Butano Creek Restoration and Resiliency Project

Appendix-Photos



Image 1. Flooding on Pescadero Creek Road



Image 3. January 18, 2017 Community meeting regarding flooding. About 100 people attended

Image 2. Dead Steelhead during from 2014 Pescadero fish kill, credit: Trout Unlimited



Image 4. Strong community sentiment for solutions to flooding



Image 5. Butano Creek channel through Butano Marsh and Pescadero Lagoon

Butano Channel Restoration and Resiliency Project Appendix-Qualifications

San Mateo Resource Conservation District(RCD):

Kellyx Nelson has served as Executive Director of the RCD since 2006 and previously managed conservation projects for Peninsula Open Space Trust. At the RCD, Kellyx has developed, overseen, or directed countless restoration efforts including significant anadromous fisheries restoration such as: removing 5 barriers to fish passage, developing watershed plans and a lagoon restoration plan, reducing sedimentation into anadromous streams, installation of Large Woody Debris in streams lacking habitat complexity, and more. Kellyx serves by appointment on the Peer Review Committee of the Fisheries Restoration Grant Program for the California Department of Fish and Wildlife as well as the Advisory Council to the Greater Farallones National Marine Sanctuary and previously served by appointment to collaboratively develop Marine Protected Areas in State waters along California's north central coast. Kellyx has extensive experience overseeing the development and completion of complex, high priority restoration projects with multiple stakeholders and landowners, and has overseen the successful completion of projects with local, state and federal funding totaling tens of millions of dollars. She has an undergraduate degree from Columbia University in Political Science and Environmental Science and a master's degree in Public Policy from University of California Berkeley.

<u>Irina Kogan</u>, Project Manager, has over 15 years public agency experience in conservation planning, project management, stewardship program development, regulatory processes, permit coordination, and environmental negotiation resolving conflicts between stakeholders. Irina also has 5 years post-graduate experience as a geologist in the private sector. Irina manages the Pescadero marsh restoration planning efforts, the Butano Creek Floodplain Restoration Project, rural roads and gully erosion control program, and the climate change adaptation and mitigation program. Prior to working at the RCD, Irina was a Resource Protection Specialist at NOAA –Office of National Marine Sanctuaries where among other duties, she conducted wildlife surveys, developed wildlife protection measures, and managed wildlife stewardship projects. She holds a bachelor's degree from Tufts University in Geological Sciences and a master's degree in Coastal and Marine Geology and Geochemistry from the University of North Carolina at Chapel Hill.

Alnus Ecological: Jim Robins in the principal owner of Alnus Ecological. He has extensive experience in resource management and conservation planning, riparian and stream ecology, wetland ecology, land-use policy and environmental compliance, as well as management of large-scale environmental projects. He has a Masters in Rangeland Management from University of California Berkeley, where his emphasis was grassland and riparian ecology, ecological restoration, and invasion biology. Since 2004 he has served as the project coordinator of the Central Coast Integrated Watershed Restoration Program (IWRP), a partnership between the CA Coastal Conservancy and the Resource Conservation Districts of Santa Cruz, San Mateo and Monterey Counties. His past projects include providing technical and regulatory support to the CA Coastal Conservancy, assisting with various resource management plans and environmental compliance strategies; assisting the Sonoma County Water Agency (SWCA) in the development of a comprehensive management plan to meet flood management responsibilities while increasing habitat complexity and value; co-managing a

Butano Channel Restoration and Resiliency Project Appendix-Qualifications

program which included development of plans for expansion of the Russian River Coho Salmon Captive Broodstock Program to become a recovery hatchery; and working with Sustainable Conservation, National Marine Fisheries Service, and CA Department of Fish and Game to develop a programmatic Biological Assessment/Opinion to cover incidental take of federal and state listed fish during construction of salmonid restoration projects. Jim has extensive experience in providing biological monitoring and permitting assistance, and has collaborated with the San Mateo RCD on a number of recent projects, include the Butano Creek Floodplain Restoration Program, Memorial Park Fish Passage Removal Program, San Gregorio Creek Habitat Enhancement Project, and the San Mateo County Drought Relief Program.

cbec inc., eco-engineering: cbec inc., eco-engineering, specializes in water resources engineering services that are concerned with developing and providing ecologically sensitive and environmentally sustainable solutions in the fields of hydrology, hydraulics, geomorphology and restoration and rehabilitation design. Chris Hammersmark, PhD, PE (CA C66595) will be the project lead for cbec. He is a registered civil engineer specializing in hydraulics, hydrology, geomorphology, water quality, ecology, and ecosystem rehabilitation/restoration. He has over 15 years of experience on a diverse array of projects including sediment and water quality studies, river and floodplain restoration, flood inundation and water supply investigations. Dr. Hammersmark's technical experience includes numerical hydraulic and hydrologic modeling (e.g., HEC, USGS, USBR and DHI models), habitat suitability modeling, terrain modeling, GIS and a variety of types of field investigations including sediment characterization and sediment transport measurements, water quality sampling, flow gauging, groundwater sampling, water table measurement habitat characterization and mapping, vegetation sampling, topographic and bathymetric surveys, soil infiltration and compaction monitoring. Dr. Hammersmark's dissertation research involved developing an integrated surface water-groundwater model to establish a water budget for a wetland system, providing spatial and temporal estimates of storage and flux though the surface-subsurface system.

