

HARBOR COMMISSION AGENDA

City of Newport Beach
3300 Newport Blvd.
Council Chambers
Wednesday, February 9, 2011
Regular Meeting – 6:00 pm

Don Lawrenz - Chairman

Doug West
Duncan McIntosh
Marshall Duffield

Karen Rhyne
Ralph Rodheim
Vincent Valdes

The Harbor Commissioners are citizens of Newport Beach who volunteer to serve on the Harbor Commission. They were appointed by the City Council by majority vote for 4-year terms. At the table in front are City staff members who are here to advise the Commission during the meeting. They are:

Chris Miller
Manager, Harbor Resources

Shannon Levin
Supervisor, Harbor Resources

NOTICE TO THE PUBLIC

Regular meetings of the Harbor Commission are generally held on the second Wednesday of each month at 6:00 p.m. Staff reports or other written documentation have been prepared. The agendas, minutes and staff reports are available on the City's web site the Friday afternoon before the meeting. The address is: <http://newportbeachca.gov/> under Agendas & Minutes, then Harbor Commission. If you have any questions or require copies of any of the staff reports or other documentation, please contact the Harbor Resources staff at (949) 644-3034.

It is the intention of the City of Newport Beach to comply with the Americans with Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting, you will need special assistance beyond what is normally provided, the City of Newport Beach will attempt to accommodate you in every reasonable manner. Please contact Shannon Levin, Harbor Resources Supervisor at (949) 644-3041, at least 48 hours prior to the meeting to inform us of your particular needs and to determine if accommodation is feasible.

NEWPORT BEACH HARBOR COMMISSION AGENDA
City Council Chambers
3300 Newport Blvd
Wednesday, February 9, 2011

CALL TO ORDER 6:00 P.M.

ROLL CALL / INTRODUCTION

The Commissioners sitting before you are citizens of Newport Beach who volunteer to serve on the Harbor Commission. They were appointed by the City Council at large by majority vote for 4-year terms. The people sitting at the table in front are City staff members and are here to advise us during the meeting. Immediately to my left are:

*Chris Miller, Harbor Resources Manager
Shannon Levin, Harbor Resources Supervisor*

PLEDGE OF ALLEGIANCE

MINUTES

Recommended Action: Approve Minutes from January 2011.

PUBLIC COMMENTS

Public comments are invited on non-agenda items generally considered to be within the subject matter jurisdiction of the Harbor Commission – Speakers must limit comments to 3-minutes. Before speaking, please state your name and address for the record.

ALL TESTIMONY GIVEN BEFORE THE HARBOR COMMISSION IS TAPE RECORDED. SPEAKERS MUST LIMIT REMARKS TO THREE MINUTES ON ALL ITEMS. (Red light signifies when three minutes are up; yellow light signifies that the speaker has one minute left for summation.)

ACTION & APPEAL ITEMS

ITEM #1

Subject: **Balboa Marina at 201 E. Coast Highway – Public Access Approval**

Issue: The Irvine Company is seeking approval to relocate the existing publically available slips at the eastern end of the Balboa Marina to a more central location at the Balboa Marina in response to access and noise complaints from the public and nearby residents.

Discussion:

Public Comments:

Action: Approve the plan as submitted by the Irvine Company.

ITEM #2

Subject: **Five Dives Expedition – Request for Moorage at the Dredge Scow Buoy Location**

Issue: Chris Welsh of the Five Dives Expedition is requesting special permission to moor his catamaran, Cheyenne, in the channel between Bayshores and Harbor Island where the existing dredge scow buoys are located, for 90 days.

Discussion:

Public Comments:

Action: Approve the special request by Five Dives Expedition for this one-time event with Conditions as outlined by Harbor Resources and the Harbor Commission.

ITEM #3

Subject: Harbor Patrol Update

Issue: The Harbor Patrol will update the Harbor Commission on various department activities and programs

Discussion:

Public Comments:

Action: Receive and file.

SUB-COMMITTEE REPORTS

QUESTIONS AND ANSWERS WITH COUNCIL LIAISON ON HARBOR RELATED ISSUES

HARBOR RESOURCES UPDATE – Receive and File

PUBLIC COMMENTS ON SUB-COMMITTEE REPORTS OR HARBOR RESOURCES UPDATE

COMMISSIONER'S ANNOUNCEMENTS OR MATTERS TO BE PLACED ON FUTURE AGENDAS FOR DISCUSSION, ACTION OR REPORT

RECOMMENDED TOPICS FOR FUTURE AGENDAS

- Eelgrass
- Dinghy Dock at Lido Bridge – New public pier
- Bilge pump-out options
- Add an additional smaller anchorage to the north turning basin by W. PCH and Via Lido
- Lower Castaways Vision Plan

