COASTAL CONSERVANCY

Staff Recommendation December 1, 2016

San Gregorio Creek Flow Improvement Project

Project No. 16-028-01 Project Manager: Tom Gandesbery

RECOMMENDED ACTION: Authorization to disburse up to \$388,000 to Trout Unlimited for implementation of an off-stream water storage project on San Gregorio Creek, San Mateo County.

LOCATION: San Mateo County.

PROGRAM CATEGORY: Integrated Marine and Coastal Resources

<u>EXHIBITS</u>

Exhibit 1: Location Map

Exhibit 2: Photos

Exhibit 3: <u>Project Letters</u>

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31220 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes the disbursement of up to three hundred and eighty-eight thousand dollars (\$388,000) to Trout Unlimited (TU) to implement a project to restore in-stream flows on San Gregorio Creek by constructing an off-stream storage pond on the Moty/Klingman Farms property, subject to the condition that prior to the disbursement of funds, TU shall submit for review and approval by the Executive Officer of the Conservancy the following:

- 1. A work program including a schedule and budget for the project.
- 2. The names and qualifications of all contractors TU intends to retain for the project.
- 3. A plan for acknowledging Conservancy funding.
- 4. Evidence that all permits and approvals required to implement the project have been obtained.
- 5. An agreement with the owner of the property on which the project will be carried out sufficient to accomplish the purposes of the project, include an agreement to forbear from

withdrawing Creek water, and to protect the public interest in the project pursuant to Public Resources Code Section 31116(c)."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

- 1. The proposed authorization is consistent with Chapter 5.5 of Division 21 of the Public Resources Code, regarding resource enhancement.
- 2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
- 3. TU is a nonprofit organization recognized under section 501(c)(3) of the U.S. Internal Revenue Code, whose purposes are consistent with Division 21 of the Public Resources Code."

PROJECT SUMMARY:

The proposed project would provide a \$388,000 grant to Trout Unlimited (TU) to construct an off channel irrigation storage pond to enhance dry season flow in San Gregorio Creek, in southern San Mateo County. The subject site is located approximately three miles upstream of the Creek's terminus in the Pacific Ocean (Exhibit 1). By facilitating water storage, the project will result in higher dry season flows, as well as a more reliable water supply for the Klingman/Moty farm, which will benefit the local agricultural economy. The project will also result in an agreement to forbear from withdrawing water from the Creek during the dry season, which Klingman/Moty currently has the legal right to do. It is hoped that this project can serve as a demonstration to other farmers in the area who might be in similar circumstances.

San Gregorio Creek has been identified as a priority creek for protection and restoration by both State and Federal agencies, and has been designated critical habitat for the federally-endangered Central California Coast (CCC) coho salmon. The Creek also contains a stable population of steelhead trout. The coho and steelhead fisheries in San Gregorio Creek have been in decline for decades. One key factor is the lack of sufficient instream flows in the Creek in summer and fall due to dry season water withdrawals for agriculture.

Use of the Creek's water has been strongly contested at times and in the 1980's the water users went through an adjudication process with the State Water Resources Control Board to allocate water rights. Most farms in the watershed depend on their adjudicated rights to divert water from the Creek directly onto their croplands throughout the summer, low flow period. The tension between two beneficial uses -- cold water fishery habitat and irrigated agriculture -- results in sub-optimal and sometimes poor conditions for salmonids, and in many years, also results in reduced yields caused by stressed, under-irrigated fields in these otherwise highly productive farms.

The proposed project is located on the Klingman/Moty farm and would entail construction of a single 18.4 acre-foot storage pond and electrically driven pump system and negotiation of a forbearance agreement and appropriative water rights for diverted and stored water. The forbearance agreement is a legally-enforceable agreement by the landowner to "give up" water

that it would otherwise have the right to withdraw from a waterway. The agreement would be recorded by San Mateo County and would attach to the property, binding successor owners. Such agreements lay the foundation for a formal change in water rights regulated by the State Water Resources Control Board – a process which typically takes several years.

The pond will be located on an area formerly farmed and not within the riparian corridor (hence "off-stream"). The proposed project will store enough water, 18.4 acre-feet or about six million gallons, to allow irrigation of the farm during the dry season with no withdrawal from the Creek during the months of August, September and October. This would result in a 15-35% increase of dry season flow in the Creek. This project is similar to numerous other projects implemented in streams along the California Coast, that divert water when flows are relatively high and store them in the pond for irrigation during the growing season.

