooperative Agreement shall be effective upon the signing thereof by the Cooperator and the Program Administrator. Certificates of Inclusion issued by the Program Administrator will extend incidental take coverage conferred by the Permit to the Enrolled Property. Each Cooperator will agree to carry out the Management Activities described in their Cooperative Agreement and to abide by the terms and conditions set forth in this Agreement, their Cooperative Agreement, and the Permit.

2. LIST OF COVERED SPECIES

This Agreement covers the federally threatened California red-legged frog, which hereafter is referred to as the Covered Species.

3. DESCRIPTION OF COVERED AREA

Pine Gulch Creek is a 7.5 square mile watershed located in the western coastal portion of Marin County. Headwaters for Pine Gulch Creek, and 85% of the entire watershed, are located within the boundaries of the Point Reyes National Seashore. Water flows from Pine Gulch Creek into Bolinas Lagoon then out to the Pacific Ocean. The lower reaches of the watershed closest to Bolinas Lagoon are in private ownership. Predominant land use in the privately owned portions of the watershed is annual agricultural production.

The agricultural properties in Pine Gulch Watershed are bordered to the north by Point Reyes National Seashore (Seashore) and to the east by Golden Gate National Recreation Area. Established in the 1960's, these parks host an impressive array of native flora and fauna. Over 45% of North American avian species, nearly 18% of California's plant species, and twenty-three state and federally threatened and endangered species are found living within the Seashore's boundaries (http://www.nps.gov/pore/home.htm). This includes a population of several thousand adult California red-legged frogs and more than 120 active breeding sites (Fellers 2002).

Historically, the western range of California red-legged frog extended along the coast from the vicinity of Point Reyes National Seashore in Marin County and inland from the vicinity of Redding in Shasta County to southern reaches in northwestern Baja California, Mexico. In April 2004, FWS designated Core Recovery Unit 13 for the California red-legged frog, which includes watersheds within and adjacent to Point Reyes, Tomales Bay and Bolinas Lagoon, which includes the Pine Gulch watershed. This recovery unit encompasses approximately 200,572 acres; 56% of which is privately owned.

3A. THE PINE GULCH CREEK WATERSHED ENHANCEMENT PROJECT

This Agreement has been developed in conjunction with the Pine Gulch Creek Watershed Enhancement Project. The project, a voluntary and cooperative effort, will modify existing irrigation delivery systems to enhance aquatic habitat for the benefit of the federally listed coho salmon (*Oncorhynchus kisutch*) and steelhead trout (*O. mykiss*), while simultaneously enhancing the area's long-term agricultural sustainability. Under the Enhancement Project, five water storage ponds – known as Ponds 1A, 1B, 2, 3A and 3B, as defined in Marin County permit approvals for the Project – will be built (or expanded) on agricultural properties for the purpose of storing water, either diverted from Pine Gulch Creek or captured through sheet flow, for summertime agricultural irrigation use. The new water regime will enable the farmers to regulate the amount and timing of pumping from the creek, thus reducing instantaneous withdrawals during the low flow periods. In addition to benefiting listed fish species, these water storage ponds present an opportunity to create high quality wetland/pond habitat ideal for several wildlife species including the California red-legged frog. A complete, detailed analysis of the Pine Gulch Creek Watershed Enhancement Project can be found in the *Water Availability & Cumulative Instream Impact Analysis* (Ketcham 2005).

4. BASELINE DETERMINATION

This Agreement provides a means by which Cooperators can manage, create and/or enhance habitat for the federally-threatened California red-legged frog without incurring additional regulatory restrictions on the use of their Enrolled Property. The Agreement, however, does not release Cooperators from the responsibility to avoid take of any listed species already occupying portions of their Enrolled Property. Therefore, any Cooperator who wishes to enroll his or her property under this Agreement must allow a baseline assessment to be conducted prior to finalizing the Cooperative Agreement. Baseline assessments shall be undertaken by a qualified person satisfactory to the Service.

For each Enrolled Property, the baseline assessment shall establish the baseline conditions (Baseline Conditions) and shall contain a description of the quantity, quality, and location of California red-legged frog habitat determined by a survey completed not more than 18 months prior to the effective date of the Cooperative Agreement. This baseline assessment should include:

1. A written description of the Enrolled Property, including existing ponds, pools, springs, seeps, and other aquatic habitats, including location, size (in acre-feet), maximum depth, presence of aquatic vegetation, amount and location of vegetated perimeter, and amount of willow (*Salix* spp.), cattails (*Typha* spp.), and bulrushes (*Scirpus* spp.);
2. A map and written description of existing habitat areas for the California red-legged frog ("Existing Habitat Areas");
3. Established photo points and photos of Existing Habitat Areas.

Baseline assessment may also include the following:

1. The presence of threats to the California red-legged frog, such as bullfrogs, warm water fish species, etc; and,
2. The presence of other amphibians.

In order to receive the assurances regarding take of Covered Species specified in Section 7 of this Agreement, a Cooperator must maintain Baseline Conditions on the Enrolled Property for the duration of the Cooperative Agreement.

5. MANAGEMENT ACTIVITIES

Each Cooperative Agreement shall specify the creation, enhancement, and/or management activities (collectively, "Management Activities") to be carried out on the Enrolled Property to which it applies. These activities shall include those listed as "Standard Activities" in Attachment 3 and such "Additional Activities" listed in Attachment 3 as the Cooperator agrees to implement. The object of such Management Activities will be to create healthy wetland communities associated with water storage ponds on each Enrolled Property. The Service has determined that implementation of these activities is expected to produce a net conservation benefit for the Covered Species.

6. NET CONSERVATION BENEFIT

The Service has determined that implementation of this Agreement is reasonably expected to provide a "net conservation benefit" to the Covered Species, because the collective Management Activities performed by the Cooperators pursuant to this Agreement are expected to increase the Covered Species' population and/or create or enhance habitat for the Covered Species. The water storage ponds built as part of this Agreement will increase California red-legged frog populations by providing key reproduction habitat within the natural migration corridor of Pine Gulch Creek. Additionally, abundant upland habitat located on adjacent public and private property

provides dispersal areas. Research at Point Reyes National Seashore has found that stock ponds, similar to those proposed for construction in Pine Gulch Creek, are commonly used as breeding sites for the California red-legged frog. Data from radio-tagged California red-legged frogs suggests that riparian areas provide critically important resting and dispersal habitats (Fellers 2002).

Specifically, the Agreement supports recovery objective Numbers 4 and 5 listed in the Recovery Plan for the California red-legged frog (USFWS 2002) by restoring habitat through construction, maintenance, and management of ponds within its historical range, removing exotic species as necessary, and protecting these restored sites for a minimum of 10 years. The Management Activities in the Agreement have been developed to support endangered species recovery actions provided for in the Recovery Plan for the California red-legged frog (USFWS 2002) by protecting habitat and by implementing management plans for habitat. The enrolled properties are located within core area number 13, Point Reyes Peninsula, as described in the Recovery Plan for California red-legged frog. The Point Reyes Peninsula core area was established either because it represents a viable population or because it will contribute to habitat connectivity that will aid species dispersal or because it has potential for population reestablishment or augmentation (USFWS 2002). Implementation of Management Activities associated with the terms of the Agreement will increase available habitat dispersal opportunities for the California red-legged frog.

7. OTHER RESPONSIBILITIES OF THE PARTIES

A. In addition to entering into Cooperative Agreements (Attachment 1) with willing non-Federal landowners, as described above, the Program Administrator agrees to:

1. Inform the Service promptly of any notification it receives from Cooperators of the latter's intent to make a changes on the Enrolled Property likely to permanently reduce the amount of habitat for California red-legged frog;

2. Approximately 3 years post pond construction, assess the general condition of California red-legged frog habitat on each Enrolled Property and determine if the habitat is occupied by Covered Species. If frogs are present, no future assessments will be required. If the Covered Species is not present, assessments will be conducted at approximately 3 year intervals until the ninth year after pond construction. Assessments shall be conducted on the Program Administrator's behalf by a qualified entity agreed upon by the Service;

3. Provide the Service with an annual report, due by March 31st of each year and covering the prior calendar year, in the form attached hereto as Attachment 2;

4. Notify the Service of any transfer of ownership of an Enrolled Property, so that the Service can attempt to contact the new owner, explain the responsibilities applicable to the Enrolled Property, and seek to interest the

new owner in signing the existing Agreement or a new one to benefit listed species on the Enrolled Property; and

5. Furnish the Service with copies of all Cooperative Agreements hereunder within 2 weeks after they are signed.

B. In consideration of the foregoing, the Service agrees to:

1. Upon execution of the Agreement, issue to the Program Administrator a Permit in accordance with Section 10(a)(1)(A) of the Act, valid for 30 years, authorizing take of the Covered Species as a result of Covered Activities, provided that such taking shall be consistent with maintaining Baseline Conditions on each Enrolled Property.

2. Provide to the Program Administrator and Cooperators technical assistance, to the maximum extent practicable, when requested; and provide information on Federal funding programs.

8. COVERED ACTIVITIES

"Covered activities" under this Agreement include any otherwise lawful activities within an Enrolled Property. "Covered activities" shall include all ordinary agriculture activities, wherever undertaken. In addition, these Covered activities shall include, but not be limited to, the following:

1. Construction of water storage ponds (including piping and other related facilities) (collectively, "Ponds & Facilities"), and operation, maintenance, repair and replacement of the Ponds & Facilities (shall be undertaken in accordance with the Management Activities (Attachment 3).

2. Outer banks of dam structure may be planted with annuals and shallow rooted perennials as allowed by pond engineer.

3. Ponds & Facilities will require occasional maintenance, including pipe repair, clearing blockages, and removing silt, plants (including algae), and trees around the inlet/outlet. Screens, foot-valves, pipes, aeration equipment, and pump/pumping apparatus will be maintained.

4. Silt removal will occasionally be performed (with a tractor loader or similar equipment) when the water is at its lowest level in the fall. Silt removal is anticipated to occur every 5 to 10 years and will be accomplished during the fall when ponds are drained by the Cooperator according to procedures stipulated in Attachment 3, Section 1.A for purposes of providing habitat management for California red-legged frog.

5. Vegetation adjacent to and within pond zone will be mowed and cleared. This includes mowing grass on the outside slope and the top of dikes and removing vegetation in and around the ponds as necessary to maintain the function, size, integrity and capacity of the ponds, but leaving a band of fringe vegetation not less than two feet wide surrounding not less than one-half of the pond perimeter to provide cover for California red-legged frog.

6. Algae will be cleared out of the ponds in the warm season around intake/outlet valves. Algae will be harvested for compost production.

7. Watercress may be cultivated in the ponds.

8. Adjacent roads or roads that are in any way connected to the pond structure will be subject to annual maintenance. This consists of applying and spreading gravel and correcting drainage problems with a tractor.

9. Occasional tree maintenance and removal of fallen trees by owner and contractors of Pacific Gas and Electric Company may be performed.

10. The Cooperator may construct or maintain an existing floating dock for the purpose of supporting pumping equipment for extracting water for irrigation or emergency situations (i.e., fire).

11. Water may be released into spillway watercourses in extreme rain events to manage any possible hydro-related emergencies (i.e., flooding).

12. Grazing of livestock and horses is permitted within and adjacent to ponds. Livestock is inclusive of sheep, goats, cattle, and llamas.

13. Recreation activities are permitted adjacent to, and within the pond, including, but not limited to: hunting of deer, rabbit, ducks, quail, dove, pigeon, turkey, etc.; fishing for any game species that may occur in the pond; swimming; boating; picnicking; and bird watching. Target practice may be conducted adjacent to the pond. The owner will take precautions to ensure that California red-legged frogs are not at risk during target practice activities.

14. Pond management for mosquito control is allowed using *Bacillus thuringiensis* or similar products. If needed, other effective methods of mosquito control will be approved in consultation with the Mosquito Abatement District and FWS, in recognition of the applicable organic food production standards.

15. Removal of water storage ponds (including piping and other related facilities) and return of an Enrolled Property to Baseline Conditions is permitted.

9. OTHER LANDOWNERS WHO MAY SECURE INCIDENTAL TAKE AUTHORIZATION

Landowners who own land that abuts and is immediately adjacent to an Enrolled Property may, without committing to undertake any Management Activities described in Section 5 on such adjoining land, secure the incidental take authority conferred by the permit issued by the Service to the Program Administrator pursuant to paragraph 7, provided: (1) such adjoining landowner enters into a written agreement with the Program Administrator in the form attached hereto as Attachment 5; (2) such written agreement specifies the baseline conditions on such adjoining property; (3) activities resulting in such incidental take are consistent with maintaining the baseline conditions on such adjoining property by a qualified person satisfactory to the Service.

10. AGREEMENT AND PERMIT DURATION

The Agreement becomes effective upon issuance by the Service of the Permit described in Section 7 of this Agreement, and will be in effect for 30 years. Cooperative Agreements developed pursuant to this Agreement will be for an initial term of at least 10 years. This Agreement and the Permit described in Section 7 of this Agreement may each be extended by mutual written consent of the Parties. Cooperative Agreements also may be extended by mutual written consent of Program Administrator and Cooperators, but for no longer than the term of this Agreement (as such term is then in effect as of the date of such extension).