DATE AND TIME FOR NEXT MEETING: Wednesday, March 9, 6:00 PM

CITY OF NEWPORT BEACH

HARBOR COMMISSION STAFF REPORT

Agenda Item No. 1
February 9, 2011

TO: HARBOR COMMISSION

FROM: Public Works Department
Chris Miller, Harbor Resources Manager
(949) 644-3043, cmiller@newportbeachca.gov

SUBJECT: Balboa Marina at 201 E. Coast Highway – Public Access Approval

ISSUE:

The Irvine Company is seeking approval to relocate the existing publically available slips at the eastern end of the Balboa Marina to a more central location at the Balboa Marina in response to access and noise complaints from the public and nearby residents.

RECOMMENDATION:

Approve the plan as submitted by the Irvine Company.

DISCUSSION:

As part of the original approval for the reconstruction of the Balboa Marina at 201 E. Coast Highway (corner of Coast Highway and Bayside Drive), the Harbor Commission conditioned the marina to provide public access for boaters from the water to the local landside businesses. During the past year, the Irvine Company (California Recreation Company) which owns the Balboa Marina, has had difficulty balancing their needs for a secured marina with the needs of the boaters for access. In addition, the Linda Isle residents have complained about the excessive noise from the late night restaurant guests as they walk the docks to their vessels and motor down the narrow channel.

Harbor Commission Liaison Nancy Gardner and Harbor Resources staff have been working closely with the Irvine Company to address these issues. In October 2010, a conceptual plan was reviewed by the Harbor Commission and input was provided for further refinement. Also, in November 2010, the Irvine Company and staff presented the conceptual plan to the affected Linda Isle residents, and this plan was also well received. And lastly, staff and the Irvine Company met with three Harbor Commissioners in January 2011 for one final review of the plans before full submission to the Commission this evening.

The attached final plan solves the earlier concerns of the Harbor Commission and the community by segregating a small area of the marina for public use while still maintaining security for the rest of the slips. In addition, the public slips will be relocated as close as possible to the main marina gangway therefore significantly reducing the “walk time” that the restaurant guests will make to the public slips, in effect, reducing the noise levels. A series of three security gates will be installed to prevent the public from accessing the other areas of this

private marina. The details of the plan, as submitted by the Irvine Company, are described below.

Signage

- Directional signage will guide visitors from the marina entrance off the main channel to the Temporary Guest Slips.
- Signage at the Temporary Guest Slips will identify the specific slip locations for visitors and state that there is a three hour time limit for use of the slip.
- Signage at the gate (upon leaving the marina docks) will inform visitors of the applicable Newport Beach municipal codes and that gates will be locked at 10:00 PM.
- Signage at the gate (upon entering the marina docks) will provide visitors with way-finding information to the Temporary Guest Slips.

Access

- Temporary Guest Slips will be accessible 365 days per year from 7:00 AM until 10:00 PM.
- Access to the Temporary Guest Slips is provided through the gate located at the east gangway (near Sol Restaurant) and via an ADA accessible gangway.
- Gate hours of operation will be controlled electronically through the security gate system operated by California Recreation Company. The entry gate will be set to automatically open at 7:00 AM and to automatically lock at 10:00 PM each day.
- A security officer can be called to the Balboa Marina to open the gate for visitors that need access after 10:00 PM. The security officer will ask for the name of the individual needing access as well as the reason the visitor was unable to return by the 10:00 PM limit. This service will be available until 11:00 PM only.
- After 11:00 PM, no public access will be provided by California Recreation Company.
- All other gates to the Balboa Marina will be locked and not accessible by the general public.

EMERGENCY

- Dial 911 for emergency response from the Newport Beach Police Department and Newport Beach Fire Department.

ENVIRONMENTAL REVIEW:

Staff recommends the Harbor Commission find this action is not subject to the California Environmental Quality Act (“CEQA”) pursuant to Sections 15060(c)(2) (the activity will not result in a direct or reasonably foreseeable indirect physical change in the environment) and 15060(c)(3) (the activity is not a project as defined in Section 15378) of the CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, because it has no potential for resulting in physical change to the environment, directly or indirectly.