TU has extensive experience removing barriers to fish migration in coastal California streams and has administered numerous grants related to salmonid habitat restoration. For example, TU successfully completed a large multi-river assessment of watershed hydrology and determination of in-stream flows in four systems from the Mattole River to the Pajaro River. That project was funded by the Conservancy in 2008 and was successfully concluded in 2013. TU is also wrapping up Conservancy-funded work on in-stream flow studies on coastal creeks in Humboldt, Sonoma, San Mateo, and Santa Clara Counties.

Site Description: The project site is located on San Gregorio Creek in southern San Mateo County, 3 miles upstream from the Pacific Ocean. (Exhibit 2). The property on which the project will occur is owned by Mr. Klingman and Ms. Moty. They currently operate a farm with twenty-five acres of land under cultivation, irrigated by a portable diesel pump with a diversion rate of 400 gallons per minute. There is no water storage infrastructure on the farm; water is pumped directly from the Creek into the overhead sprinkler irrigation system and onto croplands which produce pumpkins, mixed specialty crops and cut-flowers.

Diversion of water for use on the property is consistent with water rights authorized by water allotments within the San Gregorio Creek Stream System Adjudication (Superior Court of San Mateo, Decree No. 355792). This farm has an allowance of 336,240 gallons per day. In low water years, the court-appointed Water Master requires all diverters to cease diversions for a period of time or a number of days each week based on stream flow conditions. During these low water years, fish are more severely impacted by low water conditions and reduced habitat, and the farm is also impacted by reduced or curtailed water delivery to the fields. However, the Water Master's authority is related to adjudication of water rights amongst holders and does not extend to regulating water for fisheries (so-called "environmental flow). The proposed project will go well beyond the framework of the adjudication in restoring dry season flows to the Creek.

Land use in the San Gregorio Creek watershed combines protected State and Regional Open Space park-lands, commercial irrigated field row-crop agriculture, rural residential communities, and upland rangelands. In addition to coho salmon, the Creek has a relatively strong and sustaining population of CCC steelhead trout, which is listed as threatened. The Creek supports steelhead in all their life stages: spawning, rearing, and migration and there are no hatcheries in this watershed nor have any hatchery steelhead or rainbow trout been planted for more than 40 years.

Project History: In the 1980s, Klingman/Moty applied for appropriative rights permits to allow for the construction of off-stream storage ponds. However, those efforts were abandoned by the property owners because the applications were determined to be inadequate by the State Water Board and the California Department of Fish and Wildlife (CDFW) in that they did not contain the background data and studies needed to discern the beneficial effects to salmonid populations and the habitat. In order to help facilitate this and similar projects within the watershed, TU has conducted hydrological and engineering feasibility assessments and other permit requirements on the Creek and, has worked with the property owners to address the state's requirements for a change in water rights. Therefore, the owners are now willing to proceed with the project and the end result of this project will be not only an off-stream storage system which adds flow back into the Creek, but also a change in water rights. In addition, TU has implemented a similar project on a nearby farm, the work supported in part by a Conservancy grant approved January of 2012.

PROJECT FINANCING

Coastal Conservancy	\$388,000
Trout Unlimited	95,000
Project Total	\$483,000

The anticipated source of funding for this project is an appropriation from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1, Water Code Section 79700 et seq.). Funds appropriated to the Conservancy derive from Chapter 6 (commencing with Section 79730) and may be used "for multi-benefit water quality, water supply, and watershed protection and restoration projects for the watersheds of the state" (Section 79731). Section 79732 identifies specific purposes of Chapter 6, several of which will be furthered by the proposed project, including: a) Protect and restore coastal watersheds, including, but not limited to, bays, marine estuaries, and nearshore ecosystems (Section 79732(a) (10)); b) Assist in the recovery of endangered, threatened, or migratory species by improving watershed health, instream flows, fish passage, coastal or inland wetland restoration, or other means, such as natural community conservation plan and habitat conservation plan implementation (Section 79732(a) (12)); and c) Assist in water-related agricultural sustainability projects (Section 79732(a) (13)). Consistent with these provisions, the project will construct off-stream storage for agricultural use which will allow the land owner to enter into a forbearance agreement resulting in higher dry season flows in the Creek, to the benefit of the coastal watershed and fish passage within the Creek. The project will also result in higher a more reliable water supply for the Klingman/Moty farm, which will benefit the local agricultural economy and will serve as a demonstration to other farmers in the area who are in similar circumstances.