11. ASSURANCES OF PROGRAM ADMINISTRATOR REGARDING TAKE OF COVERED SPECIES

Provided that such take is consistent with maintaining Baseline Conditions identified in Section 4 hereof, the Permit referenced in Section 7 of this Agreement shall authorize the taking of the Covered Species by a Cooperator, their employees or agents incidental to:

A. Implementing the Management Activities identified in their Cooperative Agreement;

B. Making any lawful use of and engaging in any Covered Activities on the Enrolled Property in accordance with the Management Activities identified in the Cooperative Agreement; and

C. Returning Enrolled Property to Baseline Conditions as provided for in this Agreement.

12. MODIFICATIONS

A. Modification of the Agreement. Either Party may propose amendments to this Agreement, as provided in 50 CFR 13.23, by providing written notice to, and obtaining the written concurrence of, the other Party. Such notice shall include a statement of the proposed modification, the reason for it, and its expected results. The Parties will use

their best efforts to respond to proposed modifications within 60 days of receipt of such notice. Proposed modifications will become effective upon the other Parties' written concurrence.

B. Termination of the Agreement. As provided for in Part 12 of the Service's Safe Harbor Policy (FR 64:32717), a Cooperator may terminate his Cooperative Agreement with the Program Administrator for circumstances beyond his or her control by giving written notice to the Program Administrator. In such circumstances, the Cooperator may, pursuant to the Permit referenced in Section 7 of this Agreement, return the Enrolled Property to Baseline Conditions even if the Management Activities identified in the Cooperative Agreement have not been fully implemented.

C. Permit Suspension or Revocation. The Service or the Program Administrator may suspend or revoke the Permit referenced in Section 7 above for a reasonable cause, in accordance with the laws and regulations in force at the time of such suspension or revocation. The Program Administrator or any Cooperator has the right to appeal any suspension or revocation to a mutually agreed upon arbitrator.

D. Baseline Adjustment. The Baseline Conditions for any Enrolled Property may, by mutual agreement of the Parties and the applicable Cooperator, be adjusted if, during the term of the Cooperative Agreement for reasons beyond the control of the Cooperator, the amount of California red-legged frog habitat is reduced, or other Baseline Conditions have changed, from that existing at the time the Cooperative Agreement was signed.

E. Adaptive management allows for changes to the Management Activities, mutually agreed to by the Parties and a Cooperator, in response to changing conditions or new information. This approach will be utilized if needed to assure that the project will provide a net conservation benefit for the Covered Species for the duration of the Agreement. Decisions related to adaptive management will be based on the monitoring results and other information in annual reports.

F. Inability of the Program Administrator to Continue. If the Program Administrator shall, for any reason, cease to be able to perform its obligations under this Agreement, it shall give written notice of that fact to the Service at the earliest possible time. Upon receiving such notice, the Service may, at its discretion after consultation with Cooperators, either amend this Agreement and the associated Permit to substitute a new Program Administrator, or, if Cooperators prefer, convert any previously approved Cooperative Agreement into an individual agreement between the Cooperators and the Service under the same substantive terms.

13. OTHER MEASURES

A. Remedies. Each party shall have all remedies otherwise available to enforce the terms of the Agreement and the Permit, except that no party shall be liable in damages for any breach of this Agreement, any performance or failure to perform an obligation under this Agreement or any other cause of action arising from this Agreement.

B. Dispute Resolution. The Parties agree to work together in good faith to resolve any disputes, using dispute resolution procedures agreed upon by all Parties.

C. Succession and Transfer. As provided in Part 11 of the Service's Safe Harbor Agreement Policy, if a Cooperator transfers his or her interest in the Enrolled Property to another non-federal entity, the Service will regard the new owner as having the same rights and responsibilities with respect to the Enrolled Property as the original Cooperator, if the new owner agrees to become a party to the Cooperative Agreement in place of the original Cooperator.

D. Availability of Funds. Implementation of this Agreement is subject to the requirements of the Anti-Deficiency Act and the availability of appropriated funds. Nothing in this Agreement will be construed by the Parties to require the obligation, appropriation, or expenditure of any funds from the U.S. Treasury. The Parties acknowledge that the Service will not be required under this Agreement to expend any Federal agency's appropriated funds unless and until an authorized official of that agency affirmatively acts to commit to such expenditures as evidenced in writing.

E. No Third-Party Beneficiaries. This Agreement does not create any new right or interest in any member of the public as a third-party beneficiary, nor shall it authorize anyone not a party to this Agreement to maintain a suit for personal injuries or damages pursuant to the provisions of this Agreement. The duties, obligations, and responsibilities of the Parties to this Agreement with respect to third parties shall remain as imposed under existing law.

F. Other Listed Species, Candidate Species, and Species of Concern. In the event that other listed species or species living in riparian or aquatic habitat not initially covered by this Agreement are subsequently listed as threatened or endangered under the Endangered Species Act the Parties agree to confer in good faith concerning an amendment to this Agreement, and all Cooperative Agreements previously approved hereunder, to include such other species as Covered Species. The amendment of any Cooperative Agreement pursuant to this provision shall not change the Baseline Conditions set forth in such Cooperative Agreement at the time they were executed.

G. Repopulation by Other Listed Species. In the event that other listed species not initially covered by this Agreement are found in residence on the Enrolled Property and all parties agree their occurrence is a result of Management Activities described in this Agreement, the Parties agree to confer in good faith concerning an amendment to this Agreement, and all Cooperative Agreements previously approved hereunder, to include such other listed species as Covered Species. The amendment of any Cooperative Agreement pursuant to this provision shall not change the Baseline Conditions set forth in such Cooperative Agreement at the time they were executed as to the California red-legged frog. The amendment to any Cooperative Agreement shall determine the Baseline Conditions for the subsequently listed species in a manner approved by the Service and agreed upon by the Program Administrator and Cooperator.

H. Notices and Reports. Any notices and reports, including monitoring and annual reports, required by this Agreement shall be delivered to the persons listed below, as appropriate:

Safe Harbor Program
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, CA 95825

IN WITNESS WHEREOF, THE PARTIES HERETO have executed this Safe Harbor Agreement to be in effect as of the date that the Service issues the Permit referred to in Section 7 above.

Program Administrator:
Marin County Agricultural Commissioners Office
1682 Novato Blvd. Suite 150-A
Novato, CA 94947

Service:
Safe Harbor Program
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, CA 95825

Mary Carlsen
Marin County Agricultural Commissioner

January 7, 2010
Date

ACTING
Field Supervisor
Sacramento Field Office
U.S. Fish and Wildlife Service

26 January 2010
Date

ATTACHMENT 1
Cooperative Agreement

This is a voluntary agreement that recognizes the unique and important role that private landowners in California can play in helping wildlife valued by the people of California and of the nation. The purpose of the agreement is to enable land management activities beneficial to rare species to be carried out on privately owned land while minimizing the impact of such activities on the right and ability of the owner thereof to use it as he or she wishes.

This agreement is entered into in anticipation of the construction and operation of offstream water storage ponds for the purpose of storing water, either diverted from Pine Gulch Creek or captured through sheet flow, for summertime agricultural irrigation use as part of the Pine Gulch Creek Enhancement Project. The project, a voluntary and cooperative effort, will modify existing irrigation delivery systems to enhance aquatic habitat for the benefit of the federally listed coho salmon (*Oncorhynchus kisutch*) and steelhead trout (*O. mykiss*), while simultaneously enhancing the long-term agricultural sustainability of Cooperator's Enrolled Property.

The terms of this agreement are as follows:

1. The Marin County Agricultural Commissioner (Program Administrator) and Fresh Run Farm (aka Paradise Valley Ranch) (Cooperator) have entered into this Cooperative Agreement to improve habitat for the betterment of wildlife, including the federally threatened California red-legged frog, on certain land owned by the Cooperator that is delineated on the attached map (Exhibit A), and referred to herein as the Enrolled Property.

2. The United States Fish and Wildlife Service (Service) has entered into a Programmatic Safe Harbor Agreement (Programmatic Agreement) with the Program Administrator and has issued to the Program Administrator a Section 10(a)(1)(A) permit (Permit) that authorizes, until the year 2040, the incidental taking of California red legged frogs by Cooperator and other persons who enter into cooperative agreements with the Program Administrator pursuant to the Permit.

3. Cooperator agrees to conduct, or allow to be conducted, activities to create, enhance, or manage riparian and wetland habitat in accordance with the plan set forth in the attached Exhibit B, and maintain such habitat for a minimum period of 10 years from the date of this Agreement (Cooperator Management Activities).

4. The Cooperator further agrees to provide the Program Administrator with a brief report, **due January 31** of the year following the signing of this Cooperative Agreement, and annually thereafter. Such report, in the format shown in Attachment 4 or in any other simple format to be developed by the Program Administrator, shall cover the prior calendar year and shall identify any Cooperator Management Activities undertaken to create, enhance, or manage native riparian and wetland habitat on the Enrolled Property subject to this Cooperative Agreement, as well as any changes in the extent of riparian and wetland habitat in the preceding year. The Cooperator understands and agrees that the Program Administrator will include these annual reports with the reports that it is required to submit to the Service from time to time.

5. In consideration of the foregoing, the Program Administrator has issued to the Cooperator the attached Certificate of Inclusion under the Program Administrator's Permit. This Certificate authorizes the Cooperator and the Cooperator's successors or assigns:

a) to take the species identified above incidental to implementing the Cooperator Management Activities set forth in this Cooperative Agreement;

b) after initiation of, and consistent with such Cooperator Management Activities, to carry out any Covered Activities (as defined in the Programmatic Agreement) other lawful activity that may cause the incidental taking of such species on Cooperator's Enrolled Property, provided that Baseline Conditions are maintained.

As used in this Cooperative Agreement, "incidental" take refers to the unintentional or unavoidable killing or injuring of the species identified above in the course of carrying out otherwise lawful activities. Nothing in this Cooperative Agreement authorizes Cooperator to capture, collect, or deliberately kill or injure any such species.

6. After the agreed-upon Cooperator Management Activities have been initiated, Cooperator agrees to give the Program Administrator at least 90 days notice (except when precluded by emergency situations) prior to management changes which will reduce the amount of baseline habitat on the Enrolled Property and to allow the Program Administrator or the Service the opportunity to rescue and relocate any individuals of the Covered Species from Cooperator's land to avoid their loss.

7. The Cooperator and the Program Administrator agree that a baseline assessment has been conducted in accordance with methods outlined in Section 4 of the Agreement. The results of the baseline assessment are delineated in Exhibit C and shall be considered "Baseline Conditions" applicable to the Enrolled Property. So long as Baseline Conditions are maintained, Cooperator may incidentally take the species as provided in Part 5 above. If requested by the Service within 90 days of its receiving a copy of the Cooperative Agreement, the Cooperator agrees to allow the Service access to the Enrolled Property for the sole purpose of verifying the baseline assessment set forth in this paragraph. The Baseline Conditions may be adjusted, by mutual agreement of the Program Administrator, the Service and the Cooperator if, during the term of the Cooperative Agreement, for reasons beyond the control of the Cooperator, the amount of California red-legged frog habitat is reduced or other Baseline Conditions have changed, from that existing at the time this Cooperative Agreement was signed.

8. Successors and assignees may incur the responsibilities and benefits of this Cooperative Agreement by becoming a party thereto, unless terminated in writing as specified below. If Cooperator decides to sell or otherwise transfer ownership or management of the Enrolled Property, Cooperator agrees to give the Program Administrator notice of such decision prior to the intended sale or transfer and to give the purchaser or transferee notice of this Cooperative Agreement so that the purchaser or transferee can become a party to it if he or she so wishes. Cooperator will inform the Program Administrator in the event all, or part of, the Enrolled Property is transferred to another owner.

9. The Cooperator shall grant the Program Administrator access to Enrolled Property to confirm that the Cooperator Management Activities set forth in Exhibit B have been conducted, and to assess the condition of the habitats being managed under the Cooperative Agreement. The Program Administrator shall give the Cooperator reasonable notice of these visits and shall be accompanied by the Cooperator or an agent of the Cooperator, if the Cooperator so desires.

10. The Cooperator, or the Cooperator's successors or assigns, may terminate the Cooperative Agreement for reasons beyond their control at any time by giving 60 days written notification to the Program Administrator, in which case the Cooperator or the Cooperator's successors or assigns' right to incidentally take the species under the Permit and Certificate of Inclusion shall expire upon the effective date of such termination. This Cooperative Agreement can be renewed, extended, or modified at any time subject to both the Cooperator's and the Program Administrator's approval. The Baseline Conditions in any renewal or extension of this Cooperative Agreement shall be the same as set forth in Part 7 above.

11. Cooperator and the Program Administrator agree with respect to liability and indemnification for injuries to persons or property arising out of this Agreement as follows: Cooperator assumes no liability for injury to any employee or representative of Program Administrator or Service in the course of any visit to the Enrolled Property under this Cooperative Agreement. Program Administrator and Service shall not be liable for any damage to the Enrolled Property of the Cooperator arising from any visit to the property pursuant to this Cooperative Agreement.