PUBLIC NOTICE:

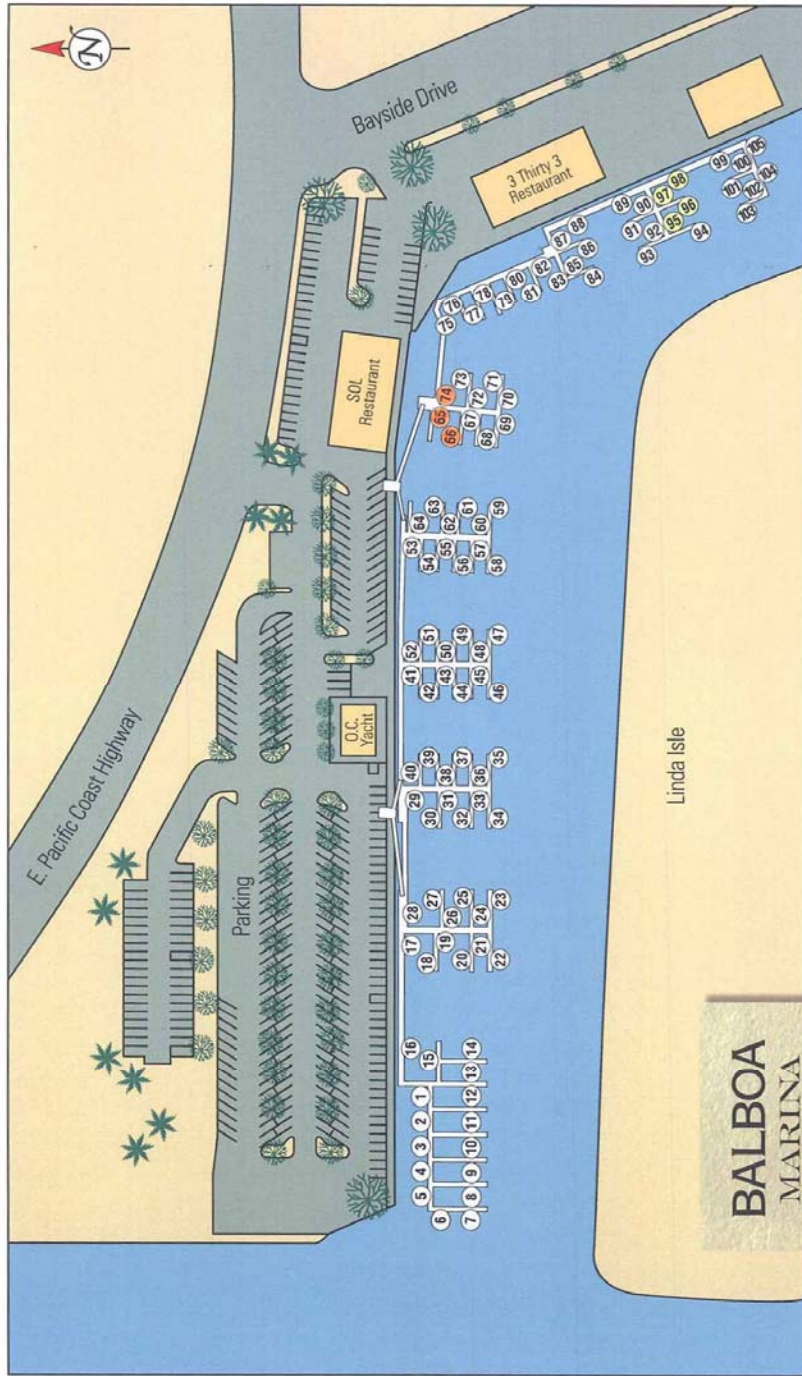
This agenda item has been noticed according to the Brown Act (72 hours in advance of the public meetings at which the Harbor Commission considers the item).

Submitted by:

Chris Miller
Harbor Resources Manager

Attachments: Exhibit A – Vicinity Map with Relocated Slips
 Exhibit B – Guest Space Berthing Layout
 Exhibit C – Signage at Slip

