

COUNTY OF HUMBOLDT



For the meeting of: April 19, 2016

Date: April 14, 2016

To: Board of Supervisors

From: Supervisor Mark Lovelace

Subject: Letter of Support for the Cochran Creek Fish Passage Restoration Project

RECOMMENDATION(S): That the Board of Supervisors authorize the Chair to sign the letter.

SOURCE OF FUNDING: N/A

<u>DISCUSSION</u>: Thomas Gast & Associates Environmental Consultants has submitted a funding request to the State Coastal Conservancy for the Cochran Creek Fish Passage and Channel Restoration, Planning and Design Project. The proposed project will restore fish access and channel conditions in Cochran Creek, a sub-watershed of Freshwater Creek, and an anadromous tributary to Humboldt Bay. The Board of Supervisors is being asked for a letter of support for this very important restoration project.

FINANCIAL IMPACT: N/A

OTHER AGENCY INVOLVEMENT: N/A

ALTERNATIVES TO STAFF RECOMMENDATIONS: Board discretion.

ATTACHMENTS: Project Description and Letter of Support

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Prepared by	Kathy Hayes	S	Signature
REVIEW: Auditor	_ County Counsel	Personnel	Risk Manager Other
TYPE OF ITEM: X Consent Departme Public He Other PREVIOUS ACTION	ental earing N/REFERRAL:		BOARD OF SUPERVISORS, COUNTY OF HUMBOLDT Upon motion of Supervisor Fennell Seconded by Supervisor Bass Ayes Sundberg, Fennell, Lovelace, Bohn, Bass Nays Abstain Absent
Board Order No			and carried by those members present, the Board hereby approves the recommended action contained in this Board report. Dated: April 19, 2016 1 By: Board Board Kathy Hayes, Clerk of the Board



BOARD OF SUPERVISORS

COUNTY OF HUMBOLDT

825 5[™] STREET EUREKA, CALIFORNIA 95501-1153 PHONE (707) 476-2390 FAX (707) 445-7299

April 19, 2016

Doug Bosco, Chair State Coastal Conservancy 1330 Broadway, Suite 1300 Oakland, CA 94612

Subject: Letter of Support for State Coastal Conservancy Project: Cochran Creek Fish Passage and Channel Restoration: Planning and Design

Dear Chair Bosco:

On behalf of the Humboldt County Board of Supervisors, I am writing in full support of this project to restore fish access and channel conditions in Cochran Creek, a sub-watershed of Freshwater Creek, and an anadromous tributary to Humboldt Bay. This project will provide innovative, implementation-ready restoration designs to address key limiting factors for ESA-listed salmonids in Cochran Creek and its tributary Quail Slough, including:

- fish passage;
- lack of floodplain and channel structure;
- rearing habitat quality/availability; and
- riparian habitat quality

Historically, Cochran Creek supported spawning populations of ESA-listed Coho salmon and steelhead before access to the upper watershed was constrained by landscape-scale land conversions and the installation of tide gates. Despite the current tide gate migration barrier, sporadic observations of Coho, steelhead, and coastal cutthroat trout upstream of the project site indicate that anadromous salmonids will utilize Cochran Creek for spawning and rearing, if such access is provided on a regular basis.

A comprehensive restoration plan for Cochran Creek was completed during 2006-2011, but was not implemented due to multiple factors, primarily a change in land ownership. The new landowners (John Gary and Heather Plaza), however, have met with the project proponents several times over the past 18 months, and have submitted a letter of support for planning and implementation phases to proceed on their property.

This project will revisit and utilize the aforementioned existing plans and conceptual designs to the maximum extent possible, with the final deliverable to include 100% implementation ready designs with completed permitting. These final design plans, once implemented, will provide multiple economic and environmental benefits addressing critical statewide needs and priorities, including:

- Improve drainage, and reduce maintenance of flood control structures for agricultural land owners;
- Increase the flood confinement and flood conveyance of Cochran Creek and Quail Slough channels through excavation of wider and deeper channels with more cross sectional area;
- Improve sediment routing from adjacent agricultural pasturelands to Cochran Creek and Quail Slough, through Fay Slough and Eureka Slough, and ultimately to Humboldt Bay;
- Continue to foster working relationships with resource agencies and agricultural landowners to advance essential work on private lands in historic estuarine areas around Humboldt Bay;
- Provide resilience against climate change-induced loss of anadromous fish rearing habitat;
- Advances previous SCC funded planning efforts to restore anadromous habitats in Cochran Creek.

Thank you for your serious consideration of this very important project.