Trout Unlimited: Trout Unlimited is dedicated to the conservation, protection, and restoration of North America's coldwater fisheries and their watersheds. The primary contact for this project will be Rene Henery. Rene Henery has been the California Science Director of Trout Unlimited (TU) since 2011. He has a PhD in Geography from University of California, Davis, where his focus was ecological rehabilitation of Pacific salmonids. At TU he works on research, restoration, stewardship and policy for conservation and recovery of aquatic habitat and coldwater fisheries in California, including restoration of the San Joaquin River, development of the Central Valley Flood Protection Plan, and salmonid recovery in the Yuba River. In this role, he has participated in collaborative efforts related to agriculture and restoration on public lands, including the California Roundtable of Water and Food Supply and the Steering Committee for the San Joaquin River Partnership. Rene is a Research Faculty member of the Aquatic Ecosystems Analysis Laboratory of the Department of Biology and University of Reno in Nevada. He has over eighteen years of experience in restoration project management, research, education, restoration and stewardship. He has worked for the California Department of Water Resources, Castle Lake Environmental Research and Education Program, and The River Exchange.

Butano Channel Restoration and Resiliency Project Appendix-References

References:

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Largier, J.L., I.W. Aiello, D. Jacobs, J.Lacy, C. Pallud, M.T. Stacey, S.M. Carlson, E. Huber and C.M. Bowles, 2015. *Report of Pescadero Lagoon Science Panel.*

National Marine Fisheries Service (NMFS), 2005, North-Central California Coast Recovery Domain 5-Year Review: Summary and Evaluation of California Coastal Chinook Salmon ESU, Central California Coast Coho Salmon ESU. National Marine Fisheries Service, Southwest Region, Long Beach, California.

National Marine Fisheries Service (NMFS), 2006, Endangered and Threatened Species: Final listing determinations for 10 Distinct Population Segments of west coast Steelhead. National Marine Fisheries Service, Southwest Region, Long Beach, California.

National Marine Fisheries Service (NMFS), 2007, Federal Recovery Outline for the Distinct Population Segment of Central California Coast Steelhead. National Marine Fisheries Service, Southwest Region, Santa Rosa, California.

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National Marine Fisheries Service (NMFS), 2016, *Species in the Spotlight: Priority Actions: 2016-2020 Central California Coast Coho Salmon*. National Marine Fisheries Service, Silver Spring, Maryland.

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Sloan, R., 2006, *Ecological Investigations of a Fish Kill in Pescadero Lagoon, CA*. M.S. Thesis San Jose State University, California.

We look forward to working with NOAA staff to review and adjust the monitoring plan to ensure sufficient and cost-effective implementation.

Monitoring Action	Tools	Metrics/Target	Schedule
Completed 100%	Longitudinal profile and cross-	Stamped by Licensed Engineer	Spring 2018
Designs	section for Butano Channel and		
	Marsh		
Hydraulic Modeling for	Final 2D hydraulic model with	Water surface elevations during the 2yr and 10	Summer 2017
Improved Flood Risk	predicted water-surface	yr event do not overtop the existing bridge	
Reduction	elevations before and after	deck.	
	project implementation during		
	2yr and 10yr event		
Project Staking	Total station or laser level,	Field layout with stakes and flags for contractor	Summer 2018
	completed by project engineer.		
As-Built Drawings	Total station or laser level for	All elevations within a tolerance that is	Fall 2018 (1 st)
	cross-sections and long profile	acceptable to the project engineer and is	
	completed by project	articulated in the project specifications (e.g. +/-	
	engineering firm	0.5ft) . Measures will be referenced to a	
		standard geodetic datum	
Sediment Deposition	Total station or laser level for	Data will be collected to 0.1ft vertical	Summer-Fall 2019
Monitoring	cross-sections (Marsh) and long	resolution and 2019 data will be compared to	
	profile (Channel) completed by	as-builts to document scour and deposition	
	project engineering firm	rates throughout the 8000ft of reconnected	
		channel and areas of the marsh that received	
		significant sediment for restoration	
Photo Documentation	Traditional camera with GPS and	Document pre-project, during construction,	Summer 2018 (pre-project)
	ordinal software with	immediately post project, and post project	Summer-Fall 2018 (during
	established photo points of	after 1 full year.	construction)
	channel, marsh and bridge +		Fall 2018 (1 st post
	time lapse cameras installed at		construction)
	2-3 locations		Winter 2018-2019 (winter
			conditions)
			Summer-Fall 2019 (2 nd post-
			construction)