Exhibit A
Vicinity Map with Relocated Slips

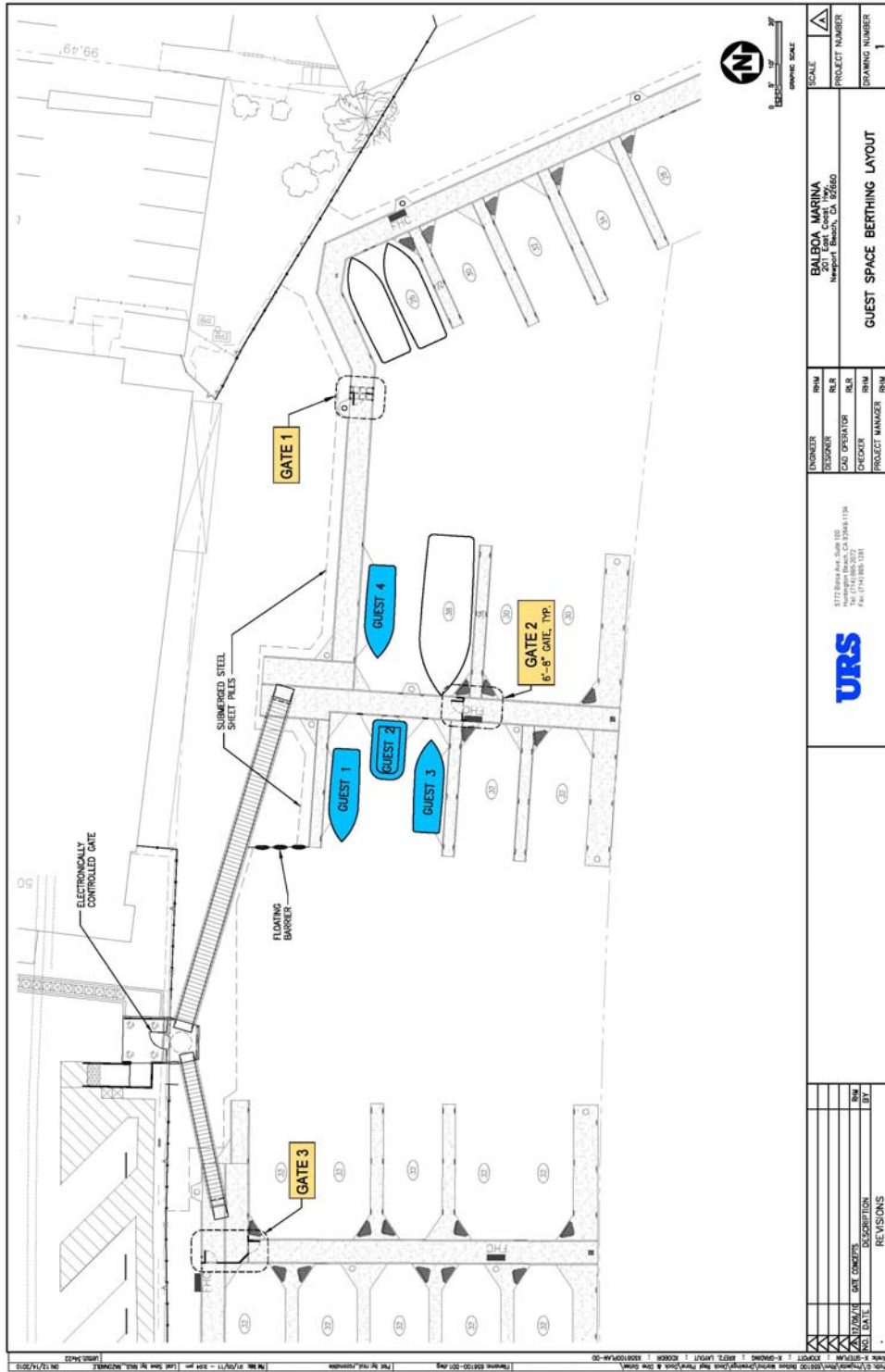


201 E. Pacific Coast Hwy, Newport Beach, CA 92660 ■ 949-721-0111 ■ www.greatslips.com

Legend

- Existing Location
- Proposed Location

Exhibit B
 Guest Space Berthing Layout



ENGINEER: RHM DESIGNER: RER CAD OPERATOR: RER CHECKER: RHM PROJECT MANAGER: RHM		BALBOA MARINA 201 East Coast Hwy Newport Beach, CA 92660		SCALE: 1/8" = 1'-0" PROJECT NUMBER: 1 DRAWING NUMBER: 1
4775 Balboa Ave, Suite 102 Newport Beach, CA 92646-1734 Tel: 949.460.2327 Fax: 949.460.1041		URS		GUEST SPACE BERTHING LAYOUT
REVISIONS NO. DATE DESCRIPTION BY				

Exhibit C
 Signage At Slip

J B 3 D
 Architectural Graphics & Branding
 731 N. Main Street • Orange, California 92668
 714.744.2300 • 714.744.8061 fax • jbsd.com

NOTES

- 1 800 ALUMINUM PANEL
- 2 WHITE R.P. VINYL GRAPHICS
- 3 PTM (C) HDI BLUE BLOSSOM
- 4 WHITE R.P. VINYL

1 FRONT VIEW - SIGN TYPE 4 - TYPICAL
 SCALE FULL SIZE
 EXACT PLACEMENT TOB IN FIELD

REVISIONS:	BALBOA MARINA NEWPORT BEACH, CA	CLIENT IRVINE COMPANY (CALIFORNIA RECREATION COMPANY) DATE 1/17/11	CONTACT GREG SINKS JOB # 10-0406	DRAWING TITLE SIGN TYPE 4 - TEMP GUEST SLIP ID SIGN SCALE NOTED DESIGNER AB SHEET # 4
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The following drawings, specifications, ideas, designs, and arrangements represented thereby, are and shall remain the property of the designer, and no part thereof shall be copied, disclosed to others or used in connection with any work or project other than the specified project for which they have been prepared and developed without the written consent of the designer. Visual contact with these plans or specifications shall constitute conclusive evidence of acceptance of these restrictions.

