

CALIFORNIA OCEAN  
PROTECTION COUNCIL

Staff Recommendation  
June 10, 2005

**San Francisco Bay Eelgrass and Native Oyster Restoration**

Developed By: Abe Doherty

**RECOMMENDED ACTION:** Consideration of the San Francisco Bay Eelgrass and Native Oyster Restoration Projects, and possible: 1) determination that they are high priority projects, and 2) authorization for the Council's Secretary to take actions needed to provide for their planning and development.

**OCEAN or COASTAL LOCATION:** Various locations throughout San Francisco Bay.

**AGENCY OR ENTITY RECOMMENDING PROJECT:** State Coastal Conservancy.

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**EXHIBITS**

Exhibit 1: Letters of Support

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**RESOLUTION:**

“The Ocean Protection Council finds pursuant to Sections 35600 *et seq.* of the Public Resources Code that the San Francisco Bay Eelgrass and Native Oyster Restoration Projects, as herein described, are of high priority for ocean conservation and authorizes the Secretary to take actions necessary for project planning and development, including the allocation of up to \$350,000 of ocean protection funds reserved by the Coastal Conservancy for use in these Projects.”

**PROJECT DESCRIPTION:**

Eelgrass and native oysters are foundational species that provide habitat for a diverse assemblage of native species, including economically-significant fisheries such as Pacific herring. Eelgrass and native oysters also improve water quality. These valuable resources have, however, suffered degradation in San Francisco Bay due largely to the impacts of development.

Both the Pew and the U.S. Commission on Ocean Policy reports identify restoration of coastal habitat as integral to ocean and coastal management. Consistent with these recommendations, the proposed Projects consist of planning and development of separate pilot eelgrass and pilot native oyster restoration projects in San Francisco Bay. Eelgrass restoration project tasks will include identifying suitable restoration site locations, and designing and testing appropriate restoration methodologies and techniques via pilot projects. Results will be used to determine

SAN FRANCISCO BAY  
EELGRASS AND NATIVE OYSTER RESTORATION PROJECTS

which restoration techniques and methods are most successful in San Francisco Bay. Native oyster restoration project tasks will include surveying oyster distribution, collecting data on diseases and predators, and developing a baywide restoration plan. Project work will be carried out by the Coastal Conservancy in partnership with the National Oceanic and Atmospheric Administration (NOAA) and San Francisco State University (SFSU), and in collaboration with the numerous organizations already involved in habitat restoration in the Bay.

Staff recommends that the Ocean Protection Council find that the San Francisco Bay Eelgrass and Native Oyster Restoration Projects are of high priority and authorize the Secretary to the Council to take actions necessary to provide up to \$350,000 for project planning and development.

**PROJECT FINANCING**

**Possible Funding Sources:**

Coastal Conservancy	\$350,000
NOAA (cash match)	<u>\$400,000</u>
<b>Total Project Cost</b>	<b>\$750,000</b>

On May 18, 2005, the State Coastal Conservancy reserved up to \$5,000,000 of its available funds to be expended in concert with the Council for programs and projects that the Council finds to be of high priority, and that are also consistent with the Coastal Conservancy's project criteria, priorities, and funding sources. The Conservancy is prepared to encumber up to \$350,000 of these reserved funds for purposes of the Projects under interagency agreements and contracts with environmental services professionals and others, including SFSU, if the Council finds these Projects to be of high priority. In addition, NOAA has provided over \$400,000 toward eelgrass and native oyster pilot restoration projects in San Francisco Bay, and will provide significant in-kind contributions of staff and equipment.

**CONSISTENCY WITH CALIFORNIA'S OCEAN ACTION STRATEGY:** The proposed projects are consistent with Action Item No. 13 in that it addresses water quality and restoration of threatened and degraded habitats in San Francisco Bay, consistent with Sections A and C in Appendix I.

