MINUTE ITEM
This Calendar Item No. C64 was approved as Minute Item No. 64 by the California State Lands Commission by a vote of 3 to 0 at its 4-26-05 meeting.

CALENDAR ITEM
C64

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04/26/05
W 9777.234
M. Falkner
D. Brown

REQUEST AUTHORITY TO ENTER INTO AGREEMENT TO CONDUCT INVASIVE SPECIES RESEARCH TO CHARACTERIZE THE TRANSFER OF ORGANISMS ON SHIPS' HULLS FOR SHIPS ARRIVING AT KEY PORT SYSTEMS IN THE WESTERN US

PARTY:

California State Lands Commission
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BACKGROUND:

Shipping has been identified as the major vector of organism transfers on a global scale (Fofonoff *et al.*, 2003). Of the two sub-vectors associated with shipping, there has been huge bias in ecological research toward ballast-mediated transfers of organisms, perhaps at the expense of hull fouling. Hull fouling transfers of organisms are historically and contemporaneously important in aquatic nonindigenous species (NIS) introductions, yet very little quantitative data exist to rigorously examine the current rates, extent, and composition of organism transfers via vessel hulls. The rationale for this project stems from the following factors, all of which suggest that it is both timely and appropriate that quantitative research be conducted to plug the extensive knowledge-gap in this area of invasive species research:

- More than 400 million m^2 of wet hull area (>1.5 area of Vermont) is estimated to arrive in US ports from different biogeographic regions each year and virtually none of this is sampled.
- The effect of ship characteristics, operating conditions and hull husbandry on the extent and composition of biofouling assemblages is not known.
- Factors such as restrictions on the use of antifouling paints, improved harbor water quality, and the effect of harbor design on colonization rates have all recently been suggested as factors that may increase the potential for hull-mediated transfers.
- From a regional perspective, the US West coast has some of the most invaded bays and estuaries in the world, which suggests it is susceptible as a recipient, and potent as a donor, of hull-mediated NIS.

- Ballast water management and research in the US is well advanced relative to hull fouling, and data are required over the coming years to ascertain if species linked to hull fouling become the dominant NIS threats to the US coast.
- Significant articles in the scientific literature that brought attention to hull fouling as a vector were published in 1910 (by Chilton) and 1953 (by Allen). Most of the recent hull fouling work has been carried out in the Antipodes and Europe (*e.g.* James & Hayden 2000; Gollasch, 2002). In the US, the last major study to include commercial vessels was carried out before 1928 (Visscher, 1928). Although recent studies have re-established interest in the topic, notably in Hawaii (Godwin, 2003), a major study of fouling on commercial vessels is overdue.

Despite the clear potential for broad scale transport on ships' hulls, we lack a quantitative assessment of the magnitude of such transfer for biofouling assemblages on ships and the extent to which this varies by ship type, operating conditions, residence times in port, routes, and hull husbandry. Here, Portland State University propose to analyze the extent and composition of biofouling among vessels operating along the U.S. Pacific coast.

The Act requires the State Lands Commission (SLC) to

" . . .. identify and conduct any other research determined necessary to carry out the requirements of this division. The research may relate to the transport and release of nonindigenous species by vessels, the methods of sampling and monitoring of the nonindigenous species transported or released by vessels, the rate or risk of release or establishment of nonindigenous species in the waters of the state and resulting impacts, and the means by which to reduce or eliminate a release or establishment . . .. " (Public Resources Code Section 71213).

PROPOSED ACTIVITY:
To meet this mandate, the Commission's Marine Facilities Division has determined that research to characterize the transfer of organisms on ships' hulls for ships arriving to key port systems in the western US was necessary.

Utilizing funds from the Marine Invasive Species Control Fund budgeted for conducting necessary research, Staff proposes entering into an agreement with Portland State University (PSU) for $100,000 to characterize the potential magnitude of species transfers, using hull surface area as an initial proxy. PSU proposes to estimate the hull surface area for coastwise and overseas arrivals to all major ports of California, Oregon and Washington during a two-year period as a function of vessel type, last port of call, and voyage duration. Additionally, PSU will estimate the extent of hull fouling by ship type, sources, and hull maintenance schedule using a combination of remotely operated

vehicles, diver verification, hull survey companies, and dry dock facilities to sample ship hulls. Per the California State Contracts Manual, Section 3.06, contracts with a state college or university, from California or any other state, are exempt from competitive bid requirements (PCC 10340).

STATUTORY AND OTHER REFERENCES:

A. Public Resources Code Section 6106 (Delegation to Execute written instruments)
B. Marine Invasive Species Act of 2003, Chapter 491, Statutes of 2003
C. State Administrative Manual Section 1200
D. State Contracting Manual (rev 11/04)

OTHER PERTINENT INFORMATION:

1. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines [Title 14, California Code of Regulations, section 15060(c)(3)], the staff has determined that this activity is not subject to the provisions of the CEQA because it is not a "project" as defined by the CEQA and the State CEQA Guidelines.

Authority: Public Resources Code section 21065 and Title 14, California Code of Regulations, sections 15060 (c)(3) and 15378.

RECOMMENDED ACTION:

IT IS RECOMMENDED THAT THE COMMISSION:

1. FIND THAT THESE ACTIVITIES ARE EXEMPT FROM THE REQUIREMENTS OF CEQA PURSUANT TO 14 CAL CODE REGS. 15060(c)(3) BECAUSE THESE ACTIVITIES ARE NOT PROJECTS AS DEFINED BY PUBLIC RESOURCES CODE SECTION 21065 AND 14 CAL CODE REGS. 15378.

2. AUTHORIZE THE EXECUTIVE OFFICER OR HIS DESIGNEE TO AWARD AND EXECUTE CONTRACT WITH PORTLAND STATE UNIVERSITY IN ACCORDANCE WITH STATE POLICIES AND PROCEDURES FOR INVASIVE SPECIES RESEARCH TO CHARACTERIZE THE TRANSFER OF ORGANISMS ON SHIPS HULLS ARRIVING AT KEY PORT SYSTEMS IN THE WESTERN U.S. IN AN AMOUNT NOT TO EXCEED $100,000.