

REPORT OF GENERAL MANAGER

NO. 03-165

DATE May 21, 2003

C.D. _____

BOARD OF RECREATION AND PARK COMMISSIONERS

SUBJECT: APPROVAL FOR CABRILLO MARINE AQUARIUM TO PROVIDE EDUCATIONAL AND EXHIBIT SERVICES FOR \$65,000 UNDER A TWENTY-FOUR MONTH SUBCONSULTANT AGREEMENT WITH IMPACT ASSESSMENT, INC.,

J. Combs _____	J. Kolb _____
*A. Coroalles _____	B. Lukehart _____
J. Duggan _____	H. Fujita _____


General Manager

Approved _____

Disapproved _____

Withdrawn _____

RECOMMENDATION:

It is recommended that the Board:

1. Approve a twenty-four-month subconsulting agreement for up to \$65,000.00, substantially in the form as is on file in the Board Office, with Impact Assessment, Inc., for the Cabrillo Marine Aquarium to provide public education and related exhibit services on the health risks related to DDT contamination in the Cabrillo Beach area, subject to approval of the Mayor in accordance with Executive Directive No. 16, and to City Attorney approval as to form; and,
2. Authorize the General Manager to execute the agreement upon receipt of necessary approvals.

SUMMARY:

For nearly 70 years, the Cabrillo Marine Aquarium (CMA) has promoted knowledge, appreciation, and conservation of the marine life of Southern California. CMA is located on the shore at Cabrillo Beach in San Pedro and is within walking distance of some of the most contaminated fishing areas associated with the Palos Verdes Shelf Superfund site. CMA is dedicated to providing a useful, real-world understanding of the marine environment and is committed to serving as a key source of information concerning coastal DDT

REPORT OF GENERAL MANAGER

PAGE 2

NO. 03-165

(Dichlorodiphenyltrichloroethane), PCB (Polychlorinated Biphenyls), mercury contamination, and associated health risks.

The Palos Verdes Shelf (PVS) is among the largest contaminated ocean sediment sites in the United States. Sediment in the PVS is heavily contaminated with DDT and PCB from industrial discharges from throughout the Los Angeles Basin into the local sewer systems which occurred three to four decades ago. DDT, which was commonly used as an insecticide, was banned for use in the United States in 1972. PCB was widely used in electrical transformers. Studies have shown that DDT and PCB cause long-range interference with normal reproductive function and can result in learning disabilities; therefore, women of childbearing age and children are at particular risk. The fishing pier and beaches at Cabrillo Beach are among the most high-risk fishing areas in the vicinity of the Superfund site because of the abundance of fish species most likely to become contaminated and because of the large number of subsistence anglers and others likely to consume local seafood.

For the past three years, CMA has been participating as a pro-bono member of the Environmental Protection Agency (EPA) sponsored California State Fish Contamination Task Force. The Task Force develops public information and education programs to reduce the public health risk. Two years ago, CMA, along with other agencies, was asked by the Task Force to submit ideas and costs to carry out some of the programs. Ultimately, the various proposal ideas were encompassed into a contract awarded by the EPA to Impact Assessment, Inc. (IAI), in early 2003. This contract to IAI includes an educational programming element which conforms to CMA's mission of serving as "an educational, recreational, and research facility dedicated to providing rich and varied opportunities for early and continuing education of the general public about the marine environment of Southern California."

IAI has allocated funds up to \$65,000 to pay CMA to carry out various educational programs, the specific scope of which, including timeline and costs, is included in EXHIBIT A. CMA will provide 1) direct educational outreach to anglers and visitors to the pier and beaches at Cabrillo Beach over a two-year period, developing enhancements to curriculum already in progress; 2) a permanent pier exhibit; and 3) a traveling exhibit to be used by CMA, by community-based organizations, and by other members of the Fish Contamination Task Force. The period of the subconsulting agreement will be retroactive to March 4, 2003, and extend to February 28, 2005, as detailed in EXHIBIT A.