Sincerely,

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Mark Lovelace, Chair Humboldt County Board of Supervisors

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Thomas Gast & Associat Environmental Consultar

SUMMARY

"COCHRAN CREEK FISH PASSAGE AND CHANNEL RESTORATION"

PROPOSAL TO STATE COASTAL CONSERVANCY

Project Background

Cochran Creek, a sub-watershed of Freshwater Creek, was once connected to Humboldt Bay via an extensive tidal marsh ecosystem that sustained diverse populations of fish and wildlife species. Conversion of 90% of Humboldt Bay's surrounding tidal marshlands to a "working landscape" over the past 150 years has provided valuable economic and agricultural benefits for humans, but has also fostered a host of associated environmental problems.

Cochran Creek historically supported spawning populations of ESA-listed coho salmon (*Oncorhynchus kisutch*) and steelhead (*O. mykiss*) before access to the upper watershed was constrained by anthropogenic activities. As is the case with many Humboldt Bay tributaries, Cochran Creek has been disconnected from downstream, tidally-influenced habitats by a levee system and a tide gate that pose a major hindrance to fish passage.

Despite the current tide gate migration hindrance, sporadic observations of coho, steelhead, and coastal cutthroat trout (*O. clarki clarki*) upstream of the project site indicate that anadromous salmonids will utilize the upper watershed for spawning and rearing, if such access is provided on a regular basis.

A comprehensive restoration plan for Cochran Creek and its tributary Quail Slough was initiated during 2006-2011. Primarily due to a change in land ownership in 2008, however, the project was not advanced to an implementation-ready phase at that time.

The project area is currently owned by John Gary and Heather Plaza, proprietors of the Organic Matters Ranch (Figure 1). These landowners have been directly engaged with the project proponents for the past 18 months, and are fully supportive of this project, its objectives, and the multiple benefits it will provide for both threatened fish species once implemented.

Project Goals

This project will provide 100% implementation-ready restoration designs to:

- Replace the existing tide gate at the confluence of Cochran Creek and Fay Slough in order to provide improved migration access for adult and juvenile salmonids to 1.93 miles of anadromous habitat;
- 2. Restore aquatic and riparian habitat along Cochran Creek between the Fay Slough tide gate and Myrtle Avenue;
- 3. Restore a muted tidal cycle; and improve instream habitat conditions within Cochran Creek tributary Quail Slough; and
- 4. Provide flood confinement/increased flood conveyance, and improved drainage from agricultural wetlands (Figure 2).



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Project Tasks

- 1. Project Administration, Management, and Reporting
- 2. Design new tide gate for Cochran Creek at Fay Slough confluence;
- 3. Restore/enhance Cochran Creek channel between tidegate and Myrtle Avenue;
- 4. Design inset floodplain for Cochran Creek between tidegate and Myrtle Avenue;
- 5. Restore/enhance Quail Slough channels, introduce muted tidal prism; and
- Restore functioning riparian corridors along restored reaches of Cochran Creek and Quail Slough.
- 7. Regulatory Compliance and completed permitting including the following:
 - Army Corps of Engineers Permit (ACOE)
 - California Environmental Quality Act (CEQA)
 - Coastal Development Permit
 - DFG 1600, Lake and Streambed Alteration Agreement (LSA)
 - Encroachment Permit
 - Humboldt Bay Harbor District- Development
 - Humboldt County- Conditional Use, Special
 - NOAA Fisheries- Incidental Take Agreements
 - Scientific Collecting Permit (SCP)
 - CDFW Memorandum of Understandings re: Incidental Take Agreements
 - SWRCB 401 Certification
 - USFWS Section 7 Consultation/Incidental Take re: tidewater goby
- 8. Revegetation and Riparian Management Plan for restored Cochran Creek and Quail Slough channels.

Project Timeline and Budget Request from SCC:

The scope of work and associated costs are based on the project team's best estimate of the level of effort anticipated, based on reconnaissance level field visits and relevant professional project experience of all team members.

This proposed project is planned to commence in July, 2016 (pending award notification and contracting), and extend through 12/31/2019.

Applicant is requesting \$322, 281 in funding from the State Coastal Conservancy to complete all proposed tasks. The Total Project Cost, including in-kind donations, is \$358,087.



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Figure 1. Cochran Creek and Quail Slough Restoration Planning Location, Humboldt Bay Watershed, California

Thomas Gast & Associates Environmental Consultants; PO Box 1137, Arcata, California 95518; Office (707) 822-8544 Located in the Historic Jacoby Storehouse on the Arcata Plaza, 4th floor, Suite H tgast@tgaec.com







Figure 2. Previous, early conceptual design for Cochran Creek and Quail Slough restoration (McBain & Trush/Jeff Anderson & Associates, 2007).

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