

# UNIVERSITY OF CALIFORNIA, DAVIS

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SANTA BARBARA • SANTA CRUZ

SCHOOL OF VETERINARY MEDICINE  
WILDLIFE HEALTH CENTER  
UNIVERSITY OF CALIFORNIA  
(530) 752-4167  
FAX (530) 752-3318  
<http://www.vetmed.ucdavis.edu/whc>

ONE SHIELDS AVENUE  
DAVIS, CALIFORNIA 95616-8734

April 28, 2008

Sam Schuchat, Executive Officer  
California Coastal Conservancy  
13th Floor, 1330 Broadway  
Oakland, CA 94612

Dear Mr. Schuchat:

Please accept this letter as a show of our enthusiastic support for the research project proposal titled, "Investigating the Consequences of Coastal Contamination and Anthropogenic Stressors for Sea Otter Recovery." This project takes the critical next step necessary to improve our understanding of the impacts of coastal change on ocean health and sea otter population health. Funding from the California Sea Otter Fund will provide the financial support necessary for this important project, and we are fully committed to providing our expertise and our resources in the fields of epidemiology and protozoal pathogen ecology to ensure project success. The proposed work seeks to elucidate processes promoting disease in the near shore marine ecosystem and will inform on specific conservation-action recommendations to promote sea otter recovery and improve ocean health. Sea otters have proven to be an excellent sentinel of the impacts of coastal change on ecosystem health, and this work will build on the California Coastal Conservancy's legacy of restoration and ocean protection by providing important direction for ecosystem management.

Respectfully,

Handwritten signature of Christine K. Johnson in cursive.

Christine K Johnson, VMD, PhD

Handwritten signature of Jonna AK Mazet in cursive.

Jonna AK Mazet, DVM, PhD

Handwritten signature of Patricia A Conrad in cursive.

Patricia A Conrad, DVM, PhD  
Wildlife Health Center  
School of Veterinary Medicine  
University of California  
Davis, California 95616

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MAY 01 2008

COASTAL CONSERVANCY  
OAKLAND, CALIF.

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DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY

SANTA CRUZ, CALIFORNIA 95064

1 May, 2008

Sam Schuchat, Executive Officer  
California Coastal Conservancy  
13th Floor, 1330 Broadway  
Oakland, CA 94612

Dear Mr. Schuchat:

I am writing to encourage the California Coastal Conservancy to direct money from the California Sea Otter Fund to support the research project proposal titled, "Investigating the Consequences of Coastal Contamination and Anthropogenic Stressors for Sea Otter Recovery." The multi-disciplinary team that will lead this project possesses the expertise and commitment to accomplish the proposed work, and the resulting data analysis will inform specific conservation-action recommendations—such as managing specific sources of land-based contaminants or routes of land-sea pathogen transmission—that should encourage sea otter population growth and improve ocean health.

Please contact me if you have any questions.

Sincerely,

James A. Estes  
Professor  
Director, STEPS Institute

UNIVERSITY OF CALIFORNIA, SANTA CRUZ



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SANTA BARBARA · SANTA CRUZ

April 10, 2008

Sam Schuchat, Executive Officer  
California Coastal Conservancy  
13th Floor, 1330 Broadway  
Oakland, CA 94612

Dear Mr. Schuchat:

I urge the California Coastal Conservancy to direct money from the California Sea Otter Fund to support the research project proposal titled, "Investigating the Consequences of Coastal Contamination and Anthropogenic Stressors for Sea Otter Recovery." The multi-disciplinary team that will lead this project possesses the expertise and commitment to accomplish the proposed work, and the resulting data analysis will inform specific conservation-action recommendations—such as managing specific routes of land-sea pathogen transmission—that should encourage sea otter population growth and improve ocean health. Big Creek Reserve is currently developing a research program that focuses on land-sea connectivity. We would look forward to assisting the proposed work through logistical support along the Big Sur coast as well as having the opportunity to collaborate and share knowledge.

Please contact me if you have any questions.