12. So long as the Permit and Certificate of Inclusion remain in effect, and provided the Cooperator Management Activities required by this Cooperative Agreement have been initiated, the Cooperator may exercise the right conferred by the Program Administrator's Permit and the Certificate to incidentally take the species identified above on the Enrolled Property.

13. This Cooperative Agreement does not create any new right or interest in any member of the public as a third-party beneficiary, nor shall it authorize anyone not a party to this Cooperative Agreement to maintain a suit for personal injuries or damages pursuant to the provisions hereof. The duties, obligations, and responsibilities of the parties to this Agreement with respect to third parties shall remain as imposed under existing law.

14. This Cooperative Agreement shall be effective as of the date the last party hereto has signed.

15. Any notices required by this Cooperative Agreement shall be delivered to the persons listed below, as appropriate:

Program Administrator:
Marin County Agricultural Commissioner's Office
1682 Novato Blvd. Suite 150-A
Novato, CA 94947

Stacy Carlson — 9-2-15

Program Administrator — Date

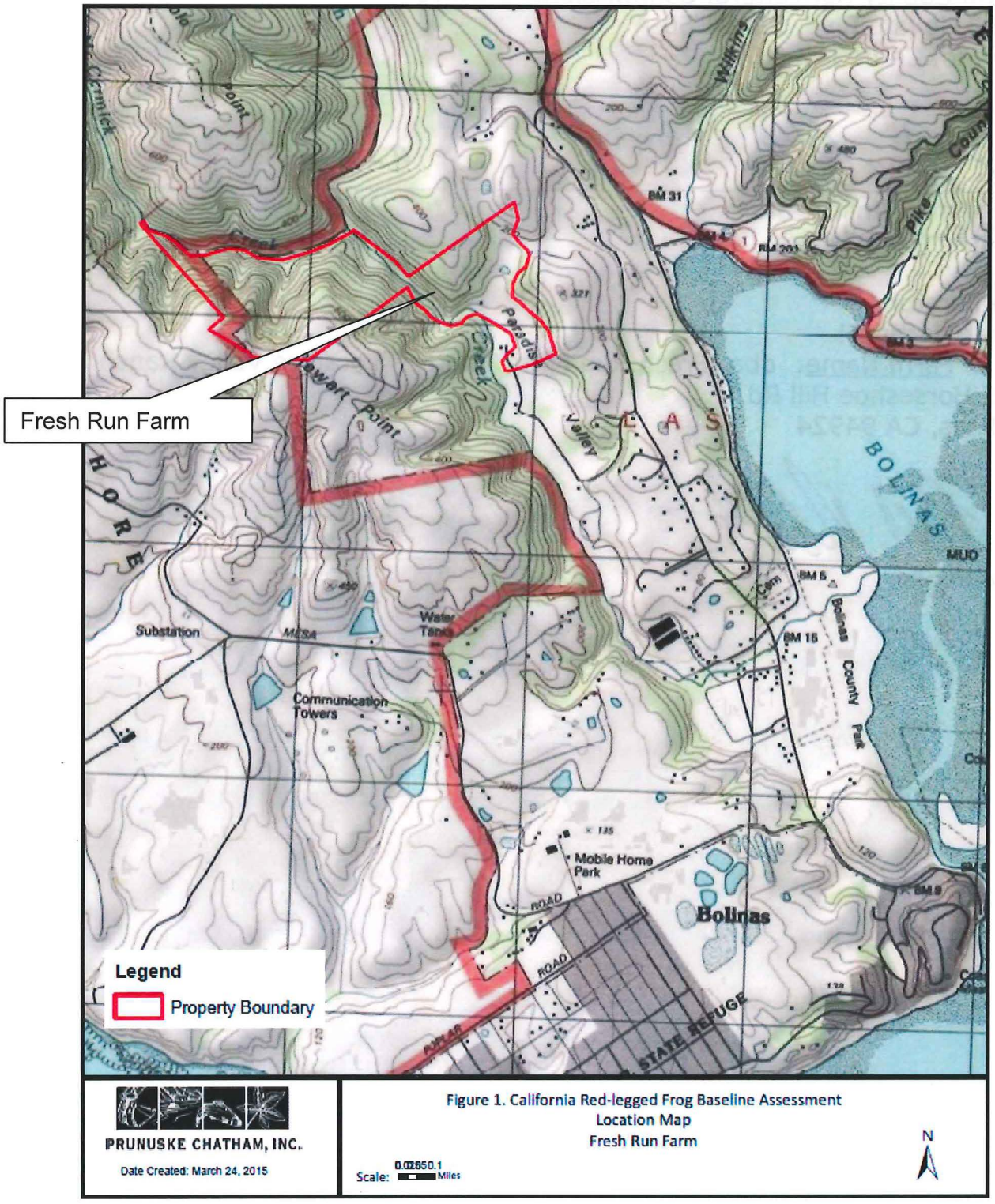
Stacy Carlson

Cooperator:
Peter Martinelli
Farm Name: dba "Fresh Run Farm" and/or "Paradise Valley Ranch"
615 Horseshoe Hill Rd
Bolinas, CA 94924

9-2-15

Cooperator — Date

Exhibit A: Map of Fresh Run Farm
(Delineated in Red)



Location: 615 Horseshoe Hill Rd, Bolinas, CA

Exhibit B: Specifications for Cooperator Management Activities

I. Standard Activities

The following Management Activities shall be included in all Cooperative Agreements:

A. Pond Installation and Management

The following Management Activities apply to all Ponds & Facilities:

- Construct new ponds with a slope of no more than 2:1
- Intake structures for in-stream pumping shall have screens smaller than 5 millimeters.
- Ponds shall be designed with gravity drains so that they can be drained of water to the lowest level feasible depending on topography and final elevations of the ponds, as constructed and maintained (the "Lowest Feasible Level").
- Ponds shall be managed each fall in such a manner to control populations of bullfrogs and other California red legged frog predators as follows:
    - On a date selected by a Cooperator after not earlier than September 15 but no later than November 15, each pond will be drained to the Lowest Feasible Level.
    - If significant standing water remains in a pond when drained to the Lowest Feasible Level, the Cooperator will pump additional water from the pond until all feasible standing water has been removed using commercially reasonable measures.
    - A Cooperator shall not re-fill a pond for at least four (4) weeks after the date on which water has been removed from the pond as set forth in the preceding two bullets.
    - Although bullfrogs and California red-legged frogs appear to coexist throughout Marin County, it is unclear if this pattern will remain throughout the life of the project. In order to assure the greatest success for the California red-legged frog through this Agreement, it is understood that undertaking the above-described steps to reduce the population of bullfrogs (and other predators) would be the preferred option. The Service understands that weather conditions in the area, practical

limitations on the ability to remove relatively small quantities of water and/or other extenuating circumstances may preclude the ability to drain the ponds of all water, or to maintain the ponds in a drained condition for any length of time. The Service also understands that such measures may not be effective in eradicating predator species, although these measures are anticipated to be effective in reducing populations of these species.

- Pond maintenance, repair and replacement activities must take place no earlier than September 1 and not later than November 15, except in case of emergency.

B. Controlling Predators and Other Threats

The following Management Activities apply to all five water storage ponds:

- Prevent knowing introductions of predators such as: bullfrogs, crayfish, mosquito fish, and other fishes.

- Monitor populations of invasive plant species around ponds including: giant reed (*Arundo donax*) and Pampas grass (*Cortaderia jubata*). Control if advised.

C. Minimizing Effects

A Biological Assessment for the Pine Gulch Creek Watershed Enhancement Plan was prepared by Huffman-Broadway Group, Inc. (HBG) in April of 2007, and mitigation requirements in this report were incorporated into Conditions of Approval required by Marin County. A draft Biological Mitigation Plan was prepared in January of 2007; review of this draft Mitigation Plan is anticipated during permit processing for the project by the U.S. Army Corps of Engineers, State Water Resources Control Board, Regional Water Quality Control Board and California Department of Fish and Game. The Biological Assessment and draft Mitigation Plan describe means of minimizing effects to wetland habitats and the potential for impacts to the federally-listed threatened California red-legged frog during pond construction.

1. Minimizing and Mitigating Wetland Impacts

Wetland mitigation sites are the five pond construction sites where construction of the ponds will convert existing areas, some of which are open water habitats or vegetated wetland areas, to open water irrigation ponds that will have a fringe of wetland vegetation such as cattail (*Typha latifolia*), lamp rush (*Juncus effusus*), spreading rush (*Juncus patens*), tall flatsedge (*Cyperus eragrostis*), velvet grass (*Holcus lanatus*) and tules (*Scirpus californicus)* similar to the existing Green Pond at Fresh Run Farm and Pond 3A at Star Route Farms. Approximately 3.07 existing acres of palustrine emergent wetland and 0.78 acres of open water habitat will be replaced by 5.12 acres of open water and 1.14 acres of palustrine emergent wetland after pond construction as part of the watershed enhancement project. In addition to the wetland created by construction of the irrigation ponds, riparian habitat restoration along Pine Gulch Creek (removal of nonnative eucalyptus and replanting with the riparian species such as red alder) within a suitable enhancement site is included as mitigation.

The draft Biological Mitigation Plan includes provisions during pond construction and stream zone enhancements for establishment of protective buffer zones along Pine Gulch Creek, baseline monitoring, worker environmental sensitivity training, identification of equipment staging areas and marking of vehicle access routes, implementation of appropriate erosion control measures, plantings of riparian tree species, and implementation of restoration activities including removal of invasive weedy species and man-made trash and debris. The final mitigation plan will include a funding plan, inspection and maintenance program, a success monitoring program, and a stewardship program.

As required by the Service, the final Biological Mitigation Plan will include the following avoidance, minimization and mitigation measures related to re-vegetation efforts:

(a) For all five water storage ponds:

- Immediately after construction, seed with native perennial grasses on berms around constructed ponds.

- A post construction report will be provided to the Service within 3 months after initial ground-disturbing activities. The report will include pre and postproject photos, including photos of the restored sites (i.e. vegetation or revegetation efforts). The report will also provide a discussion on the implementation and success (or failure) of avoidance and minimization measures, as well as verification of worker training.

- Sensitive habitat within or adjacent to project work areas will be flagged or fenced with orange construction fencing or caution tape to prevent traffic in these areas. Fencing will be placed approximately 4 inches above grade to allow wildlife to move under it.

(b) For Pond **1A**:

- Immediately after construction, seed with native wetland vegetation around the interior edge of constructed ponds to provide vegetation that could be used by California red-legged frogs for shade, foraging and attaching egg masses. The seed mix shall include species known from the wetland fringe of existing irrigation ponds, including lamp rush (*Juncus effusus*), spreading rush (*J. patens*), tall flat-sedge (*Cyperus eragrostis*), velvet grass (*Holcus lanatus*), cattail (*Typha latifolia*), and tules (*Scirpus californicus)*. As part of project mitigation, this seeding immediately after pond construction will minimize the temporal loss of occupied California red-legged frog habitat.

- Maintain the engineered emergent wetland habitat (approximately 3,700 square feet) to provide greater habitat diversity and breeding opportunities for CRLF within Pond 1A. The pond (including the engineered emergent wetland) is expected to fill in most years (through natural processes and by water delivered from the area above Green Pond); however, if the emergent wetland habitat does not fill through these processes Fresh Run Farms is not expected to supplement the volume of the pond from other sources in order to inundate the engineered emergent wetland habitat.

(c) For former Pond **1B** site:

- Ensure that the newly established Conservation Area (see Figure 5 – "additional habitat conservation area" and "preserved open water habitat/riparian") continues to provide sufficient vegetative cover for the CRLF. This provides a net conservation benefit to CRLF by ensuring cover and foraging habitat for adult and juvenile CRLF. Vegetative cover could include, but is not limited to native California blackberry, non-native Himalayan blackberry, willows, sedges, rushes, and ferns. A 10-foot buffer (of approximately 10 feet) will exist between the sump pump and the conservation area (see Figure 5).

- Ensure that "Green Pond" (denoted as the "Preserved Open Water Habitat/Riparian" area in Figure 5) maintains water (deeper than 3 feet) during the breeding season (typically November to April) and

a minimum water depth of 1 foot May through August (thereby facilitating complete tadpole metamorphosis).

- An assessment of habitat shall be completed annually as part of the Annual Report (see Attachment 4). If at year 3 post-construction, wetland vegetation is absent around the interior edge of the constructed ponds, additional seeding with native wetland vegetation shall be implemented.

2. Minimizing Construction Effects to California Red-legged Frog

As California red-legged frog is known to occur at the Existing Habitat Areas, there is the potential for impacts to occur to individuals of the species during Pond & Facilities construction at these locations. Pond & Facilities construction is planned to occur during low water levels late in the summer, which is during the non-breeding season for the California red-legged frog. Therefore, impacts to breeding frogs or egg masses in aquatic areas would not occur. As the frogs move during the dry season to upland retreat sites subsequent to breeding, there is the potential that construction activity for the Ponds & Facilities could encounter individuals using the edges of the existing pond or aestivating frogs in uplands areas. To address the potential impact to California red-legged frog during construction of Ponds & Facilities, mitigation in the form of pre-construction surveys in Existing Habitat Areas with relocation of individuals out of harms way to suitable nearby habitats, and the presence of monitors during portions of the construction operations, would be necessary.