CITY OF NEWPORT BEACH

HARBOR COMMISSION STAFF REPORT

Agenda Item No. 2
February 9, 2011

TO: HARBOR COMMISSION

FROM: Public Works Department
Chris Miller, Harbor Resources Manager
(949) 644-3043, cmiller@newportbeachca.gov

SUBJECT: **Five Dives Expedition – Request for Moorage at the Dredge Scow Buoy Location**

ISSUE:

Chris Welsh of the Five Dives Expedition is requesting special permission to moor his catamaran, *Cheyenne*, in the channel between Bayshores and Harbor Island where the exiting dredge scow buoys are located, for 90 days.

RECOMMENDATION:

Approve the special request by Five Dives Expedition for this one-time event with Conditions as outlined by Harbor Resources and the Harbor Commission.

DISCUSSION:

The Five Dives Expedition's goal is to do submarine exploration dives at the deepest locations in each of the Five Oceans of the world. The submarine is a one man carbon fiber submersible capable of diving to 36,000'. The first deep dive will be on the Mariana Trench, 300 miles south of Guam and the deepest known location in the world.

The mothership, *Cheyenne*, (formerly *PlayStation*) is a catamaran which is 125' long and 60' wide. The submarine, *Deep Flight*, will be stationed aboard *Cheyenne* as depicted in Exhibit D.

Chris Welsh of Five Dives is requesting moorage for 90 days in the channel between Bayshores and Harbor Island. This exact mooring space has been occupied by the dredge scows for both the Upper Bay and Dover Shores projects for the past five years. Five Dives is anticipating to use the mooring location around March 1, 2011 until approximately May 31, 2011 which is just before the busy summer boating season. The current Dover Shores dredging contractor anticipates completing their project by the end of February, therefore freeing up the space for the *Cheyenne*. Newport Harbor was chosen as a suitable location for Mr. Welsh, a Newport resident, because his team will be performing shallow water test dives in less than 100' of calm water before setting out on the expedition: the waters off Newport Beach are ideal for this purpose.

The Expedition's stay in Newport Harbor will be a unique opportunity for the community to view this world class catamaran which holds many records to her name, along with experiencing the

sense of adventure with the submarine. Mr. Welsh will also be working closely with the Newport Harbor Nautical Museum to bring the community closer to the mission.

Staff supports this one time, special request based on: 1) the unique nature of the expedition, 2) its ability to provide an educational experience for the community, 3) the availability of the mooring location which has been used by similar sized dredge scows for five years, and 4) the window of opportunity before the busy summer boating season. The Harbor Patrol has also been consulted and they support the request along with the Conditions as listed below.

Conditions

1. Five Dives may occupy the mooring space previously occupied by the dredge scows, for 90 days. If Five Dives decides to use alternate buoys instead of the existing contractor's buoys, then the new buoys must be in the exact same location occupying the same footprint.
2. *Cheyenne* must be "bridled" on either end so the vessel is centered on each mooring can.
3. Newport Harbor is a No Discharge harbor. *Cheyenne* will keep dye tablets in the holding tank at all times. The vessel shall be pumped out regularly by a local service with records of the pump outs available upon request along with a summary statement of the pump out service provided at the end of 90 days. Regular inspections of the holding tanks will be permitted by City and/or County staff.
4. Five Dives shall take all precautionary measures to prevent sea lions from hauling out on the vessel.
5. *Cheyenne* will be lit at night according to Coast Guard regulations, with additional lights on all four corners of the vessel. Any bright work lights must be used sparingly being extremely careful to avoid bright lights shining in the surrounding resident's windows.
6. Five Dives will provide Harbor Patrol and Harbor Resources with emergency contact information of the key members of the team.
7. Because this mooring location is over County Tidelands, Five Dives will seek approval from the County.

ENVIRONMENTAL REVIEW:

Staff recommends the Harbor Commission find this action is not subject to the California Environmental Quality Act ("CEQA") pursuant to Sections 15060(c)(2) (the activity will not result in a direct or reasonably foreseeable indirect physical change in the environment) and 15060(c)(3) (the activity is not a project as defined in Section 15378) of the CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, because it has no potential for resulting in physical change to the environment, directly or indirectly.