Best regards,  
Mark Readdie, Ph.D.  
Resident Director  
Landels-Hill Big Creek Reserve  
University of California at Santa Cruz

SAM FARR  
17TH DISTRICT, CALIFORNIA

1221 LONGWORTH HOUSE OFFICE BUILDING  
WASHINGTON, DC 20515-0517  
(202) 225-2861

COMMITTEE ON APPROPRIATIONS  
SUBCOMMITTEES:  
AGRICULTURE, RURAL DEVELOPMENT, FOOD AND  
DRUG ADMINISTRATION, AND RELATED AGENCIES  
MILITARY CONSTRUCTION  
CO-CHAIR, CONGRESSIONAL ORGANIC CAUCUS  
CO-CHAIR, CONGRESSIONAL TRAVEL AND  
TOURISM CAUCUS  
CO-CHAIR, HOUSE OCEANS CAUCUS

**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515-0517**

100 WEST ALISAL  
SALINAS, CA 93901  
(831) 424-2229  
701 OCEAN STREET  
ROOM 318  
SANTA CRUZ, CA 95060  
(831) 429-1976  
[www.farr.house.gov](http://www.farr.house.gov)

May 16, 2008

Sam Schuchat, Executive Officer  
California Coastal Conservancy  
13th Floor, 1330 Broadway  
Oakland, CA 94612

Dear Mr. Schuchat:

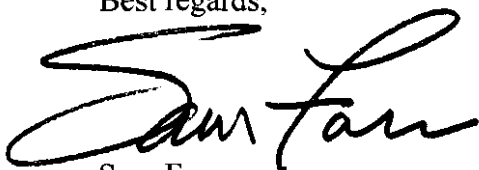
As a champion of the oceans and a lifelong resident of the Central Coast, I urge the California Coastal Conservancy to direct money from the California Sea Otter Fund to support the research project proposal titled, "Investigating the Consequences of Coastal Contamination and Anthropogenic Stressors for Sea Otter Recovery."

For years, I and my staff have worked to assist the U.S. Geological Survey, U.S. Fish and Wildlife Service, California Dept. of Fish and Game, U.C. Davis, the Monterey Bay Aquarium, the University of California, Santa Cruz and other organizations engaged in the research and recovery of the southern sea otter. This multi-disciplinary team that will lead this project possesses the expertise and commitment to accomplish the proposed work. This analysis will inform specific conservation-action recommendations—such as managing specific routes of land-sea pathogen transmission—that should encourage sea otter population growth and improve ocean health.

I have relied on the expertise of the members of this team and recently Dr. Jim Estes and Andy Johnson, testified as expert witnesses before the House Natural Resources Subcommittee on Fisheries, Wildlife, and the Oceans on my bill, the Southern Sea Otter Recovery and Research Act and on the critical research and management necessary to aid in the recovery of the southern sea otter. While I will continue to work to help provide a Federal mandate and funding to help sea otter recovery, the project you have before you will help inform all of us on how best to assist in the recovery of this subspecies and to improve the health of our nearshore ecosystems in California.

Please contact my office if you have any questions.

Best regards,



Sam Farr  
Member of Congress

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MAY 22 2008

COASTAL CONSERVANCY  
OAKLAND, CALIF.

CHAIR  
JUDICIARY

COMMITTEES  
AGRICULTURE  
BUDGET  
HEALTH  
UTILITIES AND COMMERCE

SUBCOMMITTEE  
BUDGET SUBCOMMITTEE ON  
RESOURCES

# Assembly California Legislature



**DAVE JONES**  
ASSEMBLYMEMBER, NINTH DISTRICT  
CHAIR, JUDICIAFY COMMITTEE

STATE CAPITOL  
P.O. BOX 942849  
SACRAMENTO, CA 94249-0009  
(916) 319-2009  
FAX (916) 319-2109

DISTRICT OFFICE  
915 L STREET, SUITE 110  
SACRAMENTO, CA 95814  
(916) 324-4676  
FAX (916) 327-3338

E-MAIL:  
[assemblymember.jones@assembly.ca.gov](mailto:assemblymember.jones@assembly.ca.gov)