The work will be performed by CMA exhibit and education staff with the help of trained Sea Ranger volunteers and exhibit designer, Evie Templeton, who is on a personal services contract with CMA through 2003 (Board Report 00-393, approved by the Board on October 18, 2000). A three-year renewal to her personal services contract will be submitted to the Board to allow her services throughout the DDT Pier Education Outreach project. CMA staff will prepare monthly invoices and reports for IAI and deposit payments into CMA's Municipal Recreation Programs (MRP) account to reimburse CMA's costs of salaries and expenses related to the projects. Much of the work will be performed by CMA staff that is supported through CMA's MRP account from grants, donations, and program fees. Some of the work will be performed by City budget-

REPORT OF GENERAL MANAGER

PAGE 3

NO. 03-165

supported CMA staff, and the payments will compensate CMA for buy-back employees to whom other duties of these personnel are delegated.

The draft subconsulting agreement to be entered into with IAI, a contractor to the U.S. EPA, is on file in the Board Office. The agreement incorporates reporting and invoicing requirements and reflects modifications by the City Attorney to conform to City regulations and standard conditions, including the City's self-insurance program.

This report was prepared by Susanne Lawrenz-Miller, Director, Cabrillo Marine Aquarium

PIER EDUCATION OUTREACH PROJECT
CABRILLO MARINE AQUARIUM'S SCOPE OF WORK

BACKGROUND:

The Palos Verdes Shelf (PVS) is among the largest contaminated ocean sediment sites in the United States. Between 1947 and 1983, the Montrose Chemical Corporation DDT Manufacturing plant in Torrance, California, allowed waste materials and byproducts to drain into local sewers which discharged into the local Pacific Ocean through outfalls near White Point. It is estimated that over 1,700 tons of DDT were discharged into the Palos Verdes Shelf, contaminating over 44 square km of seafloor. Sediments in the Palos Verde Shelf are also contaminated with PCBs that resulted from industrial discharges from throughout the Los Angeles Basin into the local sewer systems.

Generally, contaminant levels are highest in bottom feeding, non-migratory fish such as the white croaker. Consumption of white croaker increases the risk of cancer, especially in children and pregnant women. DDT at levels found in the fish around the Palos Verdes Shelf may affect the liver, nervous system, and reproductive system of adults and poses significant risks to nursing mothers.

In response to community concerns, the United States Environmental Protection Agency (EPA) partnered with the California Health Department to implement an 18 month pilot education and outreach program that included the creation of the Palos Verdes Fish Contamination Task Force. This Task Force is composed of federal, state, and local representatives and community based organizations and was tasked to serve as an advisory panel to the EPA in the public health outreach decision making processes. The Task Force also developed public education materials which are used to educate the public about the risks of consuming contaminated fish.

For nearly 70 years, Cabrillo Marine Aquarium (CMA) has engaged visitors in education, recreation and research promoting knowledge, appreciation, and conservation of the marine life of Southern California. CMA is located on the shore at Cabrillo Beach in San Pedro and is within walking distance of some of the most contaminated fishing areas. CMA is dedicated to providing a useful, real-world understanding of the marine environment and is committed to serving as a key source of information concerning coastal DDT, PCB and mercury contamination and associated health risks.

CABRILLO MARINE AQUARIUM'S PUBLIC OUTREACH OBJECTIVES:

CMA's primary objectives for this project are to reduce exposures of human populations most affected by contaminated fish in the areas around Cabrillo Beach and the Cabrillo Fishing Pier. To achieve this goal, CMA will educate pier and beach goers about the risks of consuming contaminated seafood and methods to reduce exposure by proper preparation of the seafood and alternative seafood choices. CMA also plans to provide educational programs for educators and community-based organizations to increase their effectiveness in communicating risks to their target audiences.