PUBLIC NOTICE:

This agenda item has been noticed according to the Brown Act (72 hours in advance of the public meetings at which the Harbor Commission considers the item).

Submitted by:

Chris Miller
Harbor Resources Manager

Attachments: Exhibit A – Approximate Existing Location of Dredge Scow Buoys
 Exhibit B – Five Dives Request
 Exhibit C – Letters of Support
 Exhibit D – Five Dives Expedition Details

Exhibit A
Approximate Existing Location of Dredge Scow Buoys



Exhibit B
Five Dives Request

Five Dives

February 1, 2011

NB Harbor Commission
c/o Chris Miller
NB Harbor Administrator

Chair & Commissioners:

The Five Dives Expedition goal is to do submarine exploration dives on the deepest locations in each of the Five Oceans of the world. The submarine is a one man carbon fiber submersible capable of diving to 36,000'. Our first dive will be on the Mariana Trench 300 miles south of Guam. The Mariana is the deepest known location in the world.

The Five Dives Expedition would like to request short term (90 day) access to the existing "dredge" mooring in the main turning basin while we are doing qualification testing on the sub. We need diver accessible (<100 feet) calm waters and a sandy bottom for this work; the waters off Newport Beach are ideal. In addition, as a lifelong Newport resident, I have excellent access to support resources here. We would like to start in early March, and vacate prior to the increase in boating activity that comes with Summer. The location has been used for the last five years by the barges; most boaters in the Bay are already aware of the mooring location.

The Expedition is a unique project for the community to see up close. Children are captivated by the sub and contemplating what it can do. For their entire life, they will remember having been close to the project just prior to departure on the dive expedition. Duffy's and bay cruisers will see the submarine up close as well. In addition to the raw visibility of the mooring location, we will be working with the Newport Harbor Nautical Museum to present the mission as one of their evening talks on Feb. 24 as well as to create display materials at the Museum which tell the story of the project.

Attached is a letter from NHHM regarding the project and mooring request, as well as two letters from Scripps and USC/C-DEBI to the Oceanographic Institute of Monaco that tell a bit about the scientific value of the Expedition.

I am available to answer any questions you may have.

Sincerely,

Chris Welsh

NB Harbor Commission Mooring Request Five Dives Submarine Project

- Mothership Owner: Deep Sea Cat LLC, a Oregon LLC
- Primary Contact: Chris Welsh
fivedives@gmail.com
- Mothership: 125' long, 60' wide, 60,000 Lb. Twin diesel powered (240HP) catamaran "Cheyenne". Vessel is carbon fiber-aluminum honeycomb construction.
- Mooring: Cheyenne is requesting moorage at the existing mooring location for the dredge disposal scows currently in the channel between Bayshores and Harbor Island. This location is currently in use by the Dover Shores dredging project, and was previously in use by the Upper Bay dredging project for nearly five years using large scows that occupy a similar footprint as the Cheyenne. Exact current GPS location to be surveyed and used.
- Resources: Cheyenne has all necessary lines and bumpers. The Cheyenne will be bridled in the center of the catamaran so the vessel will be centered on the buoys.
- Waste Disposal: Cheyenne has a holding tank for human waste for later discharge. Dye tablets can be utilized for compliance. Cheyenne will be regularly pumped out via one of the services in Newport Harbor, and a summary of pump-outs will be provided to Harbor Resources on request and at the end of the stay.
Small volume of trash in trash bags to be taken off by crew as needed.
- Pollution Risk: Bilge pumps to be breakered off in port.
- Seal Protection: In addition to high freeboard we will employ defensive protection as needed.
- Lighting: Cheyenne is white and we will place lighting consistent with C.G. reg's to assist boaters at night. Also, all four corners of the catamaran will

be lit being careful to avoid bright lights shining into the residents' homes.

Insurance: \$2MM General Liability; \$800K Pollution

Emergency Plan: Cheyenne can be mobilized and off mooring within a short time after notice.
Cheyenne skipper to be onboard or within 10 minute range 24/7 when in port. Harbor Patrol will be given emergency contact numbers.

Risk Factors: Diesel fuel (max 1200 gallons) & cooking propane on board.
Refueling Op's conducted with normal fuel delivery.

Op's/Personnel: Cheyenne will be transiting to ocean near shore locations for submarine testing in 80'-100' of water. Personnel 6 or fewer for mothership movement. Sub op's will mean 12-16 onboard for daylight local excursions.