Revegetation	Ocular estimates of cover and	75% of all pole plantings show signs of	Winter-Spring 2019
Monitoring	photo documentation	growth/life and areas treated with seed show	
		80% cover.	
Improved Flood Risk	County data on days Pescadero	Reduce frequency and duration of closure	Annual reporting from County
Reduction	Rd at Butano is flooded and	during storms at or below 2yr event to zero	Public Works (future reporting
	closed	days a year for water year 2018 and 2019	is outside of the grant time
			period, but will be tracked by
			the County)
Annual Kayak	Ocular estimates and random	Minimum depth in the reconnected channel	Summer 201 (RCD is hoping to
Reconnaissance	depth samples	are greater than 1ft to enable unfettered adult	make this an annual volunteer
		salmonid migration	event, post 2019 it will be
			outside of the grant schedule)

Additional longer-term monitoring criteria that we hope to be able to continue after NOAA grant funding ends and that will not be funded through this proposal will likely include:

- Work with NOAA and CDFW to include Butano Creek in the annual Pacific States Marine Fisheries Commission annual red surveys to validate salmonid access and spawning.
- County reports on the number of road closures days per year on Pescadero Road at Butano Creek. These data could be translated into metrics on economic impacts from flooding.
- Continued collaboration with NOAA and CDFW to enable summer and fall lagoon fisheries surveys and monitor the extent and frequency of fish-kills resulting from fall and early winter breaches.
- Continue partnership with the SFRWQCB and UC Davis Bodega Marine Labs to monitor water quality conditions in the Butano Marsh and channel to evaluate whether marsh restoration efforts have reduced the production and/or transport of anoxic/hypoxic water into the lagoon.

Reporting monitoring progress:

Pre- and post- implementation data will be shared with NOAA as part of the regular progress reports. Specific reports, such as the post-project cross section, will be provided to NOAA as they are completed. Data on days of road closure resulting from storms of less than a predicted Q2 as well as other closured data will be reported in the final report. Data from 1 year post project topographic surveys will also be reported in the final report. Additional data will be available NOAA through the existing Pescadero Lagoon Agency Roundtable.

Butano Channel Restoration and Resiliency Project Appendix-Mandatory Contractual Budget Information

Contracts:

<u>cbec, inc. eco-engingeering (cbec</u>), Santa Cruz, California, congressional district: 20 Primary place of performance: Pescadero, CA

100% designs and Basis of design report, bid support, agency requests	\$ 10,000.00
Construction observation	\$ 27,050.00
As-builts	\$ 18,000.00
Monitoring	\$ 16,000.00
Project management	\$ 2,500.00
Total cbec eco-engingeering, inc.	\$ 73,550.00

Alnus Ecological, Oakland, California, congressional district: 13

•	, place of period and the coordinates of the coordi	,	•
	Permitting	\$	20,000.00
	Fish Relocation	\$	6,500.00
	Pre-construction services	\$	7,000.00
	Meetings	\$	2,000.00
	"on call" biological services	\$	18,000.00
	Biological reporting	\$	3,000.00
	Total	\$	56,500.00

Primary place of performance: Pescadero, CA

Trout Unlimited (TU), Emeryville, California, congressional district: 13

Primary place of performance: Pescadero, CA

\$ 5,000.00	\$ CA Science Director/ CA Staff Scientist – Salary and Fringe
\$ 750.00	\$ Administrative overhead (15%)
\$ 1,000.00	\$ Travel
\$ 6,750.00	\$ Trout Unlimited Contract Total

TBD- Construction Contractor, Location: TBD

Primary place of performance: Pescadero, CA

	Unit	Qty	Unit cost	Cost
Mobilization	Lump sum	1	\$ 45,494.00	\$ 45,494.00
Insurance/Bonding	Lump sum	1	\$ 22,747.00	\$ 22,747.00
Site Preparation	Lump sum	1	\$ 15,165.00	\$ 15,165.00
Health and Safety Plan	Lump sum	1	\$ 15,165.00	\$ 15,165.00
SWPPP	Lump sum	1	\$ 30,000.00	\$ 30,000.00
Dredging Butano Creek	CY	45000	\$ 30.00	\$ 1,350,000.00
Channel Clearing	LF	4000	\$ 25.00	\$ 100,000.00
Revegetation	Lump sum	1	\$ 50,000.00	\$ 50,000.00
Road Improvement	Lump sum	1	\$ 16,450.00	\$ 16,450.00
Aggregate Base	CY	90	\$ 67.16	\$ 6,044.40
Subgrade Prep	SY	1042	\$ 10.00	\$ 10,420.00
Construction Contingency @ 20%				\$ 332.297.08
Construction Contractor Total				\$ 1,993,782.48

COUNTY OF SAN MATEO DON HORSLEY SUPERVISOR. 3RD DISTRICT

County Government Center 400 County Center, 1st Floor Redwood City, CA 94063 650-363-4569

dhorsley@smcgov.org

March 7, 2017

Ms. Lisa Warr Office for Coastal Management 1305 East-West Hwy, N/OCM6 Silver Spring, MD 20910

Re: San Mateo Resource Conservation District Application for the 2017 Coastal Resilience Grants Program

Dear Ms. Warr;

I write to express my strong support for the San Mateo Resource Conservation District's application to the National Oceanic and Atmospheric Administration's 2017 Coastal Resilience Grants Program for the Butano Channel Restoration and Resilience Project. As President of the San Mateo County Board of Supervisors and representative for the Third District, which includes Pescadero and the South Coast, I will request the San Mateo County Board of Supervisors consider approval for a 51 million contribution to match the \$2 million requested through the NOAA Coastal Resilience Grant Program. I urge you to consider full funding for this project to restore fish passage, enhance habitat for protected species, and constitute to coastal resilience for the community of Pescadero.