**CONSISTENCY WITH OCEAN PROTECTION COUNCIL'S INTERIM PROJECT SELECTION CRITERIA & GUIDELINES:**

**Mandatory Criteria**

- 1. Furthers the following statutory purposes and policies of the Ocean Protection Act:**
  - **Improves management, conservation, and protection of coastal waters and ocean ecosystems:** The proposed projects will develop and improve techniques to restore eelgrass and develop a comprehensive plan to restore native oysters in San Francisco Bay, thereby improving management, conservation and protection of these resources.
  - **Encourages those activities and uses that are consistent with sustainable, long-term protection and conservation of ocean and coastal resources:** The proposed projects will develop and improve techniques to restore eelgrass and develop a comprehensive

SAN FRANCISCO BAY  
EELGRASS AND NATIVE OYSTER RESTORATION PROJECTS

plan to restore native oysters in San Francisco Bay, thus directly contributing to long-term sustainability, protection, and conservation of these resources.

- **Promotes aesthetic, educational and recreational uses of the coast and ocean:** The proposed projects will develop and improve techniques to restore eelgrass and develop a comprehensive plan to restore native oysters in San Francisco Bay, thus helping to ensure the long-term presence of these resources in San Francisco Bay for aesthetic, educational and recreational pursuits.
  - **Improves monitoring, data gathering, and advances in scientific understanding of the ocean and coastal environment:** The proposed projects will develop and improve techniques to restore eelgrass and develop a comprehensive plan to restore native oysters in San Francisco Bay, thus gathering data about and advancing the collective understanding of these resources and their restoration.
  - **Improves the health of fish and fosters sustainable fisheries in ocean and coastal waters:** Eelgrass and native oysters are foundational species that provide habitat for a diverse assemblage of native species, including economically-significant fisheries such as Pacific herring. The proposed projects will develop and improve techniques to restore eelgrass and develop a comprehensive plan to restore native oysters in San Francisco Bay, thus improving the resources upon which many species of fish rely.
  - **Helps to integrate and coordinate the state's laws and institutions responsible for protecting and conserving ocean and coastal resources:** The proposed projects will be carried out by the Coastal Conservancy in partnership with NOAA and SFSU, and in collaboration with the numerous organizations already involved in habitat restoration in the Bay, including the San Francisco Bay Conservation and Development Commission, the California Department of Fish and Game, the Romberg Tiburon Center, the Bodega Marine Laboratory, the University of California at Davis, Save the Bay, Audubon Center, the Marine Science Institute, and the Marin Rod and Gun Club.
  - **Helps to coordinate the collection and sharing of scientific data:** As stated above, the proposed projects will be conducted in collaboration with the numerous organizations involved in habitat restoration in the Bay, thus helping to coordinate the collection and sharing of scientific data related to eelgrass and native oyster restoration.
2. **Consistent with the purposes of the funding source:** See Project Financing Section above.
  3. **Has demonstrable support from the public:** The proposed projects are supported by state legislators, research institutions, non-governmental organizations, and federal and state government agencies. Letters of support are attached as Exhibit 1.
  4. **Relates directly to the ocean, coast, associated estuaries, and coastal-draining watersheds:** The proposed projects will take place entirely within San Francisco Bay.
  5. **Has greater-than-local interest:** San Francisco Bay is a major California estuary whose ecological health and productivity is of regional, state, and national interest. For example, San Francisco Bay is part of the National Estuarine Research Reserve system.

**Additional Criteria**

1. **The project has an element of urgency (there is an immediate threat to a coastal/ ocean resource from development or natural or economic conditions, a pressing need, or a fleeting opportunity):** San Francisco Bay is heavily impacted by introduced exotic species.

SAN FRANCISCO BAY  
EELGRASS AND NATIVE OYSTER RESTORATION PROJECTS

The proposed projects to enhance the populations of eelgrass and native oysters will help support the survival of other native species that depend on them.