CMA will focus its outreach in three different projects: 1) enhance the highly successful Cabrillo Sea Ranger program to provide ongoing outreach to Cabrillo Beach visitors; 2) develop an educational kiosk that will be located permanently on the Cabrillo Fishing Pier; and 3) develop a traveling exhibit that can be transported to different venues to reach other audiences that may be affected by the consumption of contaminated seafood.

To reach the most at-risk group, CMA will expand its successful Sea Ranger Program. CMA's Sea Rangers are a group of CMA volunteers trained in marine biology and the local environment. They take their enthusiasm to visitors directly in the coastal habitats around CMA.

The Pier Education Outreach Project will entail an enhancement of CMA's existing program. CMA Sea Rangers will continue to survey those who fish at the Cabrillo Pier to determine what target species of fish are caught, the reasons for fishing, and the season for contaminated fish. The Sea Rangers will also continue to educate fishers about the risks associated with eating fish from the White Point Area, with special emphasis on the white croaker. Sea Rangers will distribute educational materials about fish advisories, fishing regulations, and methods to reduce exposure by alternative cooking methods. As part of this outreach component, CMA will develop additional educational materials for use by the Sea Rangers to better advise local fishers and their families.

CMA has already developed educational exhibits placed around the Cabrillo Coastal Park describing the local marine environments and environmental issues. As part of its Outreach Program, CMA will develop an educational kiosk that will be permanently located on the Cabrillo Fishing Pier. This kiosk exhibit will advise fishers and their families about the health risks associated with DDT and how to reduce their contamination through alternative fishing methods and food preparation.

Another area of concern is the public education of fish consumers who do not fish directly. CMA will develop a traveling exhibit, based on the success of its other educational campaign, which can be taken by community based organizations directly to their target audience. Some of these uses may be community fairs and outreach programs.

TASKS AND DELIVERABLES:

Task 1: Sea Ranger Program

CMA will enhance an existing program to include outreach to the Cabrillo Fishing Pier and will coordinate with the other Pier Advisory Task Members to develop an educational program which will include evaluating existing teaching materials and the production of additional educational resources that will be used by all Pier Outreach Programs. During this outreach period, the Sea Rangers will conduct educational programs on the Cabrillo Fishing Pier twice a week during the year and four times a week during the summer. Additional Sea Rangers will be recruited and trained. While on the Cabrillo Fishing Pier, Sea Rangers will survey fishers regarding their catches and provide educational materials about fish advisories, regulations and cooking methods.

SCHEDULE:

Sea Ranger Program	Start	End
Project Assessment		
Meet with Pier Advisory	3/4/2003	
Enhance Program		
Audience Surveys	3/3/2003	1/3/2005
Evaluate Fishing Patterns	3/3/2003	1/3/2005
Define Needs with Advisory	3/4/2003	5/6/2003
Define Messages	3/3/2003	5/6/2003
Implement Program		
Programs 2x week	3/4/2003	2/28/2005
Programs 4x week during summer		
Recruit Volunteers		
Recruit Volunteers 1	2/24/2003	5/2/2003
Train Volunteers 1	5/15/2003	6/12/2003
Recruit Volunteers 2	7/7/2003	9/5/2003
Train Volunteers 2	9/18/2003	10/16/2003
Recruit Volunteers 3	10/20/2003	1/12/2004
Train Volunteers 3	1/22/2004	2/19/2004
Recruit Volunteers 4	2/27/2004	5/19/2004
Train Volunteers 4	5/20/2004	6/17/2004
Recruit Volunteers 5	7/5/2004	9/13/2004
Train Volunteers 5	9/16/2004	10/14/2004
Resource Kit Development		
Evaluate Existing Materials	3/4/2003	3/26/2003
Develop Additional Content	3/26/2003	4/16/2003
Produce Prototype	4/23/2003	5/21/2003
Test Prototypes	5/26/2003	8/29/2003
Evaluate Prototype	7/30/2003	8/20/2003
Determine additional needs	9/3/2003	10/8/2003
Produce Final Materials	10/8/2003	3/24/2004
Incorporate into programs		4/1/2003