As you may know, portions of the historic Butano Creek channel in Pescadero Marsh have completely filled in with sediment up to the channel's banks, and vegetation has grown over this accumulated sediment where the creek used to flow. The proposed project will restore habitat in the historic channel by relocating excess sediment, re-establishing fish pass through the marsh, increasing and enhancing babitat for multiple federal and state listed species in Butano Creek, and adding banefit to the array of short and longer term improvements to alleviate flooding at Pescadero Creek Road. Of particular note, the restoration may help address water quality factors in the marsh contributing to recurring fish kills. The project will strengthen coastal ecosystem resilience by re-establishing the channel, enhancing connectivity for fresh water entering the lagoon from the upper watershed, and restoring habitat from the southern Right-of-Way for Butano Creek fielde out along 8000' through the historic Butano Creek channel to the confluence with Pescadero Creek in the marsh. I am highly encouraged by the outstanding collaboration demonstrated by the San Mateo Resource Conservation District, California State Parks, and those involved in the development of the Butano Channel Reconnection and Resilience Project. The RCD has steadily brought together investments from State Parks and members of the Science Panel on Pescadero Marsh to expand and develop consensus on how best to move toward restoring the health of the mash and upstream watershed. The integrated solutions vision outlined in the RCD's report, *Solutions to Flooding at Pescadero Creek Road* (cbec and Advisory Committee. Projects like the RCD's Butano Creek Floodplain Restoration on Peninsula Open



Space Trust land reconnected floodplain on 1 mile of Butano Creek and will trap sediment upstream of the marsh. The County of San Mateo has initiated dredging under the 1960's-era bridge at Pescadero Creek Road in 2016 and will continue to pursue this work once a year for up to five years at the same time as exploring the feasibility of a raised bridge over Butano Creek to address recurring road flooding impacting the community. In addition, the Board of Supenvisors has approved \$45,000 to support the fevelopment of a 2D modeling of wettransport in Pescadero Marsh to assist with multiple related projects in the watershed, including the potential removal of the Pescadero Marsh to Solit the area where the flood hazard has cut off access from town to Highway 1 at Pescadero Creek Road.

The partnership leading to the proposed habitat restoration project in the California State Parks' Pescadero Marsh Natural Preserve stands to create significant positive impact for the restoration of steelhead and Coho habitat as well as additional positive benefit for reducing vulnerability to extreme weather events and flood hazards for the coastal community in Pescadero. With support from NOAA, I am confident that the RCD and its partners will bring this project to full and successful completion.

Thank you for your consideration of the proposed project.

Sincerely,

Don Horsley, President San Mateo County Board of Supervisors – Third District



State of California • Natural Resources Agency

DEPARTMENT OF PARKS AND RECREATION

303 Big Trees Park Road Santa Cruz District Felton, Ca. 95018 (831) 335-6390

March 9, 2017

1305 East West Highway, N/OCM6 Office of Coastal Management Silver Spring, MD 20910 Lisa Warr

ATTN: NOAA Coastal Resilience Grant

Letter of Commitment for Butano Channel Reconnection and Resilience Project ÿ

Dear Ms. Warr:

am writing on behalf of the California Department of Parks and Recreation (Santa Cruz District's (RCD) application to the National Oceanic and Atmospheric Administration's Resilience Project. This project will implement urgently needed habitat restoration in our Pescadero Marsh Natural Preserve for federally protected Central Coast Coho District State Parks) to express support for the San Mateo Resource Conservation 2017 Coastal Resilience Grants Program for the Butano Channel Restoration and salmon and steelhead trout with multiple additional benefits for coastal resiliency.

Pescadero Lagoon to re-establish severely impaired fish passage into the watershed. essential component to a multi-faceted watershed scale restoration effort. The project will restore passage through the marsh for in- and out-migrant fish, provide an escape route for fish from the lagoon during poor water quality conditions that cause nearly annual fish kills, restore degraded marsh habitat, and reduce flooding of adjacent and will enhance ecological values for multiple federal and state listed species and be an The project will restore the connectivity of Butano Creek through Butano Marsh to upstream floodplain areas that include the road into town and private properties.

Tomales Bay, 93 miles north) and the only lagoon of its size on the coast in San Mateo California State parks has been partnering extensively with allied agencies for the best community and resource agency interest in its management. It is the most significant County. It is home to many threatened and endangered species that depend on it as habitat. Resource management of the marsh and lagoon can have direct implications estuary within 150 miles of coastline (between Elkhorn Slough, 61 miles south and multiple local, state and federal agencies to characterize, understand, restore and management of this resource, including funding and partnering with the RCD and for the adjacent community, which was built in its floodplain in the early 1800s. Pescadero Marsh Natural Preserve is a special place with a very high level of nanage the marsh and lagoon.