2. **The project involves innovation (e.g. environmental or economic demonstration):** One of the goals of the proposed projects is to evaluate the effectiveness of new restoration techniques for eelgrass and native oysters.
3. **The project is ready to implement (grantee or contractor will start and finish the project in a timely manner):** The proposed projects are ready to be implemented in the summer and fall of 2005.
4. **The project involves a combination of local, state, or federal agencies or is a public/private partnership:** Numerous organizations have enthusiastically been involved in the development of eelgrass and native oyster restoration projects in San Francisco Bay, including NOAA, the California State Coastal Conservancy, the San Francisco Bay Conservation and Development Commission, the California Department of Fish and Game, SFSU, the Romberg Tiburon Center, the Bodega Marine Laboratory, the University of California at Davis, Save the Bay, Audubon Center, the Marine Science Institute, and the Marin Rod and Gun Club.

SAN FRANCISCO BAY  
EELGRASS AND NATIVE OYSTER RESTORATION PROJECTS  
EXHIBIT 1 FINAL

DISTRICT OFFICE  
455 GOLDEN GATE AVENUE  
SUITE 14900  
SAN FRANCISCO, CA 94107  
415.557.1200  
FAX 415.557.1252

California State Senate

SENATOR  
CAROLE MIGDEN  
THIRD SENATE DISTRICT



June 7, 2005

Michael Chrisman, Chairman  
Ocean Protection Council  
Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento CA 95814

Dear Mr. Chrisman,

I am writing in strong support of the California Ocean Protection Council designating as a high priority projects to restore eelgrass and native oysters in San Francisco Bay. In my district, there is strong community support for these projects, as demonstrated through the work in the past couple of years by the Audubon Society and the Marin Rod and Gun Club to implement small oyster restoration projects along the Marin shoreline. Eelgrass and native oyster beds provide valuable nearshore habitats for other native species, including economically significant fisheries such as Pacific herring. Although eelgrass and native oyster beds are important in their roles as nurseries, improving water quality and providing shoreline protection, these habitats have been degraded and relatively little money has been invested in efforts to enhance and restore them.

The California Coastal Conservancy has developed projects costing \$350,000 to address the crucial needs for restoration of these habitats at this time. Planning is necessary to collect important data, evaluate sites to identify suitable locations for restoration of these habitats and design appropriate methodologies and techniques. Pilot projects will test various restoration techniques to identify the methods that are most successful in San Francisco Bay. Our investment in these projects will be matched by federal grants of approximately \$400,000, through the National Oceanic and Atmospheric Administration's Community Restoration Center and the Cooperative Institute for Coastal and Estuarine Environmental Technology.

I hope you will give serious consideration to designating projects to restore eelgrass and native oysters in San Francisco Bay as a high priority.

Sincerely,

A handwritten signature in black ink, appearing to read "Carole Migden".

Carole Migden  
Member, State Senate

Cc: Sam Schuchat, Coastal Conservancy, 1330 Broadway, 11<sup>th</sup> Floor, Oakland, CA 94612-2530

STATE CAPITOL  
P.O. BOX 942849  
SACRAMENTO, CA 94249-0006  
(916) 319-2006

DISTRICT OFFICE  
3501 CIVIC CENTER DRIVE  
ROOM 412  
SAN RAFAEL, CA 94903  
(415) 479-4920  
(707) 576-2631

June 7, 2005

Assembly  
California Legislature

**JOE NATION**

ASSEMBLYMAN, SIXTH DISTRICT  
Representing Marin and Sonoma Counties

*Director, Office of Policy Planning and Research*



STANDING COMMITTEES:  
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AND THE ECONOMY

Michael Chrisman, Chairman  
Ocean Protection Council, Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento CA 95814

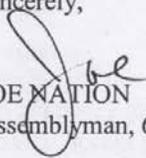
Dear Mr. Chrisman:

I am writing to add my support for the California Coastal Conservancy's projects to restore eelgrass and native oysters in San Francisco Bay. In my district, there is strong community support for these projects, as demonstrated through the work in the past couple of years by the Audubon Society and the Marin Rod and Gun Club to implement small oyster restoration projects along the Marin shoreline. Eelgrass and native oyster beds provide valuable near-shore habitats for other native species, including economically significant fisheries such as Pacific Herring. Although eelgrass and native oyster beds are important in their roles as nurseries, improving water quality and providing shoreline protection, these habitats have been degraded and relatively little money has been invested in efforts to enhance and restore them.