The Biological Mitigation Plan includes those activities related to worker training, preconstruction surveys and biological monitoring that are included in the January 26, 1999 U.S. Fish and Wildlife Service "Programmatic Formal Endangered Species Act Consultation on issuance of Permits under Section 404 of the Clean Water Act or Authorizations under the Nationwide Permit Program for Projects that May Affect the California Red-legged Frog," and specifically provides as follows:

> "(1) At least 15 days prior to the onset of activities, the applicant or project proponent shall submit the name(s) and credentials of biologists who would conduct activities specified in the following measures. No project activities shall begin until proponents have received written approval from the Service that the biologist(s) is qualified to conduct the work.
>
> (2) A Service-approved biologist shall survey the work site two weeks before the onset of activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist shall contact the Service to

determine if moving any of these life-stages is appropriate. In making this determination the Service shall consider if an appropriate relocation site exists. If the Service approves moving animals, the approved biologist shall be allowed sufficient time to move California red-legged frogs from the work site before work activities begin. Only Service-approved biologists shall participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.

(3) Before any construction activities begin on a project, a Service-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the California red-legged frog and its habitat, the importance of the California red legged frog and its habitat, the general measures that are being implemented to conserve the California red-legged frog as they relate to the project, and the boundaries within which the project may be accomplished. Brochures, books and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

(4) A Service-approved biologist shall be present at the work site until such time as all removal of California red-legged frogs, instruction of workers, and habitat disturbance have been completed. After this time, the contractor or permittee shall designate a person to monitor on site compliance with all minimization measures. The Service-approved biologist shall ensure that this individual receives training outlined above and in the identification of California red-legged frogs. The monitor and the Service-approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated by the Corps and Service during review of the proposed action. If work is stopped, the Corps and Service shall be notified immediately by the Service-approved biologist or onsite biological monitor."

The following information provides additional detail relevant to implementation of the above-quoted paragraph (2) from the Biological Mitigation Plan:

In Existing Habitat Areas, a Service-approved biologist holding the appropriate Section 10(a)(1)(A) permit will survey the area of construction for California red-legged frogs two weeks before the onset of construction activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist will relocate any life stages of the species encountered out of harms way to suitable nearby habitats (with Service approval). Relocation sites would be Pine Gulch Creek in the vicinity of Pond 3A, and the existing Green Pond in the vicinity of Pond 1B construction. The

approved biologist will be allowed sufficient time to move California red-legged frogs from the work site before work activities begin. As frogs are relocated out of the work area, an exclusion fence will be installed around pond construction sites and maintained throughout the duration of construction to keep any relocated frogs from returning while construction operations proceed.

II. Additional Activities

A Cooperator may elect to include the following Management Activities in a Cooperative Agreement:

- Seed with native perennial grasses at appropriate locations along Pine Gulch Creek.

Exhibit C: Baseline Conditions
(Assessed May, 2015)

by:

Prunuske Chatham, Inc.

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Introduction

The Pine Gulch Creek Watershed Enhancement Project, administered by the Marin Resource Conservation District (MRCD), is designed to improve summer habitat conditions for aquatic species in the Pine Gulch Creek watershed, Bolinas, Marin County. MRCD is working with local organic farms to construct a series of off-channel water storage ponds to enhance summer flows by substituting summer riparian diversions for winter appropriative diversions. Limited riparian diversion in the spring (April through June) and appropriative storage of winter diversions would accommodate the continuing irrigation needs of the farms between July and December. Appropriative winter diversion into the ponds would ensure that they are full by the last day of March on an annual basis. As part of this project, the farmers would dedicate all of their commercial riparian diversions between July 1 and December 15 to instream flow for the benefit of salmonids and other aquatic species occupying the watershed (MRCD 2015). The Fresh Run Farm is one of the three farms engaged in the project. Work on the property would include construction of two off-channel irrigation ponds. The ponds will store approximately 3.4 and 17 acre-feet of water (Ponds 1A and 1B), respectively, and irrigate approximately 22.9 acres of farm land.

The project is being funded by the California Department of Fish and Wildlife (CDFW) Fisheries Grant Restoration Program (FRGP #P1130410) and under authorizations from state and federal regulatory agencies. As part of the permit process, the U.S. Department of the Interior, Fish and Wildlife Service (USFWS) has entered into a programmatic Safe Harbor Agreement (Agreement) with the Marin County Agricultural Commissioner (Commissioner) for California red-legged frog (*Rana draytonii*; CRLF; USFWS 2009). The Fresh Run Farm property is located within the range of CRLF. The

Pine Gulch Creek watershed is designated as Core Recovery Unit 13 (USFWS 2009).

The purposes of the Agreement between USFWS and the Commissioner are: (1) to create additional habitat and enhance existing habitat for CRLF in the watershed, and (2) to provide certain regulatory assurances to landowners participating in such habitat creation and enhancement (USFWS 2009). Any landowner who wishes to enroll their property into the Agreement must complete a baseline CRLF assessment. Prunuske Chatham, Inc. (PCI) was retained by MRCD to complete the baseline assessment on the Fresh Run Farm parcel. There are two parcels that comprise Fresh Run Farm, totaling 235 acres (APN 188-090-15 and 188-120-29). As part of the Pine Gulch project, there is only once parcel enrolled in the project (APN 188-090-15; 153.3 acres). This report is a summary of our findings and describes the quantity, quality, and location of CRLF habitat on the 153-acre parcel, referred herein as the property.

Project Setting

Fresh Run Farm is located on Paradise Valley Road, accessed from Horseshoe Hill Road, north of the town of Bolinas in western Marin County, California (Figure 1). It is mapped on the Bolinas USGS quadrangle 37°55'59.09"N and 122°42'25.07"W) at elevations ranging from approximately 59 to 725 feet. The property is surrounded by forested habitat, agricultural fields, and rural residential parcels. Pine Gulch Creek runs through the property. The Pine Gulch Creek watershed encompasses 7.5 squares miles of coastal habitat. The majority of the watershed is located within the Point Reyes National Seashore (Seashore). The creek flows in a southerly direction from the Seashore towards Bolinas and into Bolinas Lagoon thence the Pacific Ocean.

Conservation Easement

In 2014, Fresh Run Farm (aka Paradise Valley Ranch) entered into a conservation easement (Easement) with Marin Agricultural Land Trust (MALT) to protect key habitat areas on the entire 235-acre property and ensure that the property remains in productive commercial agriculture in perpetuity (Creque and Martinelli 2014). As part of the Easement process, resources on the property were evaluated and delineated (Evans and Baye 2011, Reza 2014). Three management/protection zones were established on the property. These include agricultural, habitat protection, and creek

conservation areas (see Exhibit A-1 below on page 43). Habitat types were also mapped (see Habitat Types below on page 43). Existing CRLF habitat areas delineated as part of PCI's assessment overlap with those areas previously identified by MALT; these are described further below.

Methods

A baseline assessment of the Fresh Run Farm property was conducted on March 2, 2015. The purpose of the assessment was to review the extent of the proposed activities and evaluate the presence of CRLF habitat. This included an evaluation of the quality and mapping of the location and quantity of existing habitat areas. The assessment included evaluating baseline conditions as described in *Section 4. Baseline Determination* of the Agreement (USFWS 2009). It was carried out by Jennifer Michaud, Senior Wildlife Biologist, of PCI. Mrs. Michaud holds a federal Recovery Permit TE-072650-3 from USFWS for CRLF and CDFW Scientific Collecting Permit SC-6871 with a Memorandum of Understanding for CRLF.

PCI's assessment included evaluating all wetlands, stream channels, migration corridors, and representative upland habitats. The assessment was conducted with the aid of binoculars (10 x 42 Swarovski™). Conditions were mostly sunny with light winds and excellent visibility. Project plans by Erickson Engineering, Inc. (dated January 8, 2015; Erickson Engineering, Inc. 2015) and an aerial map of the property were used to orient to important habitat features and areas of potential habitat disturbance. Photo points of CRLF habitat features and conditions were collected in representative areas on the property. A Trimble XH GPS with sub-meter accuracy was used to collect data on small-scale features and photo locations.

Figure 1 is a location map with the property noted. Figure 2 is an overview of mapped existing habitat areas and photo point locations. Figure 3 includes mapped locations in the Pond 1A area and Pine Gulch Creek. Figure 4 includes mapped locations in the Pond 1B area. Established photo points are provided at the end of the report. The following includes a description of the existing CRLF habitat features with the size and quality summarized in Table 1.

Existing Habitats

The Fresh Run Farm property encompasses 153.3 acres. Much of property is steep, densely vegetated evergreen forest. The eastern portion of the property supports flat, low-lying areas, which are in agricultural production. Several residences are scattered throughout the property. Pine Gulch Creek runs through the property in a north to south direction, separating the forested western half of the property from the more open and diverse eastern half. The assessment of existing CRLF habitat was focused on the eastern half of the property, to the east of Pine Gulch Creek. Remaining forested habitats on the property were previously inventoried by Evens and Baye (2011) and found to support limited aquatic resources; these lands have been protected with a conservation easement through Marin Agricultural Land Trust (pers. comm. Martinelli 2015).

The property supports a dense canopy of vegetation along Pine Gulch Creek (Photo Point 4). The canopy is dominated by red alder (*Alnus rubra*). The stream runs through a relatively deep canyon, and the riparian plant community integrates with the surrounding dense evergreen forest. Representative understory species include native California blackberry (*Rubus ursinus*), stinging nettle (*Urtica dioica*), red elderberry (*Sambucus racemosa*), California wood fern (*Dryopteris arguta*), and lady fern (*Athyrium felix-femina*) with areas of dense non-native groundcover. The riparian woodlands along Pine Gulch Creek provide sufficient cover, aestivation habitat, and foraging opportunities for CRLF and other wildlife.

In the assessment area of Pine Gulch Creek, the bankfull width is 40 feet. At the time of the assessment, the wetted channel width was 6 feet, and the average water depth was 6 inches. During the assessment, the water temperature in Pine Gulch Creek was 49°F in 12 inches of water, and the air temperature was 60°F at 3:30 pm. The creek supports a complex of pool and riffle habitats, and water is present year-round. The substrate is comprised of pebbles and cobble. In the areas assessed, the banks are relatively steep. Accumulations of downed wood occur along the creek with small undercuts. Backwater areas are present; however, they lack emergent vegetation, and flows are fairly swift. CRLF breeding may be limited along the creek due to the lack of slow backwater areas and emergent vegetation, but the creek provides year-round aquatic habitat.

The property supports two open water ponds. The first is located at the northern property boundary (Photo Point 1), and the second, Green Pond (Photo Points 7 and 8), is at the eastern edge of the property along existing ranch roads. The smaller of the two ponds, Wetland A, is approximately 0.08 acres. At the time of the assessment, the feature only measured 40 feet x 30 feet with a maximum depth of approximately 1.5 feet, due to limited recent rains. According to the landowner, the pond dries relatively early in the late spring/early summer. The pond margins are lined with California blackberry, poison oak (*Toxicondendron diversilobum*), common rush (*Juncus effusus*), irisleaf rush (*J. xiphioides*), pennyroyal (*Mentha pulegium*), and tall flatsedge (*Cyperus eragrostis*). Approximately 20% of the pond surface was covered in smartweed (*Persicarias* sp.) and emergent dock (*Rumex* sp.). This open water habitat provides vegetative cover, aestivation habitat, and foraging opportunities for CRLF, but it is unlikely to support breeding due to lack of deep, persistent pools, and the availability of moisture may be limited during the dry season.

This second pond, Green Pond, Wetland B, is a man-made impoundment formed by an old road. Green Pond is ground water fed. The pond is approximately 0.5 acres. According to the landowner, water is present year-round. During the winter, the depth of the pond is approximately 12 feet, by summer 4 to 5 feet. The margins of Green Pond are dominated by smartweed (*Persicarias* sp.), willow (*Salix* sp.), and small-fruited bulrush (*Scirpus microcarpus*). The water surface is covered by floating plants including water-pennywort (*Hydrocotyle ranunculoides*) and duckweed (*Lemna* sp.). During the assessment, approximately 30% of the pond surface was covered with surface vegetation or overhanging willows (along west and north edges). This open water habitat provides vegetative cover, aestivation habitat, and foraging opportunities for CRLF. Breeding habitat is present, but successful breeding may be limited due to the presence of mosquito fish and American bullfrog; see discussion below.