Lisa Ann L. Mangat, Director Edmund G. Brown Jr., Governor

oversee this channel restoration project, and to integrate it with other efforts to restore California State Parks has tremendous confidence in the RCD's ability to successfully stakeholders and partners in ecologically sensitive areas. In San Mateo County, they completes high priority, complex planning and implementation projects with multiple the watershed and build a resilient community. The San Mateo RCD regularly are the go-to entity for getting this kind of project done. State Parks have been partnering extensively with others for the best management of this resource, including:

- Partnering with the California Department of Fish and Wildlife to establish the Pescadero management decisions and possible restoration actions for Pescadero marsh and lagoon. Lagoon Science Panel in 2013 to provide independent scientific expertise in support of •
- Breaching the sand bar that forms the lagoon in partnership with NOAA Restoration Center to manage water quality conditions that cause fish kills.
- Funding and/or partnering with the RCD and multiple local, state and federal agencies on efforts to characterize, understand, restore and manage the marsh and lagoon.

The Santa Cruz District of California State Parks commits to the following:

- \$50,000 cash match to the project
- monitoring and reporting and permitting to manage water levels and maintain In-kind staff time equivalent of \$50,000 for biological assessments and monitoring, archeological surveys, tribal notification, post construction
- \$50,000 for topographic surveys .

water quality.

Thank you for your consideration in helping us to protect one of California State Park's If you have any questions, please feel free to contact me at the above phone number coastal treasures.

Sincere

District Superintendent Santa Cruz District Spohrer ちっ



March 7, 2017

- To: Lisa Warr Office for Coastal
- Office for Coastal Management 1305 East-West Hwy, N/OCM6 Silver Spring, MD 20910
- Re: Letter of Commitment from Trout Unlimited for the Butano Channel Restoration and Resilience Project

Dear Ms. Warr,

I am writing to express Trout Unlimited's support for the San Mateo Resource Conservation District's (RCD) application to the National Oceanic and Atmospheric Administration's 2017 Coastal Resilience Grants Program for *The Butano Channel Restoration and Resilience Project.* Trout Unlimited (TU) is America's oldest and largest cold-water fisheries conservation organization. TU's mission is to conserve, protect, and restore North America's native trout and salmon and their watersheds. In California, a significant portion of TU's focus is devoted to recovery of native Steelhead and Coho Salmon populations in coastal rivers and streams.

The Butano Channel Restoration and Resilience Project will implement urgently needed fish passage and habitat restoration in the Pescadero Marsh Natural Preserve for federally protected Central Coast Coho salmon and Steelhead. Additionally, the project will contribute significantly to the broader recovery of watershed hydrology and ecosystem function improving conditions for additional threatened and endangered species and supporting local flood management efforts.

Trout Unlimited has worked with the San Mateo RCD in the past. Based on this history and the RCDs record of successes, we have great confidence in their ability to implement this project to the long-term benefit of both the watershed ecosystem and its human communities. Trout Unlimited is committed to engaging in this effort to provide consultation on project design, implementation, monitoring, and adaptive management. As a component of this, we will contribute \$9000.00 of in-kind contribution in the form of CA science staff consultation (\$7000.00) as well as associated travel (\$1000.00) and materials and supplies related to field assessment and monitoring (\$1000.00).

Trout Unlimited: America's Leading Coldwater Fisheries Conservation Organization California Office: 4221 Hollis Street, Emeryville, CA 94608 Direct: (415) 640-0927 • www.u.org



We hope that you will see both the immediate and long term value of this exciting proposal. Please don't hesitate to contact me with any specific questions.

XXX Sincerely,

Rene E. Henery, PhD California Science Director

Trout Unlimited: America's Leading Coldwater Fisheries Conservation Organization California Office: 4221 Hollis Street, Emeryville, CA 94608 Direct: (415) 640-0927 • www.tu.org



Lisa Warr Office for Coastal Management 1305 East-West Hwy, N/OCM6 Silver Spring, MD 20910 March 9, 2017

Re: Letter of Support for the Butano Channel Restoration and Resilience Project

Dear Ms. Warr:

SHERE LADE

I am writing you to express support for the San Mateo Resource Conservation District's (RCD) application to the National Oceanic and Atmospheric Administration's 2017 Coastal Resilience Grants Program for the Butano Channel Restoration and Resilience Project. This project will implement urgently needed habitat restoration in the Pescadero Marsh Natural Preserve for federally protected Central Coast Coho salmon and steelhead trout, with multiple additional benefits for coastal resiliency. The proposed project will restore the connectivity and fish passage of Butano Creek through Pescadero Lagoon Marsh thereby re-establishing its connection to many miles of high quality spawning grounds upstream.