The California Coastal Conservancy has developed projects costing \$350,000 to address the crucial needs for restoration of these habitats. Planning is necessary to collect data, evaluate sites and design appropriate methodologies and techniques. Pilot projects will test various restoration techniques to identify the methods that are most successful in San Francisco Bay. Our investment in these projects will be matched by federal grants of approximately \$400,000, through the National Oceanic and Atmospheric Administration's Community Restoration Center and the Cooperative Institute for Coastal and Estuarine Environmental Technology.

I hope you will do everything possible to secure funding for the restoration of these habitats. If I can provide any further information or assistance, please do not hesitate to contact me.

Sincerely,

  
JOE NATION  
Assemblyman, 6<sup>th</sup> District

JN:mwl  
R1

Cc: Sam Schuchat, California Coastal Conservancy

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JUN 08 2005

COASTAL CONSERVANCY  
OAKLAND, CALIF.



**Loni Hancock**

ASSEMBLYWOMAN, FOURTEENTH DISTRICT

June 7, 2005

Michael Chrisman  
Chairman  
Ocean Protection Council  
Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento CA 95814

**COMMITTEES:**  
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PREVENTION, CHAIR  

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JOINT LEGISLATIVE BUDGET  

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SELECT COMMITTEE ON BRIDGING  
THE ACHIEVEMENT GAP, CHAIR

Dear Mr. Chrisman:

I am writing to express my support of the California Ocean Protection Council designating as a high priority projects to restore eelgrass and native oysters in San Francisco Bay. In my district, there is community support for these projects, as demonstrated through the work in the past couple of years by the Audubon Society, and Save the Bay on native oyster projects in San Francisco Bay. Eelgrass and native oyster beds provide valuable nearshore habitats for other native species, including economically significant fisheries such as Pacific herring. Although eelgrass and native oyster beds are important in their roles as nurseries, improving water quality and providing shoreline protection, these habitats have been degraded and relatively little money has been invested in efforts to enhance and restore them.

The California Coastal Conservancy has developed projects costing \$350,000 to address the crucial needs for restoration of these habitats at this time. Planning is necessary to collect crucial data, evaluate sites to identify suitable locations for restoration of these habitats and design appropriate methodologies and techniques. Pilot projects will test various restoration techniques to identify the methods that are most successful in San Francisco Bay. Our investment in these projects will be matched by federal grants of approximately \$400,000 through the National Oceanic and Atmospheric Administration's Community Restoration Center and the Cooperative Institute for Coastal and Estuarine Environmental Technology.

I hope you will give serious consideration to designating projects to restore eelgrass and native oysters in San Francisco Bay as a high priority. These projects are vital to on-going efforts to improve the health of one of our most valuable resources. Please feel free to contact me if you have any questions.

Respectfully,

  
LONI HANCOCK  
Assemblywoman

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JUN 09 2005  
COASTAL CONSERVANCY  
OAKLAND, CALIF.

Cc: Sam Schuchat, Coastal Conservancy, 1330 Broadway, 11<sup>th</sup> Floor, Oakland, CA 94612-2530



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE

June 7, 2005

Michael Chrisman  
Chairman of the Ocean Protection Council  
Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento, CA 95814

Dear Michael Chrisman,

The National Marine Fisheries Service (NOAA Fisheries) Restoration Center would like to submit our support to the Ocean Protection Council for the enhancement of subtidal habitats, in particular eelgrass and oysters, within San Francisco Bay. NOAA Fisheries believes that the projects being recommended to the Council on June 10, 2005 will enable resource agencies, scientists, and the public, to plan for future restoration actions that will improve the quality and function of these important ecological systems.