Green Pond is fed by a spring, which originates in the vicinity of Wetland D (Photo Point 5), and also feeds Wetland E, the large complex wetland immediately to the north of Green Pond and the area of the proposed Pond 1B. Wetland D is a narrow feature along the road. It forms at the base of a hillside. Wetland thickets also occur in the surrounding pasture, the largest being Wetland C; this feature is dominated by California blackberry. Wetland E (Photo Point 5), the larger wetland complex, and the roadside wetland are dominated by common rush, California blackberry, slough sedge (*Carex*

obnupta), lady fern, and stinging nettle; see also Ryan and Parsons 2010. Patches of red alder and arroyo willow also occur within Wetland E and along the edge of Green Pond. Wetland edges and surrounding vegetation include spinyfruit buttercup (*Ranunculus muricatus*), Dutch clover (*Trifolium repens*), English plantain (*Plantago lanceolata*), water parsley (*Oenanthe sarmentosa*), clustered dock (*Rumex conglomeratus*), velvetgrass (*Holcus lanatus*), and giant horsetail (*Equisetum telmateia*) (Ryan and Parsons 2010). Wetland E provides high quality foraging and aestivation habitat, as well as protective cover and migration areas for CRLF.

Downslope of Green Pond, two additional wetland areas occur adjacent to the agricultural fields. Wetland F (Photo Point 9) occurs to the west of the ranch road serving the north end of the property, and Wetland G (Photo Point 10) occurs along a drainage flowing from Green Pond along the edge of the adjacent hillside. There is also a small willow thicket on the south side of the road from Green Pond that is supported by a leaking pipe. This willow is trimmed back each year and the area farmed during the growing season; this area was not delineated due to the active farming in the area. Wetland F is small wetland dominated by rushes. Wetland G supports a dense thicket of California blackberry; adjacent areas are dominated by California bay and coast live oak. Fields surrounding the wetlands are dominated by yellow mustard (*Brassica nigra*), wild radish (*Raphanus sativus*), wild oats (*Avena fatua*), dock (*Rumex* sp.), and planted fava beans. These wetland areas provide protective cover, migratory corridors, and foraging habitat for CRLF, but the availability of moisture may be limited.

Surrounding lands support extensive forests dominated by Douglas-fir (*Pseudotsuga menziesii*), California bay (*Umbellularia californica*), and coast live oak (*Quercus agrifolia*) to the south and west. Open grasslands and woodlands occur to the north and east of the property (Photo Points 2 and 3). CRLF may migrate overland through these areas and use the densely vegetated areas for protective cover. However, due to the steep topography and dry conditions, the frequency of use may be limited in the forested areas on the property.

Existing habitat areas identified by PCI fall into three different easement management and protection zones defined in the Easement (see Exhibit A-1). Many of the wetland features that provide suitable CRLF habitat fall within the agricultural management zone. These areas can be actively farmed and are necessary to continue agricultural uses on the property.

Upland habitat features are also part of the agricultural management and habitat protection zones. All of the riparian resources are protected as part of the creek conservation management zone. The following table outlines the existing habitat areas by zone as described in the Easement.

Table 1. California Red-legged Frog Existing Habitat Areas

Features	Size	Habitat Quality	Notes
Features within Creek Conservation Area Management Zone			
Pine Gulch Creek	0.47 miles	Good	Stream. Year-round habitat, breeding habitat may be limited.
Riparian Woodlands	7.6 acres	Excellent	No habitat limitations.
Features within Agricultural Management Zone			
Wetland A	0.08 acres	Good	Open water pond. Foraging and aestivation habitat and protective cover, breeding may limited due to lack of deep persistent pools, but pond not evaluated under normal rainfall conditions. Pond dries by summer per landowner.
Wetland B	0.47 acres	Good	Open water pond. Year-round habitat, breeding habitat may be limited due to the presence of non-native bullfrogs and mosquito fish.
Wetland C	0.05 acres	Marginal	Small thicket. Protective cover, limited moisture availability. Maybe impacted by pond construction.
Wetland D	0.01 acres	Marginal	Small roadside wetland. Protective cover and foraging habitat. At spring location, may have persistent water for extended periods.
Wetland E	0.95 acres	Excellent	Extensive vegetated wetland, location of Pond 1B. Protective cover, migratory corridor, aestivation and foraging habitat. At spring location, may have persistent water for extended periods.
Wetland F	0.12 acres	Good	Small, vegetated wetland. Protective cover and foraging habitat. Limited moisture availability.
Wetland G	0.16 acres	Good	Drainage, vegetated wetland. Protective cover, migratory corridor, and foraging habitat. Limited moisture availability.
Features within Agricultural and Habitat Protection Management Zones			
Uplands	100+ acres	Marginal	Overland migration, property fairly steep, use may be limited

Based on PCI's assessment, the Fresh Run Farm property currently supports 0.47 linear miles of blue-line stream channel, 7.6 acres of riparian woodland habitat along Pine Gulch Creek, 0.55 acres of open water habitat/pond, and 1.29 acres (1 acre impacted by pond construction) of season wetland habitat for CRLF of varying quality.

Other Amphibians and Invasive Aquatic Species

During PCI's assessment of the Fresh Run Farm, two amphibian species were detected. Sierran treefrog (*Pseudacris sierra*) were heard calling from roadside thickets. Ten adult rough-skinned newts (*Taricha granulosa*) were seen in the small open water pond at the northern edge of the property. Newts are likely to breed in the pond, but no egg masses were seen.

The landowner reports hearing American bullfrogs (*Lithobates catesbeianus*) in Green Pond Approximately 20 years ago, Green Pond was stocked with bass, but the pond has since been drained (pers. comm. Martinelli 2015). However, mosquito fish (*Gambusia affinis*) are present in Green Pond and may preclude native amphibian breeding at this location (Evens and Baye 2011). CRLF are known to occur south of the property in a small freshwater swamp/marsh (observed in 2011), and Pacific pond turtle have been reported in Green Pond (Evens and Baye 2011). Pine Gulch Creek may support a small number of warm water fish and/or introduced American bullfrog.

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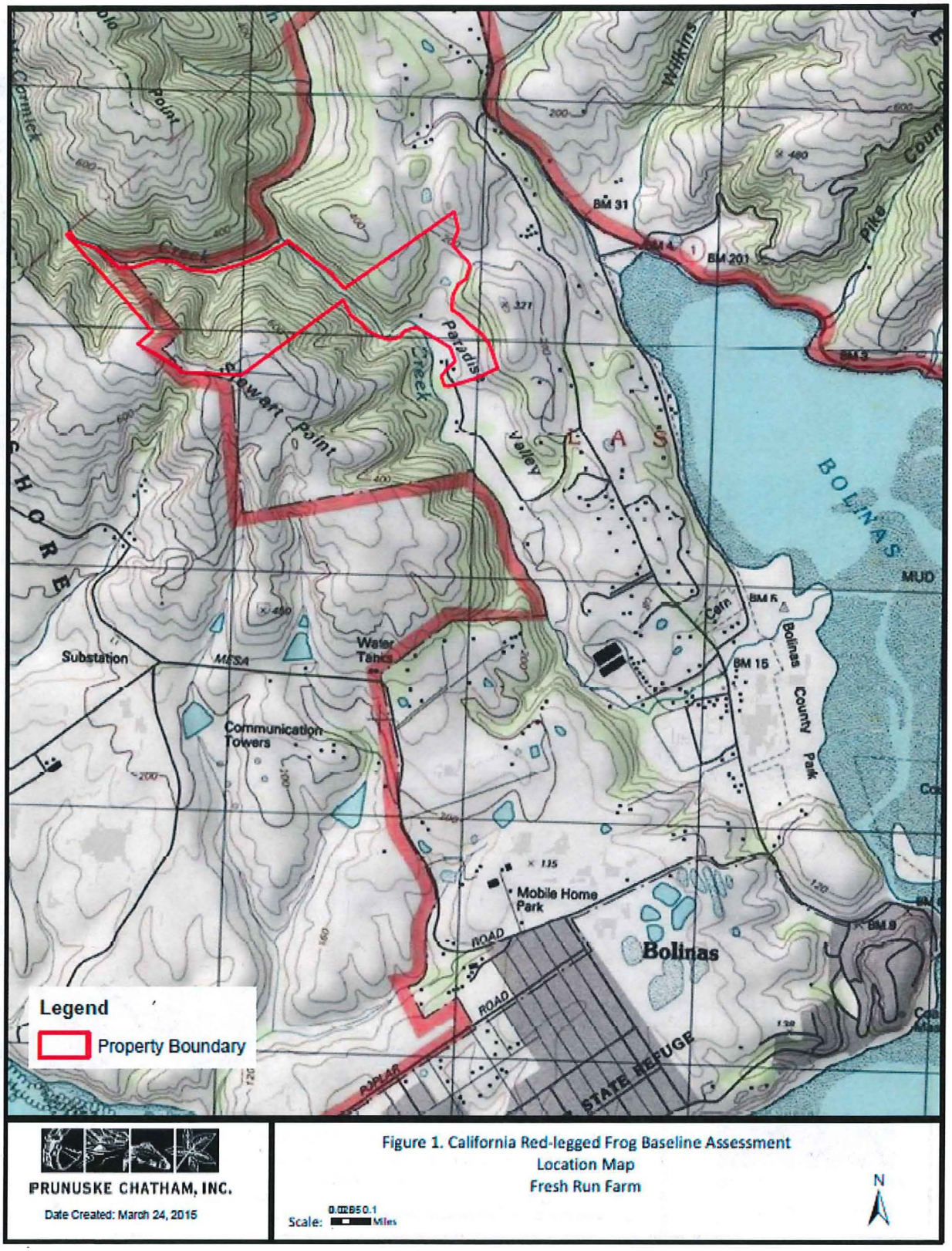


Figure 1. Location of Fresh Run Farm / Paradise Valley Ranch in relation to the Bolinas Lagoon in Marin County.

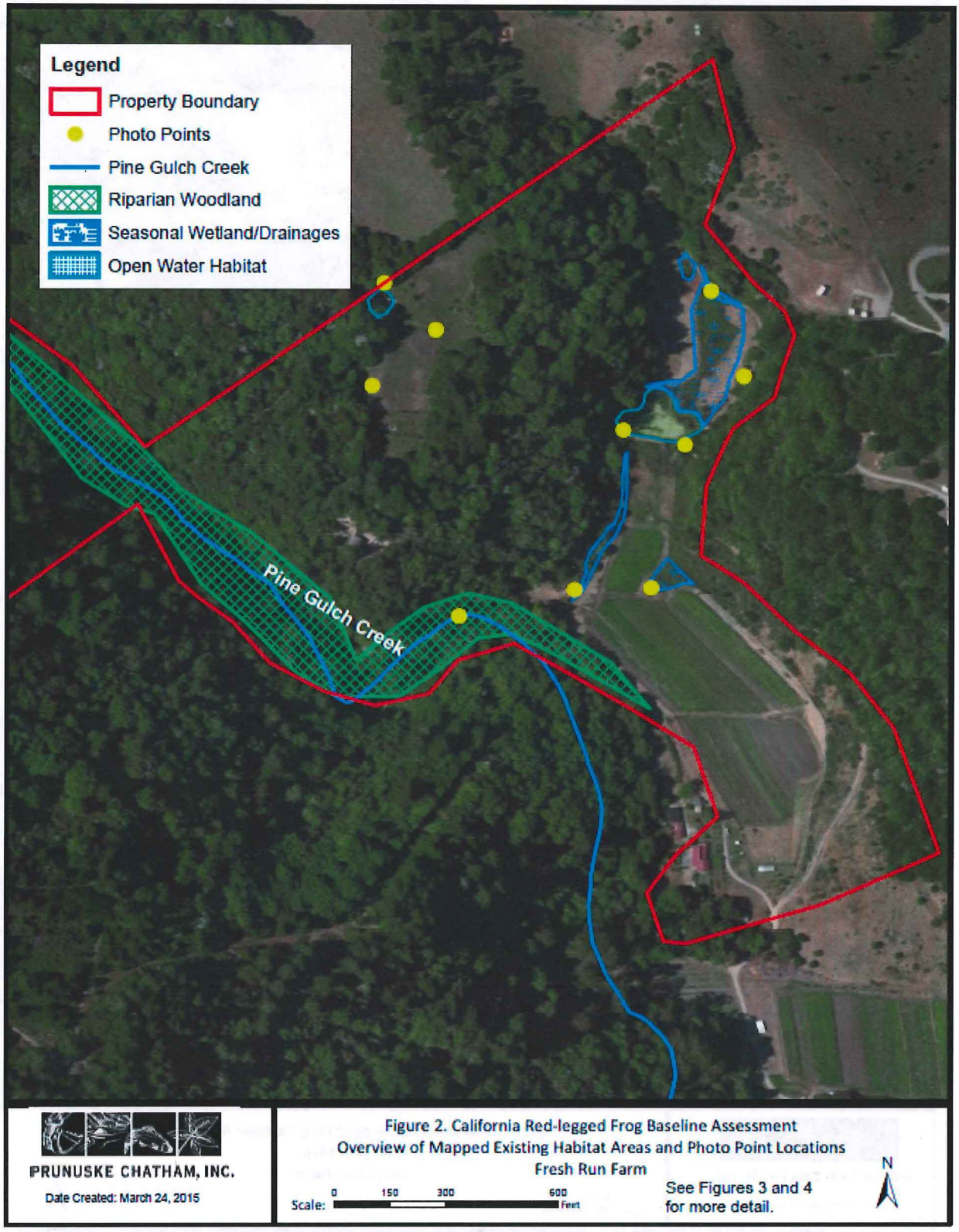


Figure 2. Overview of Mapped Existing Habitat Areas and Photo Point Locations.