Other Approval: Five Dives will seek concurrence from the County of Orange since this mooring location is on County Tidelands.

Exhibit C
Letters of Support



January 26, 2011

Interim Executive Director

Rita R. Stenlund

Board of Trustees

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President, Clarke Marine Insurance Services

John E. Clement, Vice President

President, VenturePoint Real Estate Group

William Johnson, Vice President

CFO, Brinderson Engineers & Construction

Scott Calder, Vice President

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Timothy C. Collins, Treasurer

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Mike Nash

Consultant, Morning Light Cinema

Douglas M. Pasquale

Chairman/CEO, Nationwide Health Properties

Ralph Rodheim

Rodheim Marketing Group

The Hon. J.E.T. Rutter, Chair Emeritus

Superior Court Judge, Retired

Jim Salomon

President, Questar Construction

Craig Smith, PhD

Retired President, DMJM H & M

Douglas M. Tolbert, PhD

Distinguished Engineer, CSC Corp.

Marcia Bents, Founding Chair Emerita

Partner, RE/Max Real Estate Services

William Blurock, Chair Emeritus

CEO, The Blurock Partnership, Retired

Phillip S. Glasgow, Chair Emeritus

CEO, PSG Enterprises, Inc.

Peter C. Pallette, Chair Emeritus

Executive Director, G.T.I. Management Co.

June Wood, Emerita

Artist, Civic Leader

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Oncologist, Hoag Hospital

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John L. Curci

Managing Partner, Lido Peninsula Co. LLC

William P. Ficker

Architect, America's Cup Winner: 1970

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Brigadier General, Retired

David LaMontagne

Business Consultant, Founder, Vessel Assist

Hon. Ignacio E. Lozano, Jr.

Former US Ambassador to El Salvador

RAdm. Richard Lyon

Rear Admiral, SEAL, USNR, Retired

Ira Rosenstein

Dr. Pepper / 7-up Co. Executive, Retired

William C. Shepherd

Chairman, Allergan, Inc., Retired

Joseph Vallejo

Owner, Vallejo Gallery

James P. Warrington

Chairman, Warrington Homes

Mr. Donald Lawrenz
Chairman, Newport Beach Harbor Commission
c/o Chris Miller
Harbor Resources Manager
via email

Re: Temporary Mooring Request for Five Dives Catamaran

Mr. Chairman & Commissioners:

I am writing on behalf of the Newport Harbor Nautical Museum Board of Trustees who enthusiastically supports the opportunity to bring the *Five Dives Expedition* to Newport Beach using the temporary dredge barge mooring in the Turning Basin.

The *Five Dives Expedition* is unique in many ways; the Expedition will be doing ground breaking exploration of the least explored areas of Earth: the deep ocean trenches. In addition, the Expedition will be bringing back science data and samples that will dramatically expand man's knowledge of the depths as well as providing the foundation for ongoing extremophile and pharma research. In addition to the Mariana Trench, the Expedition will be visiting trenches around the world, none of which have been explored by manned vehicles before.

Chris Welsh of Five Dives will be speaking at NHNM about the Expedition on February 24th. We look forward to working with Five Dives to craft additional unique educational messaging for the community using the Museum. As a local product, Chris's story will particularly resonate with local children and residents.

Although the mooring location is not traditional, the Expedition and the opportunity are unique and not likely to be repeated. Residents will get a very personal exposure to the submarine and the Expedition, from within the museum all the way down to the level of Duffy harbor cruisers. The Harbor Commission's approval of the mooring request will allow this visit and the valuable related community rewards to happen.

Regards,

Rita R. Stenlund
Acting Executive Director

cc: James D. Reed, President, NHNM Board of Trustees





Katrina J. Edwards
Director
Center for Dark Energy Biosphere Investigations
Professor
University of Southern California
Departments of Biological Sciences & Earth Sciences
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AHF203
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Mobile: (508) 326-9870
Fax: (213) 740-8123
Email: kje@usc.edu

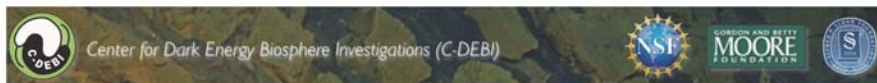
January 24th, 2011

CALCAGNO Robert,
CEO Oceanographic Institute
Fondation Albert ler
Prince de Monaco

RE: 5-Dive Project

Dear Sir:

I have been collaborating and consulting with Mr. Chris Welch on the 5-dive project since September of last year. My organization, a newly funded National Science Foundation Science and Technology Center, contains some of the world's experts in deep-sea exploration and research. Specifically we are an internationally coordinated distributed center of microbiologists, geochemists, hydrogeologists, and geologists focused on the deep sea and sub-seafloor, and the life harbored in the deep. I wished to express to you how excited we are about the 5-dive project and the doors that this work will open up for scientific study. In particular, this project has already served as a catalyst among our organization, for re-invigorating exploration of the Mariana Trench, which has been a focus for many of our researchers. Indeed, we will be holding a workshop on Catalina Island (USC's Boone Center) in March to explore major research questions concerning "extreme life" and serpentinization, with the goal of developing a research road map that can in part be fulfilled in collaboration with the 5-dive project. The video that will be obtained as part of this project will be invaluable for shaping the future of scientific investigation at these remote, difficult to access environments. It is exceptionally challenging to obtain deep submergence vehicles and bottom time to properly characterize and plan a sampling venture at such deep depths from our "normal" funding sources such as the National Science Foundation here in the US. We are routinely turned away from exploratory research, as the NSF is far more inclined to fund hypothesis-driven research. Hypotheses require observation, however, and this is where we are limited most in the deep sea.



We also offer the expertise and one of the only practical products available to guide this venture – the maps and the mapping experts for Mariana. We are thrilled to be able to contribute to this exciting and important venture, and look forward to assisting in any way possible for the determination of dive paths, sampling, and analysis.

Please contact me if there are any questions. I am best reached by mobile (508) 326 – 9870 or email kje@usc.edu.

Sincerely,



Katrina J. Edwards

From: Douglas Bartlett [dbartlett@ucsd.edu]
Sent: Monday, January 24, 2011 3:30 PM
To: r.calcagno@ocean.org
Cc: Chris Welsh; Tony Haymet
Subject: Trench Dives Science Components

Dear Robert;

Chris Welsh asked that I provide you with a brief description of the trench science projects that will be led by myself and colleagues as a part of the Five Dives mission. They involve the use of full ocean depth free falling/ascending vehicles. These instruments will be configured to provide stunning video of the manned submersible, as well as the deep trench pelagic and benthic environments and to collect a variety of life forms for further study. In the case of the latter they will be set up to collect seawater, animal and sediment samples, and even to collect seawater under pressure-retaining conditions (which may improve microbe isolations) and to perform microbiological enrichments while sitting on the trench seafloor for several months. The samples collected would be used to provide unprecedented molecular data on the biodiversity of trench life, the nature of genes and gene expression patterns present at great depth, and the degree of adaptation to the dark biosphere. Samples would also be used to perform an exhaustive battery of high pressure (i.e. 120 megapascal, ~ 16,000 psi) and low temperature (i.e. 2°C) enrichments. Most of the diversity on Earth is microbial and most of the microbial diversity is present in deep-ocean pelagic and benthic environments. It is expected that a vigorous innovative culturing program will result in the isolation of new broad groups of microbes (e.g. new phyla will provide lessons in bio-innovation and new sources of secondary metabolites of therapeutic value. In addition to all the microbiology, the animals collected (i.e., scavenging crustaceans and fish in baited traps and oligochaetes in sediments) will also be extensively investigated at the taxonomic and phylogenetic level and selected structural proteins and enzymes will be examined for unique properties.

Colleagues in Europe are welcome to join the science team. For example, the husband of Dr. Lauro Giuliano at CIESM, Monaco, Dr. Michail Yakimov, has a great deal of experience in deep-Mediterranean microbiology.

I hope this helps. I would be glad to expand on the science, its significance and potential partners in Europe.

Best regards,

Doug Bartlett, Professor
Scripps Institution of Oceanography

Exhibit D
Five Dives Expedition Details

**CITY OF NEWPORT BEACH
HARBOR COMMISSION STAFF REPORT**

Agenda Item No. 3
February 9, 2011

TO: HARBOR COMMISSION

FROM: Public Works Department
Chris Miller, Harbor Resources Manager
(949) 644-3043, cmiller@newportbeachca.gov

SUBJECT: Harbor Patrol Update

ISSUE:

The Harbor Patrol will update the Harbor Commission on various department activities and programs.

RECOMMENDATION:

Receive and file.

ENVIRONMENTAL REVIEW:

Staff recommends the Harbor Commission find this action is not subject to the California Environmental Quality Act ("CEQA") pursuant to Sections 15060(c)(2) (the activity will not result in a direct or reasonably foreseeable indirect physical change in the environment) and 15060(c)(3) (the activity is not a project as defined in Section 15378) of the CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, because it has no potential for resulting in physical change to the environment, directly or indirectly.

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Submitted by:

Chris Miller
Harbor Resources Manager