Eelgrass and oyster beds offer valuable subtidal habitat by providing feeding, escape, or breeding habitat for many species of invertebrates, fish, and waterfowl. The pilot projects being proposed support NOAA's objectives to expand scientific information on the Bay's subtidal areas and enhance commercial and recreational fisheries. Restoration Center efforts in the Bay include the inventory of subtidal areas, identification of eelgrass and oyster restoration sites, and development of new restoration techniques. Over the past two years NOAA has provided financial and technical support and will continue to provide Federal funding and remain engaged in the restoration of these important species and habitats.

We hope that the Ocean Protection Council will consider NOAA's support for these pilot projects and recommend the use of state bond funds for the planning and implementation of eelgrass and oyster restoration. We believe that a cooperative multi-agency approach is the most effective way to address San Francisco Bay's diverse restoration challenges.

Thank you

Respectfully,

Patrick J. Rutten  
NOAA Restoration Center Supervisor  
Southwest Region

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JUN 09 2005

COASTAL CONSERVANCY  
OAKLAND, CALIF.

Cc: Mr. Sam Schuchat – Executive Director, Coastal Conservancy





DEPARTMENT OF FISH AND GAME

MARINE REGION

20 Lower Ragsdale Drive, Suite 100

Monterey, California 93940

(831) 649-2870

<http://www.dfg.ca.gov>



May 17, 2005

Douglas Bosco, Chairman  
California Coastal Conservancy  
1330 Broadway, 11th Floor  
Oakland, CA 94612-2530

Dear Mr. Bosco:

I am writing to express California Department of Fish and Game's (Department) support for the San Francisco Bay Conservancy (Conservancy) Program's preparation of a native oyster restoration plan for San Francisco Bay. Department staff has been communicating with the Conservancy's Mr. Abe Doherty regarding the project.

The project includes assimilation of existing information, convening a workshop for discussion of issues affecting restoration design, collecting additional data as needed, producing GIS-based figures to graphically display information on crucial factors in native oyster survival in the bay and developing recommendations for locations and techniques to be used for future restoration projects. Native oysters historically performed important ecosystem services in San Francisco Bay and many other bays and estuaries throughout California.

The Department of Fish and Game supports Conservancy efforts to restore native oyster populations and we look forward to working with the Conservancy on this issue. If you have any questions, please contact Mr. Jim Moore, Senior Fish Pathologist in the Department's Marine Region Bodega Field Office at 2099 Westside Road, Bodega Bay, California, 94923, or by phone at (707) 875-2067, or by email at [jimmoore@ucdavis.edu](mailto:jimmoore@ucdavis.edu).

John Ugoretz

Nearshore Ecosystem Coordinator  
Marine Region- Monterey

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cc: See page 2

MAY 18 2005

*Conserving California's Wildlife Since 1870*

COASTAL CONSERVANCY  
OAKLAND, CALIF.



Making San Francisco Bay Better

June 7, 2005

Michael Chrisman  
Chairman  
Ocean Protection Council  
Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento, CA 95814

Dear Mr. Chrisman;

I am writing to support the California Coastal Conservancy's Eelgrass and Native Oyster Restoration Project in San Francisco Bay as a high priority project for the California Ocean Protection Council.

The San Francisco Bay Conservation and Development Commission (Commission) has regulatory authority over filling and dredging projects in the San Francisco Bay. In 2002, the Commission revised its *San Francisco Bay Plan* to add new policies specifically regarding the Bay's subtidal areas. In addition to supporting protection of important subtidal areas of the Bay (such as eelgrass beds), the policies also recognize that major gaps in scientific knowledge exist and thus, support and encourage expansion of scientific information on the Bay's subtidal areas. Accordingly, the Commission, in partnership with NOAA Fisheries and numerous other state and federal agencies, has undertaken the San Francisco Bay Subtidal Habitat Goals Project, the purpose of which is to characterize the biological and physical properties of the Bay's subtidal areas and establish a comprehensive, long-term management vision to balance protection, restoration and appropriate use of San Francisco Bay.