Over the decades, the Coastal Conservancy has invested millions of dollars of state bond funds in various land conservation and habitat restoration projects within the Pescadero Creek watershed. In 2010, we partnered with the RCD to hold workshops amongst the many scientists, fisheries experts and other stakeholders in order to develop a set of consensus-based actions that would address the annual fish kills and generally poor health of the Lagoon. And, through our Integrated Watershed Restoration Program, the Conservancy partners with the RCD to implement planning and design of habitat restoration work in this and other coastal watersheds (<u>http://iwrp.rcdsantacruz.org/</u>). In fact, the Conservancy has already committed \$122,000 as match to this grant to for marsh and lagoon restoration planning and design. These are but two examples of how the RCD has successfully complete high priority, complex planning and implementation projects with diverse stakeholders and partners in ecologically sensitive areas.

Sincerely Sam Schuchat

Executive Officer

1515 Clay Street, 10th Floor Oakland, California 94612-1401 510•286•1015 Fax: 510•286•0470



Congress of the United States Washington, D. C. 20515 House of Representatives

California

Cighteenth District Anna 9. Eshoo

March 13, 2017

Office for Coastal Management National Oceanic and Atmospheric Administration 1305 East-West Highwy, N/OCM6 Silver Spring, Maryland 20910 Ms. Lisa Warr

Dear Ms. Warr,

RCD) application for funding under the National Oceanic and Atmospheric Administration's [NOAA] Coastal Resilience Grants Program for the Butano write in support of the San Mateo County Resource Conservation District's Channel Restoration and Resilience Project. This project will provide critical habitat restoration for endangered species and can also help protect the community of Pescadero from dangerous flood risks.

fish kills. The proposed project will re-establish the historic creek channel, thereby restoring fresh water flows, fish passage, water quality, and critical habitat in the marsh for federal and state listed species including steelhead and Coho salmon. This project is necessary because the Butano Creek channel in Pescadero Marsh, located in my Congressional District, has completely filled with sediment and is overgrown with vegetation. This has blocked fish passage through the marsh in most places and has also contributed to water quality degradation that has caused repeated

town of Pescadero. Even in minor rain events, the buildup of sediment in Butano The Butano Channel Restoration and Resilience Project will also enhance coastal resilience by re-establishing the Creek channel, offering relief from the chronic flooding of Pescadero Creek Road which causes tremendous hardship in the rural Creek causes the flooding of this major road, separating many residents of Pescadero from emergency services, schools, and places of employment. When combined with Resilience Project has the potential to provide tremendous resilience benefits to the local community which has suffered from this chronic flooding for decades. other ongoing projects in the watershed, the Butano Channel Restoration and

The RCD's grant application is the product of tremendous cooperation between the County, California State Parks, members of the local community, and other parties

working on ecosystem restoration in the watershed. The proposed Butano Channel Restoration and Resilience Project is the product of a consensus among all of these local stakeholders and includes the promise of matching funds from the local sponsors. Additionally, other projects in the watershed will help alleviate the sediment collection problems that have plagued Butano Creek in recent history. For example, the RCD is working with the Peninsula Open Space Trust (POST) to restore floodplain upstream on Butano Creek which will capture sediment that currently gets trapped in the Butano Creek channel at Pescadero Marsh.

I urge you to fund this important project which will restore critical habitat and improve coastal resilience in Pescadero, and I thank you in advance for your attention to my request.

Most gratefully,

Anna G. Eshoo

Member of Congress

-

CANTOL OFFICE STATE CAPTOL SACRAMENTO, CA 95814 TEL (916) 651-4013 FAX (916) 651-4013 DISTRICT 0FFICE

REFRICTOFFICE 1528 S. ELCAMINO REAL SAN MATEO. CA 94402 TLL (650: 212-3313 FAX (650: 212-3313 FAX (650: 212-3320 WWW SEMATE CA GOVINILL



ECONOMIC DEVELOPMENT ECONOMIC DEVELOPMENT APPROPRIATIONS EVERGERIATIONS EVERGERIATIONS ENVIRONMENTAL, ONG ANIZATION ENVIRONMENTAL, ONG ANIZATION

March 10, 2017

Ms. Lisa Warr Office for Coastal Management 1305 East-West Hwy, N/OCM6 Silver Spring, MD 20910 Re: San Mateo Resource Conservation District Application for the 2017 Coastal Resilience Grants Program

Dear Ms. Warr;

I write to express my strong support for the San Mateo Resource Conservation District's application to the National Oceanic and Atmospheric Administration's 2017 Coastal Resilience Grants Program for the Butano Channel Restoration and Resilience Project. As the state Senator representing the San Mateo County coast, which includes Pescadero and the South Coast, I encourage you to consider funding this request for urgently needed habitat restoration for fish passage in Butano Creek and Pescadero Marsh Natural Preserve.