WEB:  
[www.assembly.ca.gov/jones](http://www.assembly.ca.gov/jones)

May 30, 2008

Sam Schuchat, Executive Officer  
State Coastal Conservancy  
13th Floor, 1330 Broadway  
Oakland, CA 94612

Dear Mr. Schuchat:

I am writing to urge the State Coastal Conservancy approve grant funds from the California Sea Otter Fund to support the research project, "Investigating the Consequences of Coastal Contamination and Anthropogenic Stressors for Sea Otter Recovery."

The multi-disciplinary and multi-institutional team that will lead this project possesses the expertise and commitment to accomplish the proposed work, and the resulting data analysis will inform specific conservation-action recommendations that should encourage sea otter population growth and improve ocean health.

As such, as hope the Conservancy can act to fund this proposal and help meet the vision we had when we passed Assembly Bill 2485 (Jones and Laird). Californians want to help this iconic species thrive in our nearshore coastal environment and this research proposal will help with that goal.

For these reasons, I fully support their grant request.

Sincerely,



**Dave Jones**  
Assemblymember, District 09

**MARINE MAMMAL COMMISSION**  
4340 EAST-WEST HIGHWAY, ROOM 700  
BETHESDA, MD 20814-4447

30 April 2008

Sam Schuchat, Executive Officer  
California Coastal Conservancy  
13th Floor, 1330 Broadway  
Oakland, CA 94612

Dear Mr. Schuchat:

I write to support a proposal being submitted to you by M.T. Tinker et al. for "Investigating the Consequences of Coastal Contamination and Anthropogenic Stressors for Sea Otter Recovery." I do not know about other proposals soliciting support from the California Sea Otter Fund, so I cannot weigh their relative merits. That being said, the proposed study is potentially very useful and informative, and worthy of your consideration.

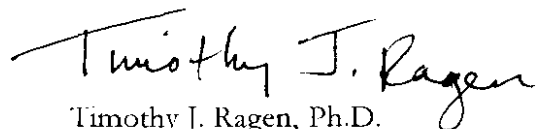
The investigators for this proposal are all highly accomplished scientists with well-deserved, excellent reputations for their research on sea otters, contaminants, and disease. Collectively, their work in California coastal areas has provided insights into sea otter status and ecology that are at the cutting edge of applied marine mammal research. They have taken a multi-disciplinary approach, bringing together a mix of research tools from veterinary medicine, ecology, biology, physiology, pathology, and demography. Their results to date have provided great insights into human/marine mammal interactions in coastal ecosystems.

The work itself is vital to understand not just the sea otter, but the broader ecology of nearshore ecosystems that may be heavily influenced by human activities. The sea otter is remarkable among marine mammals because it is a keystone species that plays a vital role in structuring nearshore ecological communities. The sea otter also is an important indicator species and, to date, sea otter research findings have raised a number of red flags regarding unintended human impacts on nearshore communities.

The work proposed by Tinker et al. is vital to bring the existing information together and provide an integrated, comprehensive perspective on sea otters, their ecological relationships, and their interactions with coastal activities. Such studies are crucial if we are to maintain healthy coastal ecosystems. With that in mind, I urge you to give careful consideration to supporting the Tinker et al. proposal.

Please contact me if I can be of assistance to you during your deliberations.

Sincerely,



Timothy J. Ragen, Ph.D.  
Executive Director

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MAY 02 2008

COASTAL CONSERVANCY  
OAKLAND, CALIF.