The Eelgrass and Native Oyster Restoration Project in San Francisco Bay will greatly improve scientific understanding of restoration techniques for valuable shallow subtidal habitats. Eelgrass beds provide food, shelter and spawning grounds for many Bay fish and invertebrates. In addition, we are in danger of losing the remnant important native oyster populations in the Bay. The results of the Eelgrass and Native Oyster Restoration Project will directly feed into the Subtidal Habitat Goals Project and will help inform the development of a coordinated subtidal areas management strategy for multiple state and federal resource management agencies, thereby protecting the long-term health and public resource values of the Bay's ecosystem. We, therefore, urge you to designate the Eelgrass and Native Oyster Project in San Francisco Bay a high priority for the Ocean Protection Council.

Sincerely,

A handwritten signature in black ink, appearing to read 'Will Travis', is written over a horizontal line. The signature is fluid and cursive in style.

WILL TRAVIS  
Executive Director



## San Francisco Bay National Estuarine Research Reserve

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*Romberg Tiburon Center, 3152 Paradise Drive, Tiburon, CA 94920-1205  
Tel (415) 338-3703 Fax (415) 435-7120*

I am writing to express my strong support for the **San Francisco Bay Eelgrass and Native Oyster Restoration Projects**. The San Francisco Bay National Estuarine Research Reserve (SF Bay NERR) is a federally-designated Marine Protected Area, and our core mission is advancing science, management, and education related to our regional estuaries. We believe the proposed Eelgrass and Oyster Restoration Projects will fundamentally contribute to the understanding, protection, and restoration of the region's threatened estuaries and coastal habitats.

One of the principal goals of NOAA's National Estuarine Research Reserve System is to facilitate research that will increase our ability to achieve better science-based stewardship of coastal ecosystems. Here at the San Francisco Bay NERR, we are just beginning to establish baseline and reference data with which to both detect habitat changes and assess restoration success. We need the best possible research to help us steer these efforts. The Eelgrass and Oyster Restoration Projects address a critical yet understudied and rarely-targeted component of the ecosystem, subtidal habitats. These subtidal habitats are increasingly being shown to be intimately connected to the health of the more often protected and restored intertidal habitats. I believe that this work will contribute to helping us manage, protect, and restore coastal habitats specifically here in San Francisco Bay, but also more broadly throughout California.

I should add that another important mission of the SF Bay NERR is dissemination of information regarding regional research, and results of the proposed work could be made available to the bay science community and others, leveraging the staff and infrastructure of the reserve. We will be happy to highlight the results of this project in workshops and discussions with a range of audiences.

Again, I would like to voice our strong support for this proposal.

Sincerely,

Dr. Drew Talley  
Research Coordinator



## Romberg Tiburon Center

for Environmental Studies  
San Francisco State University  
3152 Paradise Dr., PO Box 855  
Tiburon, CA 94920-0855

Alissa J. Arp, Ph.D.  
Director & Professor of Biology  
Office: (415) 338-1182  
Fax: (415) 435-7120  
E-mail: aarp@sfsu.edu

June 1, 2005

Michael Chrisman  
Chairman, Ocean Protection Council  
The Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento CA 95814

Dear Dr. Chrisman,

I am writing in support of the proposed Eelgrass and Native Oyster Restoration Project in San Francisco Bay, which will be considered for designation as a high priority by the Ocean Protection Council at its June 10, 2005 meeting. The eelgrass work, if funded, will be based at the Romberg Tiburon Center for Environmental Studies, a field station of San Francisco State University, where I am professor and director. The eelgrass project lead, Dr. Katharyn Boyer, has obtained funding for related work on eelgrass restoration experimentation through NOAA. Additional funding through the California Coastal Conservancy would greatly increase the impact of this work on restoration and conservation of eelgrass habitats in San Francisco Bay.