Pescadero Marsh Natural Preserve is a special place in my district with a very high level of community and resource agency interest in its management and conservation. It is the most significant estuary within 150 miles of coastline, and the only lagoon of its size on the coast in San Mateo County. As you may know, portions of the historic Butano Creek channel in Pescadero Marsh have completely filled in with sediment up to the channel's banks, and vegetation has grown over this accumulated sediment where the creek used to flow. The proposed project will represe habitat in the historic channel by relocating excess sediment, re-establishing fish pass through the marsh, increasing and enhancing habitat for multiple federal and state listed species in Butano Creek, and adding benefit to the array of short and longer term improvements to alleviate flooding at pescadero Creek Road. Of particular note, the restoration may help address water quality factors in the marsh contributing to recurring fish kills. The project will implement urgently needed habitat restoration for federally protected Central Coast Coho salmon and steelhead trout.

Ms. Lisa Warr, Page 2 March 9, 2017 Furthermore, this project will strengthen coastal ecosystem resilience by re-establishing the channel, enhancing connectivity for fresh water entering the lagoon from the upper watershed, and restoring habitat from the southern Right-of-Way for Butano Creek Bridge out along 8000['] through the historic Butano Creek channel to the confluence with Pescadero Creek in the marsh. I am highly encouraged by the outstanding collaboration demonstrated by the Sam Mateo Resource Conservation District, California State Parks, and those involved in the development of the Butano Channel Reconnection and Resilience Project. The RCD has steadily brought together investments from State Parks and members of the Science Panel on Pescadero Marsh to expand and develop consensus on how best to move toward restoring the health of the marsh and upstream watershed. The integrated solutions vision outlined in the RCD's report. Solutions to Flooding at Pescadero Creek Road (cbec and Stillwater Sciences 2014), included both input from the community and a multi-agency Technical Advisory Committee. Projects like the RCD's Butano Creek Floodplain Restoration on Peninsula Open Space Trust land reconnected floodplain on 1 mile of Butano Creek and will trap sediment upstream of the marsh. The County of San Mateo has initiated dredging under the 190°s-cra bridge at Pescadero Creek Road in 2016 and will continue to pursue this work once a year for up to five years at the same time as exploring the feasibility of a raised bridge over Butano Creek to address recurring road flooding impacting the community. The partnership leading to the proposed habitat restoration project in the California State Parks' pescadero Marsh Natural Preserve stands to create significant positive impact for the restoration of stellened and Coho habitat as well as additional positive barefit for reducing vulnerability to extreme weather events and flood hazards for the coastal community in Pescadero. With support from NOAA, I am confident that the RCD and its partners will bring this project to full and successful completion.

Thank you for your consideration of the proposed project.

Senator, 13th District erry Hill Sincerely

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March 6, 2017

Ms. Lisa Warr Office for Coastal Management 1305 East-West Hwy, N/OCM6 Silver Spring, MD 20910

Re: San Mateo Resource Conservation District Application for the 2017 Coastal Resilience Grants Program

Dear Ms. Warr,

We write in strong support for the San Mateo Resource Conservation District's application to the National Oceanic and Atmospheric Administration's 2017 Coastal Resilience Grants Program for the Buttano Channel Restoration and Resilience Project. As the two California State Assemblymembers that represent the San Mateo County coast, we are particularly interested in restoration efforts that preserve and enhance our coastal ecosystem. The project proposed through this grant addresses long-standing issues and will provide far reaching benefits for our coastal environment and community.

Portions of the historic Butano Creek channel in Pescadero Marsh have completely filled in with sediment up to the channel's banks, and vegetation has grown over this accumulated sediment where the or creek used to flow. The proposed project will restore habitat in the historic channel by relocating excess sediment, re-establishing fish pass through the marsh, increasing and enhancing habitat from multiple federal and state listed species in Butano Creek, and adding benefit to the array of short and longer term improvements to alleviate flooding at Pescadero Creek Road. Of particular note, the restoration may help address water quality factors in the marsh contributing to recurring fish kills. The project will strengthen coastal ecosystem resilience by re-establishing the channel, enhancing contectivity for fresh water entering the Butano Creek Bride out along 8000' through the historic Butano Creek channel to the confluence with Pescadero Creek in the marsh. The San Mateo Resource Conservation District (RCD) has demonstrated continued leadership through its collaborative efforts with California State Parks and those involved in the development of the Butano Channel Reconnection and Resilience Project. The RCD has steadily brought together investments from State Parks and members of the Science Panel on Pescadero

Marsh to expand and develop consensus on how best to move toward restoring the health of the marsh and upstream watershed. The integrated solutions vision outlined in the RCD's report, *Solutions to Flooding at Pescadero Creek Road* (cbec and Stillwater Sciences 2014), included both input from the comunuity and a multi-agency Technical Advisory Committee. Projects like the RCD's Butano Creek Floodplain Restoration on Peninsula Open Space Trust land reconnected floodplain on one mile of Butano Creek and will trap sediment upstream of the marsh. The partnership leading to the proposed habitat restoration project in the California State Parks' Pescadero Marsh Natural Preserve stands to create significant positive impact for the restoration of steelhead and Coho habitat as well as additional positive benefit for reducing vulnerability to extreme weather events and flood hazards for the coastal community in Pescadero. NOAA's support of this project will ensure full and successful completion.

Thank you for your consideration of the proposed project.