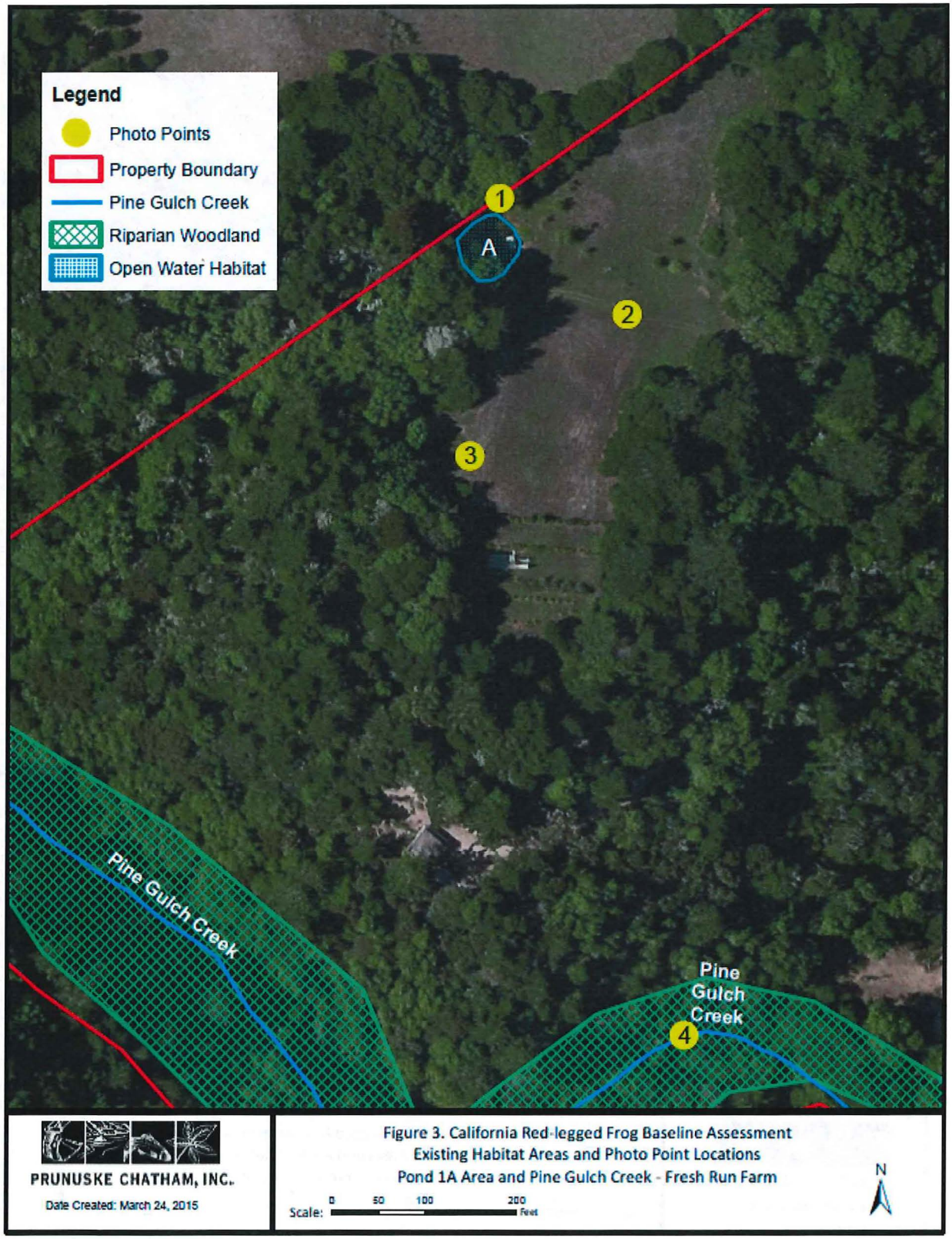


Figure 3. Existing Habitat Areas and Photo Point Locations (Pond 1A Area)

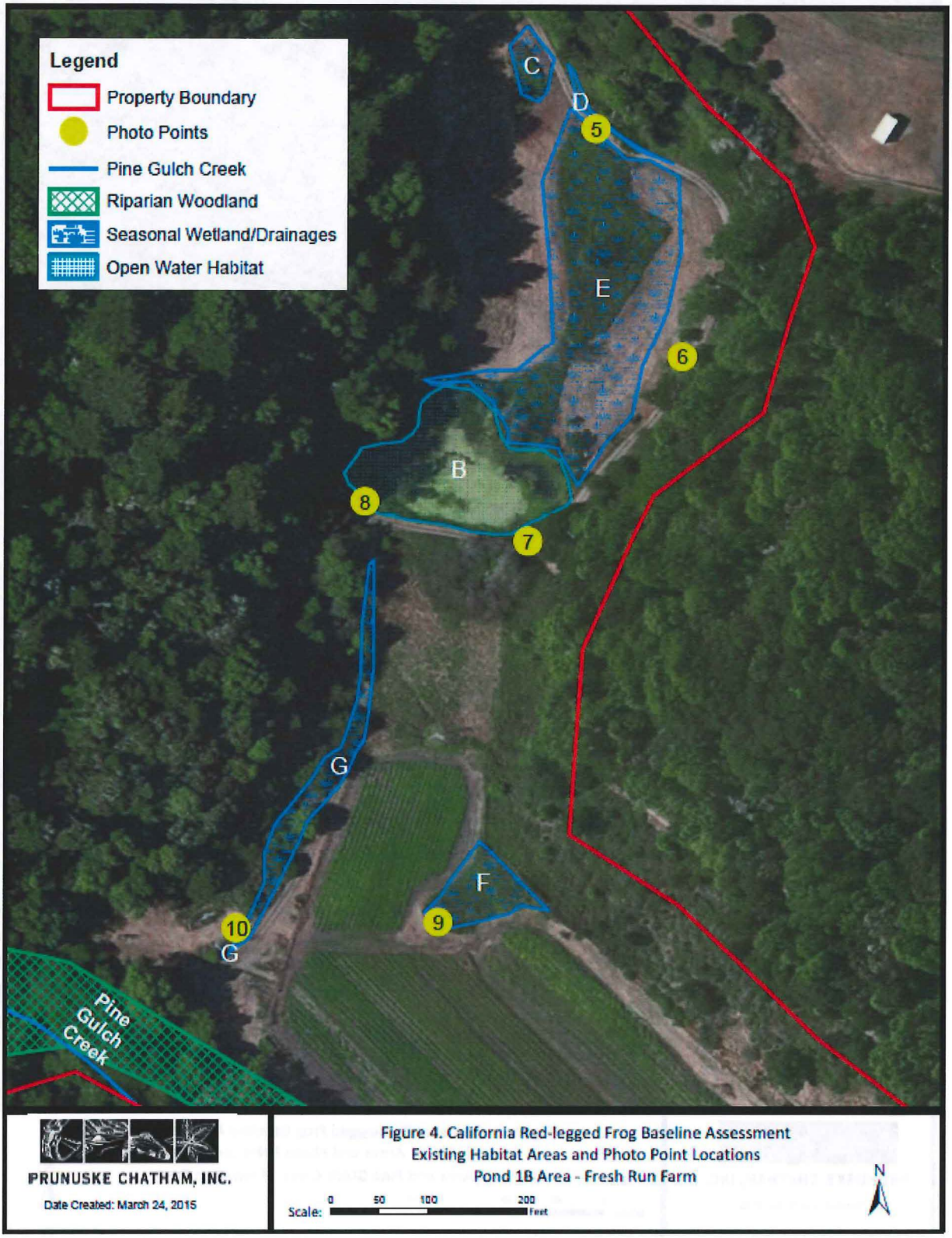


Figure 4. Existing Habitat Areas and Photo Point Locations (Pond 1B Area). Note: Due to project changes, polygon E is modified in Figure 5.

Figure 5. Due to hydrologic conditions, Pond 1B construction was infeasible. A CRLF conservation area (CA) has since been established adjacent to green pond (the red area). The area north and northeast of the conservation area, which would have been Pond 1B, will be allocated to farming and is no longer considered baseline habitat. 10-foot buffer between sump and CA.

BASELINE ASSESSMENT APPENDIX A

Locations of designated photo points (#'s 1-10)

Photo Point 1: Looking south at small open water pond (Wetland A).

Photo Point 2: Upland habitat, looking north towards property line.

Photo Point 3: Evergreen woodland and Pond 1A location, looking west.

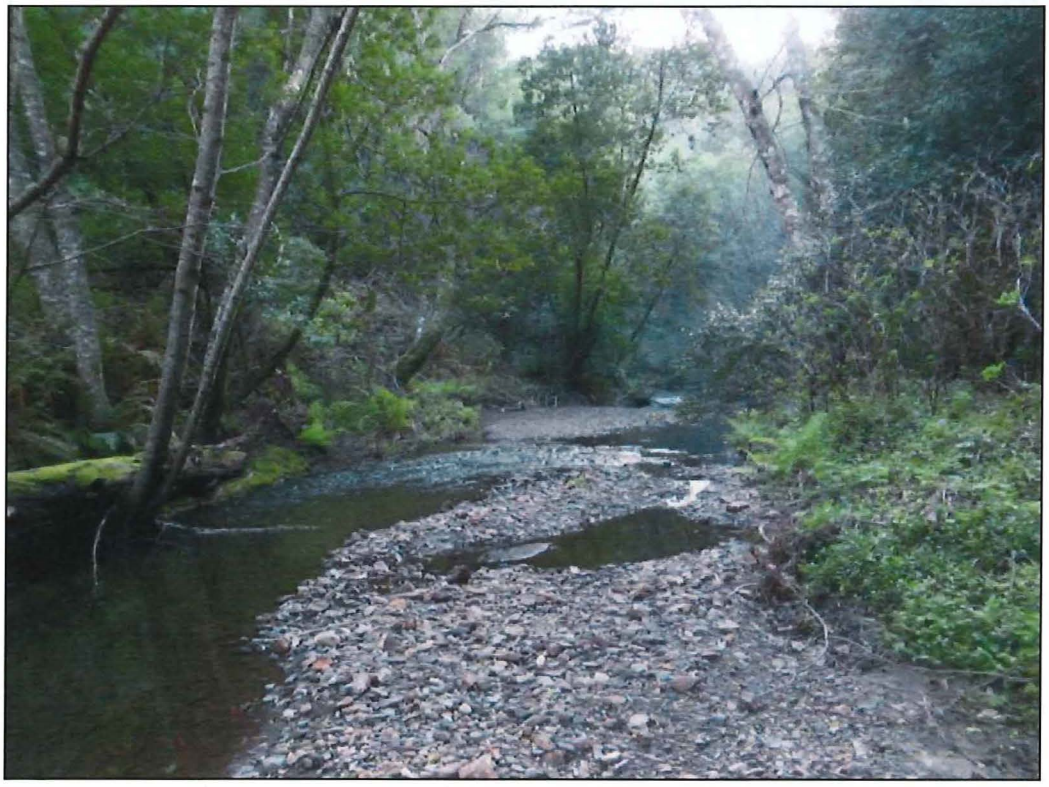


Photo Point 4a: Looking upstream (west) at Pine Gulch Creek.

Photo Point 4b: Looking downstream (east) at Pine Gulch Creek.

Photo Point 5a: Looking south at Wetland E and proposed location of Pond 1B.

Photo Point 5b: Close-up view of vegetation in Wetland E.

Photo Point 5c: Looking northwest at Wetland C from road.

Photo Point 5d: Looking east at Wetland D from road.

Photo Point 6: Looking west at Wetland E.

Photo Point 7a: Green Pond, Wetland B, from southeast corner.

Photo Point 7b: Green Pond, Wetland B, from southeast corner.