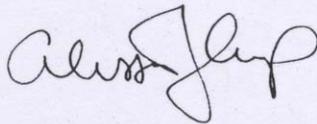
It is especially exciting to see subtidal habitats being considered for funding and support in San Francisco Bay. The role of eelgrass as a foundation species that creates structure for myriad other species is well known, but the constraints on extant populations as well as opportunities for bay-wide population expansion through restoration are poorly understood. Eelgrass beds cover <1200 ha (1% of submerged land) of the bay, yet current biophysical modeling efforts indicate that nearly 14,000 ha of bottom area may now be suitable habitat for eelgrass, and recent surveys have found eelgrass in new areas that may have recently become habitable. Restoration measures could proactively advance the trend of population expansion in the bay; however, transplanting adult plants for experimentation and restoration purposes have been relatively unsuccessful. Seeding techniques may lead to greater success, but none have been attempted in the bay to date.

Dr. Boyer and colleagues are planning to experimentally evaluate the use of "buoy deployed seeding", which simulates long distance dispersal of detached flowering shoots and takes advantage of the natural slow release of seeds as they mature within the shoot. This work will evaluate several source populations and several restoration sites to test the importance of proximity (i.e., adaptation to local conditions) and the success of perennial versus annual donor plants (the latter grow from seed, flower, and die in the same year; common in the bay) in establishing new, self-sustaining beds. Through the Coastal Conservancy funding, the eelgrass project will be expanded to include additional

restoration sites, to compare an additional restoration technique using seeds (gel-injection seeding), to monitor existing beds to help inform future restoration and conservation efforts, and to enhance outreach and participation of the local non-profit organization, Save the Bay.

I whole-heartedly support the funding of this much needed study of the San Francisco Bay subtidal zone. As the only marine science field station situated on the bay, the Romberg Tiburon Center is an exceptional facility at which to base the proposed eelgrass research, with boats, tanks, and laboratories at the ready. In addition, our full-time outreach coordinator will be participating in dissemination of the results through workshops and publication of proceedings. As a marine scientist and environmental steward, I am thrilled that subtidal research and restoration in the bay is beginning to receive the attention it deserves, and commend your vision in considering this work as a top funding priority.

Sincerely,



Alissa J. Arp, Director and Professor of Biology  
Romberg Tiburon Center for Environmental Studies  
San Francisco State University

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JUN 06 2005

COASTAL CONSERVANCY  
OAKLAND, CALIF.



24 The Plaza Drive  
Berkeley, CA 94705  
Tel: 510-601-1082  
www.audubon.org

June 1, 2005

Michael Chrisman  
Secretary  
The Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento CA 95814

Dear Mike,

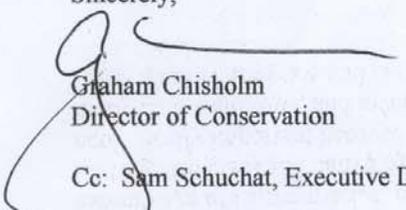
In your capacity as Chairman of the Ocean Protection Council, I am writing on behalf of Audubon California's 60,000 members to express strong support for the Eelgrass and Native Oyster Restoration Project in San Francisco Bay.

Eelgrass and native oysters are foundational species that provide habitat for a diverse assemblage of native species, including economically significant fisheries, such as Pacific herring. Eelgrass and native oyster beds are highly productive communities, and are ecologically important because they act as a nursery, habitat, and feeding ground for many fish, waterfowl, and invertebrates. Both eelgrass and native oysters also improve water quality. Eelgrass and native oyster habitat in San Francisco Bay have been degraded due to development in and around San Francisco Bay. This project will help advance efforts to restore these valuable habitats.

San Francisco Bay is North America's most biologically rich estuary, and to date the bay's sub tidal community has not received sufficient focus. The Eelgrass and Native Oyster Restoration Project is an important step in this direction, and Audubon California looks forward to working with the Coastal Conservancy, the National Oceanic and Atmospheric Administration, and other public agencies to conserve and restore this important cornerstone natural community.

Audubon California appreciates your consideration of this project. Thank you.