In accordance with Section 79707(b) which requires agencies to prioritize "projects that leverage private, federal, or local funding or produce the greatest public benefit", this project leverages a local in-kind contribution from TU as listed above. TU's contribution is being used primarily for planning and required technical studies.

The project was reviewed and subsequently recommended for funding through a competitive grant process under the Conservancy's *Proposition 1 Grant Program Guidelines* adopted in June 2015 ("Prop 1 Guidelines"). (See § 79706(a)). The proposed project meets each of the evaluation criteria in the Prop 1 Guidelines as described in further detail in this "Project Financing" section, the "Project Summary" section and in the "Consistency with Conservancy's Project Selection Criteria & Guidelines" section of this report.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project would be undertaken pursuant to Chapter 5.5 of the Conservancy's enabling legislation, Division 21 of the Public Resources Code; in particular, Chapter 5.5, section 31220, regarding integrated coastal and marine resources protection.

Section 31220(a) authorizes the Conservancy to undertake a project or award a grant for coastal watershed resources protection projects that meet one or more of the criteria of section 31220(b). The proposed project will help achieve the objectives of the following subsections: (b)(2) protect and restore fish and wildlife habitat within a coastal watershed; (b)(6) restore sensitive watershed lands and (b)(7) reduce the impact of population pressures on the coastal resources caused by water withdrawals. The proposed project will help achieve these objectives by providing an alternative to dry season water withdrawals which will benefit steelhead and coho populations during this critical period.

Consistent with section 31220(a), staff has consulted with the State Water Resources Control Board and the San Francisco Bay Regional Water Quality Control Board in the development of the project to ensure consistency with Public Resources Code section 30915 concerning protection and restoration of water quality of coastal waters.

As section 31220(c) requires, the proposed project is consistent with the Water Quality Control Plan (Basin Plan) prepared by the regional water quality control board as discussed in detail below under "Consistency with Local Watershed Management Plan/State Water Quality Control Plan," and will include monitoring data as part of the draft permit and design development.

CONSISTENCY WITH CONSERVANCY'S 2013 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S) AS REVISED JUNE 25, 2015:

Consistent with **Goal 5, Objective E** of the Conservancy's 2013-2018 Strategic Plan, the proposed grant will result in a project that improves fish habitat including ensuring sufficient instream flow.

Consistent with **Goal 6, Objective B** of the Conservancy's 2013-2018 Strategic Plan, the proposed grant will result in a project that fosters the long-term viability of coastal working lands and assists farmers to reduce impacts of their operations on wildlife habitat and water quality.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on October 2, 2014, in the following respects:

Required Criteria

- 1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
- 2. Consistency with purposes of the funding source: See the "Project Financing" section above.
- 3. **Promotion and implementation of state plans and policies:** The proposed project is consistent with the following plans and policies:
 - California Water Action Plan (2014). California Natural Resources Agency, California
 Environmental Protection Agency, and California Department of Food and Agriculture
 developed the 2014 California Water Action Plan (CWAP) to meet three broad
 objectives: more reliable water supplies, the restoration of species and habitat, and a more
 resilient, sustainably managed water resources system. The proposed project advances
 CWAP Goal #4: Protect and Restore Important Ecosystems, and specifically the
 objective to "Enhance water flow in stream systems statewide."
 - California Wildlife Action Plan (California Department of Fish and Wildlife (CDFW), 2005). The CWAP sets forth goals for the Central Coast region that include protecting sensitive species and important wildlife habitat and restoring anadromous fish populations.
 - 2015 Public Draft Coastal Multispecies Recovery Plan (2015, National Marine Fisheries Service). The project implements a recovery action identified for the San Gregorio Creek (which lies within the Santa Cruz Mountain Diversity Strata) in this plan, which states that water diversions are a "high threat" to summer rearing juveniles in this watershed. The associated recommended action to address this threat is SGC-CCCS-3.1.1.1 Promote off-channel storage to reduce impacts of water diversions
 - Recovery Plan for Central California Coast Coho Salmon (2012, National Marine Fisheries Services). The federal Coho Recovery Plan lists incentives to water rights holders that agree to restore instream flows, as an "immediate restoration action" and promotion of off-channel storage to reduce impact of water diversion as a "longterm restoration action".
 - Task List for the Steelhead Restoration and Management Plan for California (1996, Updated 2013, CDFW). The task list makes specific recommendations for San Gregorio Creek steelhead recovery including Task CC-20-235-04 "Promote winter season diversions, as opposed to spring through fall diversions, while ensuring adequate pass flows for steelhead passage".
- 4. **Support of the public:** The proposed project is supported by the National Marine Fisheries Service, the Resource Conservation District of San Mateo County, the San Mateo County Farm Bureau and others. In addition, the Conservancy has received support letters from State Senator Jerry Hill and Assemblyman Rich Gordon (See Exhibit 4, Project Letters).
- 5. **Location:** The proposed project is located in unincorporated San Mateo County, about 1.5 miles east of the community of San Gregorio and is within the Coastal Zone and within a coastal-draining watershed.