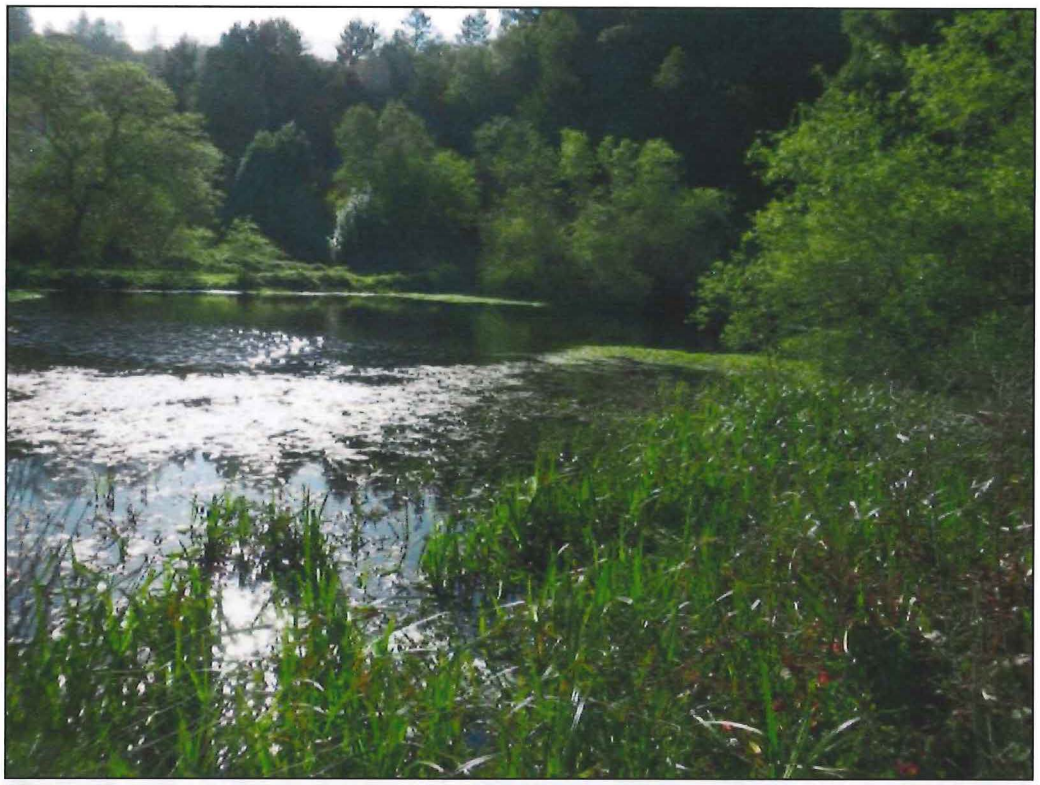


Photo Point 8: Green Pond, Wetland B, from southwest corner.

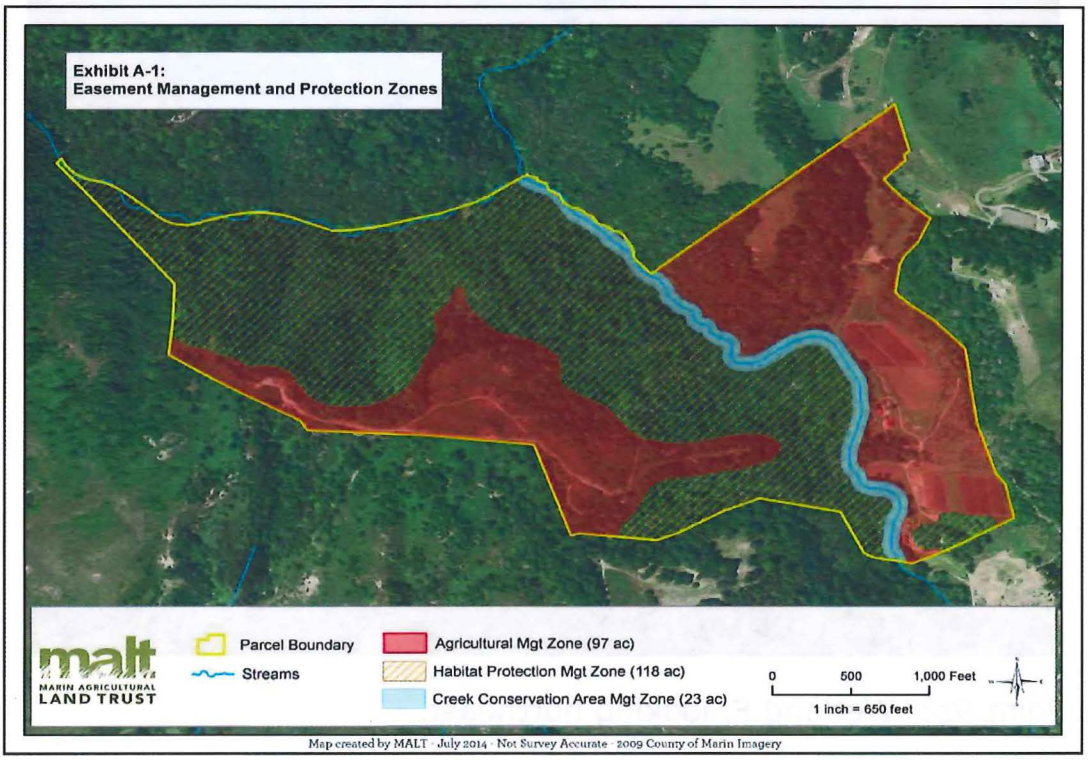
Photo Point 9a: Wetland F, looking northeast.

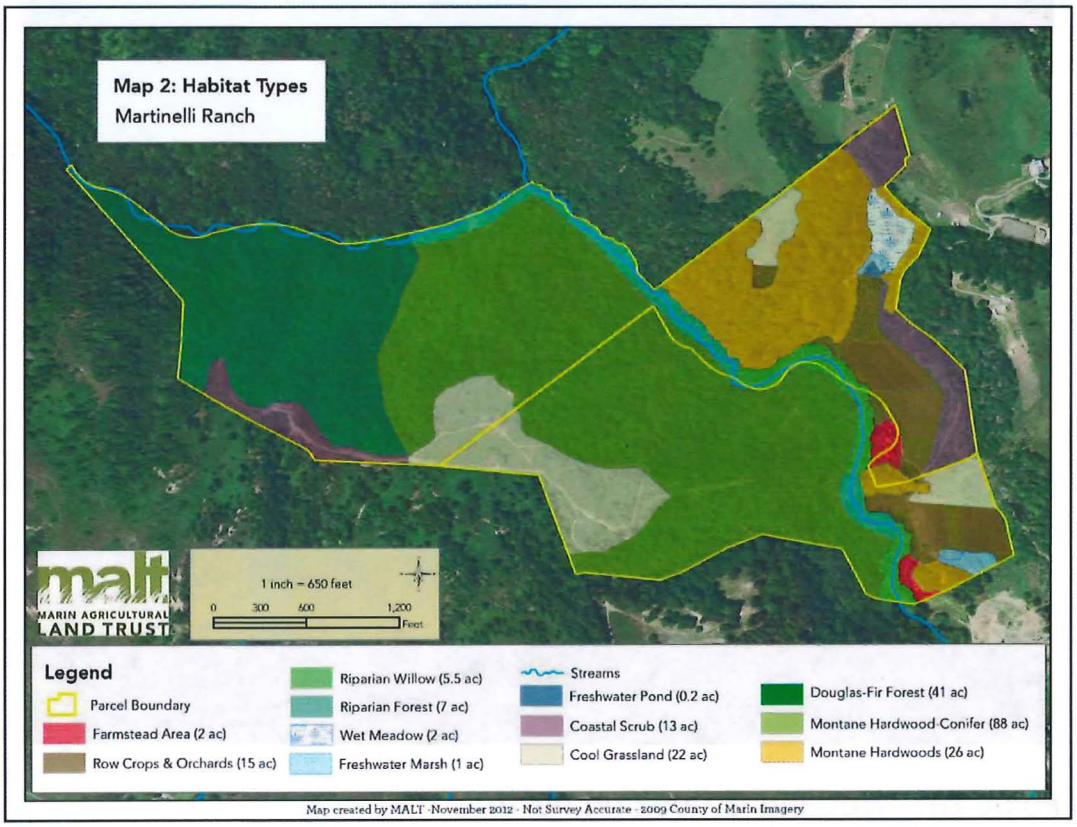
Photo Point 9b: Wetland F, looking northeast.

Photo Point 10: Wetland G, looking north.

Easement Exhibits

Management and protection zones and habitats areas delineated by MALT (2014):





CERTIFICATE OF INCLUSION

This certifies that the property located at 615 Horseshoe Hill Rd (dba "Fresh Run Farm" and/or "Paradise Valley Ranch") and owned by Peter Martinelli is included within the scope of Permit No. TE206773-0 issued by the U.S. Fish and Wildlife Service on March 11, 2010 for a period of 30 years to the Marin County Agricultural Commissioner's Office under the authority of section 10(a)(1)(A) of the Endangered Species Act of 1973, as amended, 16 U.S.C. 1539(a)(1)(A). Such permit authorizes certain activities by participating landowners as part of a Safe Harbor Program to create and enhance habitat for the California red-legged frog. Pursuant to that permit and this certificate, the holder of this certificate is authorized to engage in activities on the above described property that may result in the incidental taking of such species, subject only to the terms and conditions of such permit and the cooperative agreement entered into pursuant thereto by the Marin County Agricultural Commissioner's Office and Peter Martinelli of Fresh Run Farm / Paradise Valley Ranch on May 29, 2015.

Representative from the Marin County Agricultural Commissioner's Office:

Name	Title	Date
Stacy Carlsen	Agricultural Commissioner	9-2-15

Stacy Carlsen

ATTACHMENT 2
Annual Report for Safe Harbor Agreement between the U.S. Fish and Wildlife Service and the Marin County Agricultural Commissioner

Permittee's Name: Marin County Agricultural Commissioner

Permit Tracking Number: TE206773-0

Location: Pine Gulch Watershed, Marin County, California

Agreement Approved by: California/Nevada Operations Office, U.S. Fish and Wildlife Service

Covered Species: California red-legged frog

Report on the Monitoring Program (1-2 paragraphs): Describe in general terms the results of any assessments carried out pursuant to Section 7.A.2. of the Safe Harbor Agreement in the year covered by the report; append a copy of the report. Describe any major changes in habitat around the ponds included in the baseline. Append to this report copies of all reports submitted to the Program Administrator by Cooperators since the last annual report.

Date Annual Report is Due: On or before March 31, for the prior calendar year

Date Annual Report was Received: _____

Date Annual Report was Reviewed: _____

Signature of Reviewer: _____

Printed Name and Phone # of Reviewer: _____

Report on Area wide Management and Conservation Actions (1-2 paragraphs): As necessary to supplement the monitoring reports above, summarize the condition of areas around new and existing water storage ponds on the collective enrolled properties. Describe any apparent year-to-year trends in restoration success in the region. Describe any relevant regional conditions (e.g., drought, flood) that may enhance understanding of the appended annual reports from the Cooperators. Finally, please convey any suggestions for adaptive management of created areas that may have emerged from the program so far.

ATTACHMENT 3
Management Activities

I. Standard Activities

The following Management Activities shall be included in all Cooperative Agreements:

C. Pond Installation and Management

The following Management Activities apply to all Ponds & Facilities:

- Construct new ponds with a slope of no more than 2:1
- Intake structures for in-stream pumping shall have screens smaller than 5 millimeters.
- Ponds shall be designed with gravity drains so that they can be drained of water to the lowest level feasible depending on topography and final elevations of the ponds, as constructed and maintained (the "Lowest Feasible Level").
- Ponds shall be managed each fall in such a manner to control populations of bullfrogs and other California red legged frog predators as follows:
    - On a date selected by a Cooperator not earlier than September 15 but no later than November 15, each pond will be drained to the Lowest Feasible Level.
    - If significant standing water remains in a pond when drained to the Lowest Feasible Level, the Cooperator will pump additional water from the pond until all feasible standing water has been removed using commercially reasonable measures.
    - A Cooperator shall not re-fill a pond for at least four (4) weeks after the date on which water has been removed from the pond as set forth in the preceding two bullets.
    - Although bullfrogs and California red-legged frogs appear to coexist throughout Marin County, it is unclear if this pattern will remain throughout the life of the project. In order to assure the greatest success for the California red-legged frog through this Agreement, it is understood that undertaking the above-described steps to reduce the population of bullfrogs (and other predators) would be the preferred option. The Service

understands that weather conditions in the area, practical limitations on the ability to remove relatively small quantities of water and/or other extenuating circumstances may preclude the ability to drain the ponds of all water, or to maintain the ponds in a drained condition for any length of time. The Service also understands that such measures may not be effective in eradicating predator species, although these measures are anticipated to be effective in reducing populations of these species.

- Pond maintenance, repair and replacement activities must take place no earlier than September 1 and not later than November 15, except in case of emergency.

D. Controlling Predators and Other Threats

The following Management Activities apply to all five water storage ponds:

- Prevent knowing introductions of predators such as: bullfrogs, crayfish, mosquito fish, and other fishes.

- Monitor populations of invasive plant species around ponds including: giant reed (*Arundo donax*) and Pampas grass (*Cortaderia jubata*). Control if advised.

C. Minimizing Effects

A Biological Assessment for the Pine Gulch Creek Watershed Enhancement Plan was prepared by Huffman-Broadway Group, Inc. (HBG) in April of 2007, and mitigation requirements in this report were incorporated into Conditions of Approval required by Marin County. A draft Biological Mitigation Plan was prepared in January of 2007; review of this draft Mitigation Plan is anticipated during permit processing for the project by the U.S. Army Corps of Engineers, State Water Resources Control Board, Regional Water Quality Control Board and California Department of Fish and Game. The Biological Assessment and draft Mitigation Plan describe means of minimizing effects to wetland habitats and the potential for impacts to the federally-listed threatened California red-legged frog during pond construction.