Sincerely,

  
Graham Chisholm  
Director of Conservation

Cc: Sam Schuchat, Executive Director of the Coastal Conservancy

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JUN 03 2005

COASTAL CONSERVANCY  
OAKLAND, CALIF.

350 Frank H. Ogawa Plaza, Suite 900  
Oakland, CA 94612-2016

t. 510.452.9261  
f. 510.452.9266

www.saveSFbay.org

May 31, 2005

Michael Chrisman, Chairman  
Ocean Protection Council  
California Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento CA 95814

Dear Mr. Secretary:

I am writing to request the Ocean Protection Council's support for the Eelgrass and Native Oyster Restoration Project in San Francisco Bay. Save The Bay is the largest and oldest organization working exclusively to protect, restore and celebrate San Francisco Bay, with more than 10,000 members. The Bay Area's economy and quality of life depend on a healthy and vibrant Bay, and our work to make the Bay cleaner and healthier has yielded important success. The Bay now provides millions of dollars in economic benefits annually from tourism and commerce, and preserved recreation and beauty for the region.

As you know, extensive efforts over the past decade have significantly advanced planning and restoration of thousands of acres of tidal marsh and related terrestrial habitats around San Francisco Bay and the Sacramento/San Joaquin Delta. Now restoration and enhancement of subtidal habitats, including eelgrass and native oysters, needs a similar concerted effort to improve the health of this important estuarine ecosystem and to benefit key species,

Eelgrass and native oysters are foundational species that provide habitat for a diverse assemblage of native species, including economically significant fisheries, such as Pacific herring. Both eelgrass and native oysters also improve water quality. Eelgrass and native oyster habitat in San Francisco Bay have been degraded from human development, but techniques have been developed to restore these valuable habitats. Save The Bay's own Native Oyster Restoration project has mobilizing community volunteers to monitor native oyster populations in the Bay through water quality testing, habitat assessment, and oyster shell monitoring.

The State Coastal Conservancy has taken a lead role, in consultation with the National Oceanic and Atmospheric Administration and other resource agencies, on planning and implementation of pilot restoration projects in San Francisco Bay for eelgrass and native oysters. We urge the Ocean Protection Council to establish oyster and eelgrass habitat restoration in San Francisco Bay as a high priority. Thank you very much for your consideration.

Sincerely,

  
David Lewis  
Executive Director

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JUN 03 2005

COASTAL CONSERVANCY  
OAKLAND, CALIF.

**SAVE THE BAY**





## Marin Rod and Gun Club, Inc.

P.O. Box 150900, San Rafael, California 94915-0900

June 8, 2005

Michael Chrisman, Chairman  
Ocean Protection Council  
Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento CA 95814

Dear Mr. Chrisman,

The Marin Rod and Gun Club is strongly committed to habitat restoration in San Francisco Bay and has been actively engaged in oyster research and restoration since the summer of 2004. I am writing in support of the California Ocean Protection Council's initiative to designate eelgrass and native oyster restoration in San Francisco Bay as a high priority project. This summer we will be setting up two small artificial oyster reefs and studying the effectiveness of these reefs as fish habitat. In addition we are supporting efforts to test an innovative eelgrass propagation method on Marin Rod and Gun Club tide lands.

It is our understanding that the California Coastal Conservancy has developed plans that will cost approximately \$350,000 to address the gaps in our knowledge on how to restore the native oyster, evaluate suitable locations for restoration, and design appropriate restoration methodologies and techniques. I sincerely hope you will give serious consideration to designating the California Coastal Conservancy projects to restore eelgrass and native oysters in San Francisco Bay a very high priority.

Please feel free to come and visit us at the Marin Rod and Gun Club and walk out on our amazing pier and see for yourself the progress we are making in native oyster restoration. Do not hesitate to contact me at (415) 256-8005 if you have any questions or suggestions.

Respectfully yours,

A handwritten signature in black ink that reads "Robert R. Abbott". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Robert R. Abbott Ph.D.  
Chairman, Habitat Conservation Committee