PHONE: (301) 504-0087

FAX: (301) 504-0099



U. S. Department of the Interior  
U. S. GEOLOGICAL SURVEY  
Biological Resources Division  
WESTERN ECOLOGICAL RESEARCH CENTER  
3020 State University Dr., East  
Modoc Hall, Room 3006  
Sacramento, CA 95819



April 18, 2008

Sam Schuchat, Executive Officer  
California Coastal Conservancy  
13th Floor, 1330 Broadway  
Oakland, CA 94612

Dear Mr. Schuchat:

This letter is written in strong support of the proposal being submitted by Dr. Tim Tinker et al. entitled "Investigating the Consequences of Coastal Contamination and Anthropogenic Stressors for Sea Otter Recovery" for funds from the California Sea Otter Fund. This project addresses urgent needs to understand coastal ocean health using the southern sea otter as a "sentinel" species to assess changes in coastal ecosystems. Dr. Tinker and the other scientists submitting this proposal have impeccable scientific credentials and are the most qualified experts in the field of sea otter ecology. Collectively, they possess the knowledge, experience and commitment to accomplish the proposed work. The data resulting from this study will inform specific conservation-action recommendations—such as managing specific routes of land-sea pathogen transmission—that should encourage sea otter population growth and improve ocean health. Thus, we believe this work is critical to the future health of our coastal oceans and we support it fully.

Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven Schwarzbach", written in a cursive style.

Steven Schwarzbach, Center Director  
Western Ecological Research Center  
U.S. Geological Survey



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

**Monterey Bay National Marine Sanctuary**  
299 Foam Street  
Monterey, California 93940

April 24, 2008

Sam Schuchat, Executive Officer  
California Coastal Conservancy  
13th Floor, 1330 Broadway  
Oakland, CA 94612

Dear Mr. Schuchat *Sam*

I am pleased to submit this letter from the Monterey Bay National Marine Sanctuary in support of the "Investigating the Consequences of Coastal Contamination and Anthropogenic Stressors for Sea Otter Recovery" a research proposal submitted to the Coastal Conservancy for Southern sea otter research seeking funding from the California Sea Otter Fund. This proposal addresses a high priority issue and management concern for the Monterey Bay National Marine Sanctuary.

The mission of NOAA's Monterey Bay National Marine Sanctuary is to understand and protect the coastal ecosystem of central California. Designated in 1992, the Monterey Bay National Marine Sanctuary (MBNMS) is a Federally protected marine area offshore of California's central coast. Stretching from Marin to Cambria, the MBNMS encompasses a shoreline length of 276 miles and 5,322 square miles of ocean, extending an average distance of 30 miles from shore. At its deepest point, the MBNMS reaches down 10,663 feet (more than two miles). It is our nation's eleventh Marine Sanctuary and its largest—larger than Yosemite or Yellowstone National Parks.

The MBNMS was established for the purpose of resource protection, research, education and public use. Its natural resources include extensive kelp forests, one of North America's largest underwater canyons and the closest-to-shore deep ocean environment in the continental United States. It is home to one of the most diverse marine ecosystems in the world, including 33 species of marine mammals, 94 species of seabirds, 345 species of fishes, and numerous invertebrates and plants. This remarkably productive marine environment is fringed by spectacular coastal scenery, including sandy beaches, rocky cliffs, rolling hills and steep mountains.

The southern sea otter (*Enhydra lutris nereis*) is a key player in this diverse ecosystem, whose ecological and local economic role cannot be overstated. MBNMS through the Sanctuary Integrated Monitoring Network (SIMoN) has supported several studies on sea otters, including research on nutritional constraints in Monterey Bay, contaminant sources in the region, necropsy studies, and foraging studies near Moss Landing. The proposed study by Tinker et al. builds upon these efforts and will bring us closer to understanding the population dynamics of this listed species, whose health is an indicator of overall ecosystem health.



I urge the California Coastal Conservancy to direct money from the California Sea Otter Fund to support this research project. The multi-disciplinary team, including many investigators that continue to work closely with MBNMS and SIMoN, will lead this project with the expertise and commitment to accomplish the proposed work. The resulting data analysis will inform specific conservation-action recommendations—such as managing specific routes of land-sea pathogen transmission—that should encourage sea otter population growth and improve ocean health overall.