1. Minimizing and Mitigating Wetland Impacts

Wetland mitigation sites are the five pond construction sites where construction of the ponds will convert existing areas, some of which are open water habitats or vegetated wetland areas, to open water irrigation ponds that will have a fringe of wetland vegetation such as cattail (*Typha latifolia*), lamp rush (*Juncus effusus*), spreading rush (*Juncus patens*), tall flatsedge (*Cyperus eragrostis*), velvet grass (*Holcus lanatus*) and tules (*Scirpus californicus)* similar to the existing Green Pond at Fresh Run Farm and Pond 3A at Star Route Farms. Approximately 3.07 existing acres of palustrine emergent wetland and 0.78 acres of open water habitat will be replaced by 5.12 acres of open water and 1.14 acres of palustrine emergent wetland after pond construction as part of the watershed enhancement project. In addition to the wetland created by construction of the irrigation ponds, riparian habitat restoration along Pine Gulch Creek (removal of nonnative eucalyptus and replanting with the riparian species such as red alder) within a suitable enhancement site is included as mitigation.

The draft Biological Mitigation Plan includes provisions during pond construction and stream zone enhancements for establishment of protective buffer zones along Pine Gulch Creek, baseline monitoring, worker environmental sensitivity training, identification of equipment staging areas and marking of vehicle access routes, implementation of appropriate erosion control measures, plantings of riparian tree species, and implementation of restoration activities including removal of invasive weedy species and man-made trash and debris. The final mitigation plan will include a funding plan, inspection and maintenance program, a success monitoring program, and a stewardship program.

As required by the Service, the final Biological Mitigation Plan will include the following avoidance, minimization and mitigation measures related to re-vegetation efforts:

(b) For all five water storage ponds:

- Immediately after construction, seed with native perennial grasses on berms around constructed ponds.

- A post construction report will be provided to the Service within 3 months after initial ground-disturbing activities. The report will include pre and postproject photos, including photos of the restored sites (i.e. vegetation or revegetation efforts). The report will also provide a discussion on the implementation and success (or failure) of avoidance and minimization measures, as well as verification of worker training.

- Sensitive habitat within or adjacent to project work areas will be flagged or fenced with orange construction fencing or caution tape to prevent traffic in these areas. Fencing will be placed approximately 4 inches above grade to allow wildlife to move under it.

(b) For Pond **1A**:

- Immediately after construction, seed with native wetland vegetation around the interior edge of constructed ponds to provide vegetation that could be used by California red-legged frogs for shade, foraging and attaching egg masses. The seed mix shall include species known from the wetland fringe of existing irrigation ponds, including lamp rush (*Juncus effusus*), spreading rush (*J. patens*), tall flat-sedge (*Cyperus eragrostis*), velvet grass (*Holcus lanatus*), cattail (*Typha latifolia*), and tules (*Scirpus californicus)*. As part of project mitigation, this seeding immediately after pond construction will minimize the temporal loss of occupied California red-legged frog habitat.

- Maintain the engineered emergent wetland habitat (approximately 3,700 square feet) to provide greater habitat diversity and breeding opportunities for CRLF within Pond 1A. The pond (including the engineered emergent wetland) is expected to fill in most years (through natural processes and by water delivered from the area above Green Pond); however, if the emergent wetland habitat does not fill through these processes Fresh Run Farms is not expected to supplement the volume of the pond from other sources in order to inundate the engineered emergent wetland habitat.

(c) For former Pond **1B** site:

- Ensure that the newly established Conservation Area (see Figure 5 – "additional habitat conservation area" and "preserved open water habitat/riparian") continues to provide sufficient vegetative cover for the CRLF. This provides a net conservation benefit to CRLF by ensuring cover and foraging habitat for adult and juvenile CRLF. Vegetative cover could include, but is not limited to native California blackberry, non-native Himalayan blackberry, willows, sedges, rushes, and ferns. A 10-foot buffer (of approximately 10 feet) will exist between the sump pump and the conservation area (see Figure 5).

- Ensure that "Green Pond" (denoted as the "Preserved Open Water Habitat/Riparian" area in Figure 5) maintains water (deeper than 3 feet) during the breeding season (typically November to April) and

a minimum water depth of 1 foot May through August (thereby facilitating complete tadpole metamorphosis).

- An assessment of habitat shall be completed annually as part of the Annual Report (see Attachment 4). If at year 3 post-construction, wetland vegetation is absent around the interior edge of the constructed ponds, additional seeding with native wetland vegetation shall be implemented.

2. Minimizing Construction Effects to California Red-legged Frog

As California red-legged frog is known to occur at the Existing Habitat Areas, there is the potential for impacts to occur to individuals of the species during Pond & Facilities construction at these locations. Pond & Facilities construction is planned to occur during low water levels late in the summer, which is during the non-breeding season for the California red-legged frog. Therefore, impacts to breeding frogs or egg masses in aquatic areas would not occur. As the frogs move during the dry season to upland retreat sites subsequent to breeding, there is the potential that construction activity for the Ponds & Facilities could encounter individuals using the edges of the existing pond or aestivating frogs in uplands areas. To address the potential impact to California red-legged frog during construction of Ponds & Facilities, mitigation in the form of pre-construction surveys in Existing Habitat Areas with relocation of individuals out of harms way to suitable nearby habitats, and the presence of monitors during portions of the construction operations, would be necessary.

The Biological Mitigation Plan includes those activities related to worker training, preconstruction surveys and biological monitoring that are included in the January 26, 1999 U.S. Fish and Wildlife Service "Programmatic Formal Endangered Species Act Consultation on issuance of Permits under Section 404 of the Clean Water Act or Authorizations under the Nationwide Permit Program for Projects that May Affect the California Red-legged Frog," and specifically provides as follows:

> "(1) At least 15 days prior to the onset of activities, the applicant or project proponent shall submit the name(s) and credentials of biologists who would conduct activities specified in the following measures. No project activities shall begin until proponents have received written approval from the Service that the biologist(s) is qualified to conduct the work.
>
> (2) A Service-approved biologist shall survey the work site two weeks before the onset of activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist shall contact the Service to determine if moving any of these life-stages is appropriate. In

making this determination the Service shall consider if an appropriate relocation site exists. If the Service approves moving animals, the approved biologist shall be allowed sufficient time to move California red-legged frogs from the work site before work activities begin. Only Service-approved biologists shall participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.

(3) Before any construction activities begin on a project, a Service-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the California red-legged frog and its habitat, the importance of the California red legged frog and its habitat, the general measures that are being implemented to conserve the California red-legged frog as they relate to the project, and the boundaries within which the project may be accomplished. Brochures, books and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

(4) A Service-approved biologist shall be present at the work site until such time as all removal of California red-legged frogs, instruction of workers, and habitat disturbance have been completed. After this time, the contractor or permittee shall designate a person to monitor on site compliance with all minimization measures. The Service-approved biologist shall ensure that this individual receives training outlined above and in the identification of California red-legged frogs. The monitor and the Service-approved biologist shall have the authority to halt any action that might result in impacts that exceed the levels anticipated by the Corps and Service during review of the proposed action. If work is stopped, the Corps and Service shall be notified immediately by the Service-approved biologist or onsite biological monitor."

The following information provides additional detail relevant to implementation of the above-quoted paragraph (2) from the Biological Mitigation Plan:

In Existing Habitat Areas, a Service-approved biologist holding the appropriate Section 10(a)(1)(A) permit will survey the area of construction for California red-legged frogs two weeks before the onset of construction activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist will relocate any life stages of the species encountered out of harms way to suitable nearby habitats (with Service approval). Relocation sites would be Pine Gulch Creek in the vicinity of Pond 3A, and the existing Green Pond in the vicinity of Pond 1B construction. The approved biologist will be allowed sufficient time to move California red-

legged frogs from the work site before work activities begin. As frogs are relocated out of the work area, an exclusion fence will be installed around pond construction sites and maintained throughout the duration of construction to keep any relocated frogs from returning while construction operations proceed.

II. Additional Activities

A Cooperator may elect to include the following Management Activities in a Cooperative Agreement:

- Seed with native perennial grasses at appropriate locations along Pine Gulch Creek.

ATTACHMENT 4

Annual Report from Cooperator to Program Administrator
(Due January 31 of each year)

Directions: Take a walk around your ponds and observe the overall condition of vegetation in and around the ponds. You may wish to have your baseline maps and pond designs handy for reference and a camera for taking photos. Explanations can be brief (one or two sentences).

At the discretion of the Program Administrator, you may substitute this form for a monitoring report provided to you by a biologist or restoration professional familiar with the California red-legged frog.

Assessment of Habitat Conditions

1. In a few sentences please describe the general condition of the newly installed ponds on your property. Include information about plant location, composition and density, condition of banks, a description of the water level and clarity.

2. Provide photographs taken from established photo points to show annual changes in or around the irrigation ponds. These locations should be marked for reference on Exhibit B and should remain the same from year to year.

3. In a few sentences please describe the general condition of vegetation planted around the ponds. Include information about plant vigor, if they the plants have spread out since last year, how many different kinds of plants are growing, if any have died since last year, and any other relevant or helpful information.

4. Provide photographs taken from several locations to show annual changes in vegetation growing around irrigation ponds. These locations should be marked for reference on Exhibit B and should remain the same from year to year.

Condition of Other Native Plants and Areas around Irrigation Ponds

5. Has the extent of the area that supports California red-legged frog changed within the past year? For example, has the area expanded naturally or has it markedly decreased due to fire, flood, drought, or other natural disturbance?

- Expanded _____
- Decreased _____
- Stayed the same _____

Please explain briefly the extent and causes of any noticeable increase or decrease.

6. Did non-native grasses or other invasive species
    - Spread _____
    - Degrade or dominate portions of the native plantings _____
    - Remain about the same _____

Please describe any action you took to control the spread of non-natives.

Management Activities

7. Please describe any maintenance work associated with the irrigation ponds that took place around the ponds this past year?

8. Please list which month each of the activities took place in.

9. Have you heard or seen any evidence of California red-legged frog predators such as bullfrogs, crayfish, mosquitofish, and other fishes in or around your pond?

10. Did you completely drain your pond this year? If so, in which month?

ATTACHMENT 5
Neighboring Landowner Agreement

1. [Owner] owns land (hereafter "the Property") in Marin County, California, that is designated on the attached map and that is adjacent to land enrolled in the Programmatic Safe Harbor Agreement between the Marin County Agricultural Commissioner's office and the United States Fish and Wildlife Service (hereafter "the Service"), dated [date]. The Programmatic Safe Harbor Agreement, and the permit issued by the Service to the Marin County Agricultural Commissioner's Office in connection therewith, authorizes participating landowners who enter into cooperative agreements to build and maintain water storage ponds on land enrolled in the program and to take endangered California red-legged frog incidental to farming, ranching, and other lawful activities on the enrolled land, provided that baseline habitat conditions as specified in such cooperative agreements are maintained.

2. The Marin County Agricultural Commissioner's Office serves as the Program Administrator of the foregoing Programmatic Safe Harbor Agreement, and as such is authorized by that Agreement to enter into both cooperative agreements with landowners who enroll land in the Programmatic Agreement, and similar Neighboring Landowner Agreements with landowners who own land adjacent to land enrolled in the Agreement. Such Neighboring Landowner Agreements confer upon such neighboring landowners the same rights to take endangered species incidental to lawful activities on such neighboring land, subject to requirements as are set forth in this Agreement, as cooperative agreements confer upon landowners who enroll land in the Programmatic Agreement. The Marin County Agricultural Commissioner's Office has determined that the "baseline conditions" applicable to the Property are as follows:

a. A written description of property, including size (in acre feet) and location of existing ponds;
b. A map and written description of habitat areas for the California red-legged frog, especially areas around existing ponds;
c. Established photo points and photos of habitat areas for the California red legged frog.

Baseline assessment may also include the following:

a. A complete description of pools, ponds, springs, seeps, and other aquatic habitats, including size of ponds, maximum depth, presence of aquatic vegetation, amount and location of vegetated perimeter, amount of willow (Salix spp.), cattails (Typha spp.), and bulrushes (Scirpus spp.);
b. The presence of threats to the California red-legged frogs, such as bullfrogs, warm water fish species, etc; and
c. The presence of other amphibians.

So long as at least baseline conditions for the California red-legged frog remain in the same on the Property, [owner] may incidentally take the Covered Species in the course of any lawful use of the property, subject to Section 4 below. As used herein, "incidental" take refers to the unintentional or unavoidable killing or injuring of California red-legged frog in the course of carrying out otherwise lawful activities. Nothing herein authorizes [Owner] to capture, collect, or deliberately kill or injure any such frogs.

3. [Owner] agrees to give the Marin County Agricultural Commissioner at least 90 days notice (except when precluded by emergency situations) prior to commencing any management activity likely to reduce the baseline conditions on the Property, and to allow the Program Administrator or the Service the opportunity to rescue and relocate any individual California red-legged frogs and translocate frogs from the Property to avoid their loss.

4. This Neighboring Landowner Agreement remains in effect until the expiration of the Programmatic Safe Harbor Agreement between the Service and the Marin County Agricultural Commissioners Office on [date].

[Owner] Date

Marin County Agricultural Commissioner's Office Date