Task 2: Production of a Permanent Educational Kiosk on Cabrillo Fishing Pier

To reach those who fish at the Cabrillo Fishing Pier during times Sea Rangers are unavailable, CMA plans to install an educational kiosk that will help identify the risks associated with contaminated seafood. In addition, this exhibit will identify methods in which fishes and their families can reduce their risks associated with DDT and PCB. Exhibit concepts will be derived from a local advisory committee as well as the Fish Contamination Task Force. CMA staff will produce storylines and sample graphic treatments that will be tested at the Cabrillo Fishing Pier for effectiveness. After evaluation and modifications, CMA will direct the production of the final exhibit elements. Exhibit concepts may be replicated for use in other local fishing areas.

SCHEDULE:

Kiosk Exhibit	Start	End
Concept Development		
Develop Local Advisory	3/14/2003	3/27/2003
Define Audience	3/3/2003	3/21/2003
Define Messages	3/3/2003	3/21/2003
Review Existing Materials	3/3/2003	3/21/2003
Develop Storylines	3/24/2003	4/4/2003
Review Storylines	4/7/2003	4/18/2003
Develop Sample Graphics	4/21/2003	5/16/2003
Review Graphic Styles	5/19/2003	5/30/2003
Prototype Development		
Produce Samples to Test	6/2/2003	6/13/2003
Test Samples	6/16/2003	8/15/2003
Evaluate Prototyping	8/4/2003	8/29/2003
Exhibit Production		
Modify Graphic Treatments	9/1/2003	9/26/2003
Develop Exhibit Styles	9/29/2003	10/17/2003
Integrate Resource Kits	9/29/2003	10/17/2003
Develop RFP for Exhibit Production	10/20/2003	10/31/2003
Evaluate RFP	12/1/2003	12/12/2003
Award Sub-contract		12/15/2003
Fabrication	12/15/2003	4/30/2004
Exhibit Delivery		5/14/2004
Installation of Exhibits	5/17/2004	5/28/2004

Task 3: Production of a Traveling Exhibit

Many Southern California residents are at risk of contamination from fish caught off the Palos Verdes Shelf. In order to reach a diverse audience who do not fish directly, CMA will develop a traveling exhibit. This exhibit will be easily transported and can be used in multiple venues. Community based organizations will be able to use the exhibit at health and community fairs, and the Sea Food Task Force will be able use it at environmental fairs.

CMA will oversee the development of exhibit content with input from the Task Force and the community based organizations. Exhibit concepts and graphic treatments will be tested by the Task Force. After the designs are modified, CMA will direct the final production of the exhibit.

SCHEDULE:

Traveling Exhibit	Start	End
Concept Development		
Define Audience	9/1/2003	9/19/2003
Define Messages	9/1/2003	9/19/2003
Review Existing Materials	9/1/2003	9/19/2003
Develop Storylines	9/22/2003	10/17/2003
Review Storylines	10/20/2003	10/31/2003
Develop Sample Graphics	11/3/2003	11/28/2003
Review Graphic Styles	12/1/2003	12/12/2003
Prototype Development		
Produce Samples to Test	1/12/2004	2/20/2004
Test Samples	2/23/2003	3/19/2003
Evaluate Prototyping	3/22/2004	4/2/2004
Exhibit Production		
Modify Graphic Treatments	4/5/2004	4/30/2004
Develop Exhibit Styles	5/3/2004	5/21/2004
Integrate Resource Kits	5/3/2004	5/21/2004
Develop RFP For exhibit production	5/24/2004	6/4/2004
Evaluate RFP	7/5/2004	7/30/2004
Award Sub-Contract		8/2/2004
Fabrication	8/2/2004	11/19/2004
Exhibit Delivery		12/3/2004
Installation of Exhibits		1/3/2005