Sincerely,

A handwritten signature in black ink that reads "Paul Michel". The signature is fluid and cursive, with the first name "Paul" being larger and more prominent than the last name "Michel".

PAUL MICHEL  
Superintendent  
(831) 647-4201



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MONTEREY BAY AQUARIUM\*

April 22, 2008

Sam Schuchat, Executive Officer  
California Coastal Conservancy  
13th Floor, 1330 Broadway  
Oakland, CA 94612

Dear Mr. Schuchat:

I urge the California Coastal Conservancy to direct money from the California Sea Otter Fund to support the research project proposal titled, "Investigating the Consequences of Coastal Contamination and Anthropogenic Stressors for Sea Otter Recovery." The multi-disciplinary team that will lead this project possesses the expertise and commitment to accomplish the proposed work, and the resulting data analysis will inform specific conservation-action recommendations—such as managing specific routes of land-sea pathogen transmission—that should encourage sea otter population growth and improve ocean health.

The proposed scope of research represents the kind of effort envisioned by the authors of Assembly Bill 2485 and for which the California Sea Otter Fund was established. The alliance of scientists, program managers, and conservationists working on sea otter recovery agrees that the resources available through the California Sea Otter Fund must support the proposed research project, and project investigators realize that the tax funds are critical to the project's success.

Please contact me if you have any questions.

Best regards,

A handwritten signature in cursive script that reads "Andrew B. Johnson".

Andrew B. Johnson, Program Manager  
Sea Otter Research and Conservation  
831-648-1039  
ajohnson@mbayaq.org

Exhibit 5: Project Letters



Marine Program Office  
P.O. Box 959 | Moss Landing, CA 95039 | tel 831.726.9010 | fax 831.726.9020  
[www.defenders.org](http://www.defenders.org) | [www.saveaseotters.org](http://www.saveaseotters.org)

April 29, 2008

Sam Schuchat, Executive Officer  
California Coastal Conservancy  
13th Floor, 1330 Broadway  
Oakland, CA 94612

Dear Mr. Sam Schuchat:

On behalf of Defenders of Wildlife (Defenders) and our over 200,000 members and supporters in California, we would like to urge the California Coastal Conservancy to direct money from the California Sea Otter Fund to support the research project proposal titled, "Investigating the Consequences of Coastal Contamination and Anthropogenic Stressors for Sea Otter Recovery." Defenders greatly appreciates all of the work of the Conservancy and staff to promote the California Sea Otter Fund and to take the time to participate in meetings to discuss southern sea otter research priorities and how best to use the funding that came in from California Taxpayers in 2007 and 2008.

Defenders has worked collaboratively on many levels with the great team of researchers from U.S.G.S, FWS, CDFG, U.C. Davis, the Monterey Bay Aquarium, the University of California, Santa Cruz and other agencies. This is a fantastic team that will get this project done. The multi-disciplinary team that will lead this project possesses the expertise and commitment to accomplish the proposed work, and the resulting data analysis will inform specific conservation-action recommendations—such as managing specific routes of land-sea pathogen transmission—that should encourage sea otter population growth and improve ocean health.

In addition, along with Dr. Jim Estes and Andy Johnson, I was asked to be an expert witness to testify before the House Resources Subcommittee on Fisheries, Wildlife, and the Oceans last week. The main issue was the bill introduced by Congressman Sam Farr ("Southern Sea Otter Recovery and Research Act"), but much of the testimony dealt with the critical research needs facing the southern sea otter and the need for this great team of scientists to move forward on various projects. The project you have before you will help inform all of us on how best to assist in the recovery of this subspecies and to improve the health of our nearshore ecosystems in California.

Please contact me if you have any questions.