- 6. **Need:** TU does not have the financial capacity to undertake this project on its own. Without the Conservancy's support, the project would not occur.
- 7. **Greater-than-local interest:** San Gregorio Creek provides habitat for both the federally-endangered CCC coho salmon and federally-threatened CCC steelhead and has been identified as an important watershed for recovery of both species. The proposed project will enhance dry season flows thereby providing critical habitat for juvenile and adult salmonids.
- 8. **Sea level rise vulnerability:** The proposed project is located well inland at an elevation of 10-100 feet above sea level. Therefore, the project is not vulnerable to rising sea levels.

Additional Criteria

- 9. **Urgency:** CCC steelhead and coho populations are a critically low levels and are likely to face further stress as temperatures increase and drought becomes more common due to long-term climate change.
- 10. **Resolution of more than one issue:** The proposed project solves a conflict between agriculture and a fisheries resource. By facilitating water storage, the project will result in a more reliable water supply for the farm as well as higher dry season flows.
- 13. **Innovation:** Construction of off-stream storage facilities to increase dry season flows has been implemented in other regions but is still rare in the central coast. This project has the potential to demonstrate the approach to other farmers who hold similar water rights on this and other creeks in the region.
- 14. **Readiness**: TU has already completed work on designs and is ready to order equipment and complete permits and bidding documents. TU hopes to construct the project in the summer of 2017.
- 17. **Cooperation**: TU is working with the land owners, the San Mateo County RCD, local San Mateo County Farm Bureau, the National Fish and Wildlife Foundation, and NOAA Restoration Center to undertake the project.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/ STATE WATER QUALITY CONTROL PLAN:

Projects undertaken pursuant to Public Resource Code Section 31220 must be consistent with the following, if available and relevant: Integrated Watershed Resource Management Programs (IWRMP); local watershed management plans; and water quality control plans, adopted by the state and regional water boards.

The proposed project is consistent with the 2013 Bay Area Integrated Regional Watershed Management Plan (IRWMP), the scope of which includes San Gregorio Creek. Goal #2 is to "Improve water supply reliability and quality" and Objective 2.6 is specifically to Expand Storage Capacity. Goal #5 is to "Create, protect, enhance, and maintain environmental resources and habitats". Objectives that will be advanced by the proposed project include "protect, restore, and rehabilitate habitat for species protection" (5.1); "enhance wildlife populations and biodiversity" (5.2); and "protect and recover fisheries" (5.3).

The project is also consistent with the 2015 Water Quality Control Plan for the Bay Area, (Water Quality Plan), adopted by the San Francisco Bay Regional Water Quality Control Board, which

designates beneficial use objectives for several of the tributaries in the San Gregorio Creek Watershed, including cold fresh water habitat and habitat for rare, threatened or endangered species. The proposed project will help to ensure survival of CCC steelhead and coho, a threatened species that require cold fresh water habitat, and is thus consistent with the Basin Plan's identified beneficial uses.

The project is also consistent with the 2010 San Gregorio Creek Watershed Management Plan, which identifies construction of off-stream storage to store winter flows for use in summer and fall as a priority.

COMPLIANCE WITH CEQA:

Staff has reviewed the proposed project and determined that it is exempt from the California Environmental Quality Act (CEQA) pursuant to the CEQA Guidelines, Title 14 of the California Code of Regulations, Section 15304, as follows.

Pursuant to Section 15304 the construction of this pond is categorically exempt from CEQA because it involves grading on a slope of less than 10 percent and outside a federal, state or locally designated waterway, wetland or scenic area and does not require removal of mature trees and is not in a mapped geologic hazard zone such as an Alquist-Priolo Earthquake Fault Zone or within an official Seismic Hazard Zone, as delineated by the State Geologist.

Upon approval, staff will file a Notice of Exemption for the project.

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