Sincerely,

MARC BERMAN Assemblymember, 24th District

Speaker Pro Tempore KEVIN MULLIN

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Board of Directors

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President

Walter T. Moore

March 8, 2017

Lisa Warr Office for Coastal Management National Oceanic and Atmospheric Administration 1305 East-West Hwy, N/OCM6 Silver Spring, MD 20910

Re: Support for San Mateo Resource Conservation District Application for a Coastal Resilience Program Grant for the Butano Channel Restoration and Resilience Project

Dear Ms. Warr:

I am writing on behalf of Peninsula Open Space Trust (POST) to express strong support for the San Mateo Resource Conservation District's (RCD) grant application to the 2017 Coastal Resilience Program for the Butano Channel Restoration and Resilience Project.

If funded, this project will implement urgently needed habitat restoration and passage improvements for federally protected Central Coast Coho salmon and steelhead trout, with the complimentary benefit of reducing flooding in the coastal community of Pescadero. In addition to anadromous fish, the project will enhance ecological values for many other protected species of concern, and is an essential component of a multi-faceted, watershedscale restoration effort.

Implementation of this project will leverage the benefits of a partnership effort by the RCD and POST to restore 100 acres of wetland habitat and 1 mile of Butano Creek upstream of Butano Marsh. That project is reconnecting the creek with its floodplain and will ultimately hold back 500,000 cubic yards (150,000 tons) of sediment from the marsh. For more information about this project, including a brief video, please visit our website at https://openspacetrust.org/blog/butano-creek/.

POST's mission is to protect and care for open space, farms and parkland in and around Silicon Valley. Across the San Francisco Peninsula and Santa Cruz Mountains, POST is conserving coastal land, redwood forests, wildlife habitat, vital water resources, and farm and ranch land. Since its founding in 1977, POST has protected over 75,000 acres, including 900 acres directly upstream of Butano Marsh.

POST has tremendous confidence in the RCD's ability to successfully complete this project. The San Mateo RCD regularly implements high priority, complex restoration projects with multiple stakeholders and partners in ecologically sensitive areas. POST is grateful to have such a strong partner in San Mateo, and fully supports this project.

Sincerely,

ET. Moore

Walter T. Moore President

Peninsula Open Space Trust

222 High Street Palo Alto, CA 94301 openspacetrust.org (650) 854-7696





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



March 13, 2017

NOAA Office for Coastal Management 1305 East-West Hwy, N/OCM6, Room 10626 Silver Spring, MD 20910

Dear Grant Review Committee:

Subject: Letter of Support for the Resource Conservation District of San Mateo County's Proposed Butano Channel Reconnection and Resilience Project

The California Department of Fish and Wildlife (CDFW) hereby supports the Resource Conservation District of San Mateo County's (RCD) proposed restoration project through the National Oceanic and Atmospheric Administration (NOAA) Coastal Resilience Grant Program. As a partner in restoration and participant in multiple Technical Advisory Committees, we are pleased to collaborate on the proposed Butano Channel Reconnection and Resilience Project (Project) in the Pescadero Creek Watershed. The proposed Project's main overarching goal is to improve salmonid passage through lower Butano Creek, which has been severally degraded due to sediment aggradation near the lagoon interface for decades. The Project also involves additional side benefits including: improving in-channel aquatic habitat complexity and improving chronic flooding of Pescadero Creek Road through the Town of Pescadero.

The RCD has made substantial efforts, alongside stakeholders and the community, to improve system processes and ecological function throughout the Pescadero-Butano Watershed by recently implementing a project that reconnected Butano Creek to 10 percent of its historic floodplain, creating sediment storage upstream of the marsh and improving creek habitat complexity. While the goal of this proposed Project is to alleviate the sediment blockage in the lower creek, restoration of upstream fluvial processes that will increase upstream sediment storage, reduce sediment delivery, and supply suitable stream habitat for salmonids is also important to continue to reduce the likelihood of this problem repeating itself.

Pescadero Creek is currently identified as a priority target recovery area for Central California Coast Coho Salmon and Central California Coast Steelhead Trout in the NOAA Fisheries Recovery Plans and a priority for reducing sediment in the Total Maximum Daily Load plan for Pescadero Creek. The Project was identified as a high priority through the county-wide Integrated Watershed Restoration Program (IWRP). CDFW has provided technical assistance that supports this. CDFW has also been monitoring the aquatic populations in Pescadero Creek Lagoon Complex as part of our Sport Fish Restoration Act grant deliverables.

Thank you for this opportunity to support this important project. We look forward to partnering with the RCD on the Project. If you wish to discuss this matter further, please contact Mr. Jon Jankovitz, District Fisheries Biologist, at (510) 853-1054 or <u>Jon.Jankovitz@wildlife.ca.gov</u>; or Mr. George Neillands, Senior Environmental Scientist (Supervisory), at (707) 576-2812 or <u>George.Neillands@wildlife.ca.gov</u>.

Sincerely,

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Scott Wilson Regional Manager Bay Delta Region

Conserving California's Wildlife Since 1870