Best regards,

**National Headquarters**  
1130 17th Street, N.W.  
Washington, D.C. 20036-4604  
tel 202.682.9400 | fax 202.682.1331

OCEANS PUBLIC TRUST INITIATIVE



a Project of Earth Island Institute's  
International Marine Mammal Project

April 21, 2008

Mr. Sam Schuchat, Executive Officer  
California Coastal Conservancy  
1330 Broadway, 13<sup>th</sup> Floor  
Oakland, CA 94612

Dear Mr. Schuchat:

I am writing to you on behalf of the Oceans Public Trust Initiative (OPTI,) a project of Earth Island Institute's International Marine Mammal Project. OPTI's mission is to ensure that state and federal governments undertake the action necessary to ensure that ocean and coastal areas are managed consistent with the public trust.

We urge the Conservancy to direct money from the California Sea Otter Fund to support the research project proposal titled, "Investigating the Consequences of Coastal Contamination and Anthropogenic Stressors for Sea Otter Recovery."

The multi-disciplinary team that has been assembled to lead this project possesses the expertise and commitment to accomplish the proposed work and the resulting data analysis will inform specific conservation-action recommendations. It is our belief that the end result of this research will help to increase the sea otter population and improve ocean health.

Please let me know if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Cindy Lowry".

Cindy Lowry  
Director

April 20, 2008

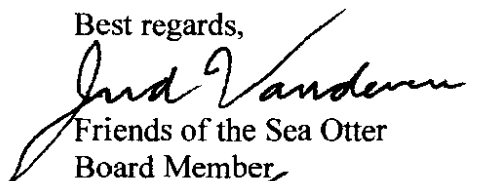

Sam Schuchat, Executive Officer  
California Coastal Conservancy  
13th Floor, 1330 Broadway  
Oakland, CA 94612

Dear Mr. Schuchat:

On behalf of Friends of the Sea Otter, I am writing to support the funding request for the research project proposal titled, "Investigating the Consequences of Coastal Contamination and Anthropogenic Stressors for Sea Otter Recovery." Friends of the Sea Otter has been a leading advocate of science-based conservation efforts for this species for over 40 years, and the proposed project would investigate important issues that should be answered to promote recovery. The multi-disciplinary team that will lead this project possesses the expertise and commitment to accomplish the proposed work, and the resulting data analysis will inform specific conservation-action recommendations – such as managing routes of land-sea pathogen transmission – that should encourage sea otter population growth and improve ocean health. For this reason, Friends of the Sea Otter supports the use of money from the California Sea Otter Fund for the proposed project.

Please contact me if you have any questions. Thank you.

Best regards,

  
Friends of the Sea Otter  
Board Member  


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APR 24 2008

COASTAL CONSERVANCY  
OAKLAND, CALIF.



CENTRAL COAST LONG-TERM ENVIRONMENTAL ASSESSMENT NETWORK

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P. O. BOX 8346 • SANTA CRUZ • CA • 95061-4836 • 831.426.6326



April 22, 2008

Andrew Johnson  
Sea Otter Research and Conservation  
Monterey Bay Aquarium



**RE: Proposal for Investigating the Consequences of Coastal Contamination and Anthropogenic Stressors for Sea Otter Recovery**

Dear Andrew:



I am pleased to write a letter of support for the referenced proposal, which is being submitted to the California Coastal Conservancy. The Central Coast Long-term Environmental Assessment Network (CCLEAN) is a regional water-quality monitoring program in the Monterey Bay area. Among CCLEAN's objectives are the measurement of sources, loads and effects of contaminants discharged into Monterey Bay. CCLEAN has received two grants from the State of California to study the effects of anthropogenic contaminants on the southern sea otter. The sea otter is an ideal sentinel organism for ocean health, because it is restricted to nearshore areas and each otter eats 25% of its weight in prey each day, often including large amounts of filter-feeding invertebrates that tend to accumulate chemical and biological contaminants. Consequently, the sea otter is exposed to chemical and biological contaminants washing into nearshore waters from anthropogenic sources along the California coast. Your proposed work would leverage the results of our previous grant-funded work and provide invaluable information on the affects of anthropogenic contaminants on living otters.



We look forward to the contribution that this important project would make to address environmental problems in the Monterey Bay area.

Sincerely,

Dane Hardin  
Director



City of  
Watsonville