



May 4, 2009

Eileen Maher
Environmental Services Department
San Diego Unified Port District
P.O. Box 120488
San Diego, CA 92112-0488

Ms. Maher,

We are honored to submit the attached proposal for a grant in response to the Request for Proposals, Environmental Projects Benefiting San Diego Bay, March 11, 2009. Our proposal is to fund the **San Diego Oceans Foundation Ocean in Motion** marine science education program for five years, starting in 2009.

Project Title: Ocean in Motion (OIM)

Project Description: OIM is a five-week traveling K-12 marine science program. Based on the Science Content Standards for California Public Schools, OIM brings **environmental education** about San Diego's marine ecosystems to young people in San Diego County, especially those in Title I schools, in youth organizations that serve underprivileged children, and students living in the San Diego Bay watershed. Each presentation during weeks 1-4 includes slideshows with visual representations, hands-on activities, marine organism dissections, and live animal laboratories. During week 5, we offer a topic-related field trip.

Project Manager's Contact Information: John Valencia, SDOF Executive Director, 1875 Quivira Way, Suite C-5, San Diego, CA 92106, 619-523-1903, john@sdoceans.org.

Grant Funding Request: Year 1: \$84,182; Year 2: \$134,483; Year 3: \$134,455; Year 4: \$139,833; Year 5: \$145,426; Total Years 1-5: \$638,380

Total Cost of Proposal: Year 1: \$256,253; Year 2: \$342,719; Year 3: \$335,985; Year 4: \$349,425; Year 5: \$363,401; Total Years 1-5: \$1,647,782.

Timeline of Project: July 7, 2009 to June 30, 2014.

Benefit to San Diego Bay: With OIM, we provide standards-based education in San Diego Bay marine science to the youth of our county. While we cannot guarantee that educated children will make good decisions nor or in their future about the use and management of the bay, we can say that without OIM, San Diego's children do not get solid marine science education in school. With OIM, our children learn real science about the San Diego Bay.

Source of Matching Funds: SDGE, private grants, corporate grant, donations and volunteer hours.

Sincerely,

John Valencia
Executive Director

Table of Contents

I. Introduction 3

II. Project narrative 3

Description of the proposed project 3

How it will be implemented 4

How its impacts will be measured 7

Specific activities including timeline 7

Year 1, 2009-2010 Timeline 7

Year 2, 2010-2011 Timeline 8

Year 3, 2011-2012 through Year 5, 2013-2014 Timeline 8

Why our proposed project is important 8

How our project benefits San Diego Bay 9

Partnerships to complete the project 9

III. Qualifying Experience 9

IV. Objectives of Grant Proposal 11

V. Cost Proposal 11

VI. Personnel 17

John Valencia, Executive Director 17

Heidi van Lydegraf, SDOF marketing and development director 17

Cheryl Barnes, Project director qualifications 17

OIM Educator qualifications 17

VII. Subconsultants 18

VIII. Non-Profit Status 18

IX Applicant Disclosure 18

X. Agreement 18

XI. Conflict of Interest 18

XII. Additional Information 18

Attachment A: Respondent's Equal Opportunity Program

I. Introduction

What was your first view of the ocean? Did you see water sparkling to infinity, or hear the wind whistling through rigging on boats docked in the bay, or smell the tang of salt in the air from spindrift sprinkling your face? Well, some children who live in San Diego County have never been to the ocean or the bay. They're missing out, and so are we. These young people may be our most fertile source of ideas and commitment to keep our bay and marine ecology healthy.

We can't bring all these young people to the bay, but we can bring the bay to them. **Ocean in Motion** (OIM), launched in 2002 by San Diego Oceans Foundation (www.sdoceans.org/), is a traveling marine science program that brings **environmental education** about San Diego's marine ecosystems to young people in schools and youth organizations in San Diego County. We based OIM on the Science Content Standards for California Public Schools.

Historically through OIM, we have reached 700 San Diego students each year, focusing on Title I schools to serve underprivileged students. With this proposal, we plan to double our OIM outreach to 1,600 youth, seeking out those within the watershed of the San Diego Bay.

Since its founding in 1984, the non-profit, volunteer-based San Diego Oceans Foundation has promoted stewardship of the region's marine waters and living resources. Our programs involve the community in hands-on, action-based activities that include fisheries restoration, scientific research, habitat enhancement, pollution prevention, and science education. Our OIM project grew out of a need recognized by members of SDOF, and it is not required as a matter of compliance or mitigation. While we receive funds from other sources, as described in our budget plan, these additional funds contribute to the San Diego Unified Port District's 25 percent matching funds requirement for OIM. OIM is not fully funded by any other entity. OIM has never been identified as a specifically required activity of another agency or entity.

OIM is consistent with the Port mission: "While protecting the Tidelands Trust resources, the Port will balance economic benefits, community services, **environmental stewardship**, and public safety on behalf of the citizens of California." OIM builds toward **environmental stewardship** by **educating** the youth of San Diego on our marine waters and living resources.

II. Project narrative

OIM augments K-12 science education by linking the region's marine health to the wider quality of life in San Diego. We present both the problems and the possibilities.

Description of the proposed project

OIM's qualified educators, experienced in the study of marine science, visit participating K-12 classrooms during school hours and provide interactive marine science lessons. Each classroom receives four 60-minute presentations, one each week for four weeks. Each presentation includes age appropriate (K-12) slideshows with visual representations, hands-on activities, marine organism dissections, and live animal laboratories.

During the fifth and final week, we offer an optional topic-related field trip to reinforce the lesson plan. Field trip volunteers are Live Scan certified, strong swimmers, and able to work well with children. For continuity, we brief each volunteer before the trip about the day's events, safety precautions, and the educational material to be covered.

During warmer months we also offer OIM Summer Snorkeling. For one magical five-hour day, students, up to 20 each day, learn snorkeling techniques and safety at Mission Point in

Mission Bay. Because Mission Point is safe, sheltered, and rich in marine life, children have the chance to make a range of underwater observations and discoveries. We round out the day with a trip to Birch Aquarium, games, workbook activities, and a snack. Our Summer Snorkeling is free to Title I children, and we charge on a sliding scale for students from youth organizations.

How it will be implemented

To better fit individual classroom curricula and interests, we developed three separate ocean-related topics that give an overview of general marine themes and address issues specific to San Diego: Marine Ecosystems; Fish and Sharks; and Marine Mammals, Sea Turtles, and Shorebirds. Under this proposal, to expand our program to include more students, we plan to hire one OIM educator in year one and a second educator in year two. To measure how well our students learn from our program, we plan to develop grade-appropriate tests in marine science aligned with the Science Content Standards for California Public schools.

Marine Ecosystems

Marine Ecosystems offers an introduction to ocean environments, including tide pools, kelp forests, and the deep sea; the animals that live in each environment and their specific adaptations; how people use these resources, why the resources are important, and what we can do in our everyday lives to ensure the prevalence of these valuable systems.

Week 1. Introduction

- What is trophic ecology and how are marine ecosystems affected by change? (Primary producers, consumers, and decomposers of the ocean: microbes to whales).
- Brief discussion about the oceans' different ecosystems and their relative importance (coral reefs, kelp forests, rocky shores or tide pools, and the deep).
- Humans, these sensitive systems, and how to counteract our impact.
- Run-off demonstration: how pollutants make their way to the ocean.

Week 2. Rocky Shores (aka: Tide pools)

- Definition of a tide pool; brief lecture on the movement of water (tides).
- What are the conditions in tide pool areas? (Light, temperature, salinity, oxygen).
- Zonation patterns and which animals live in each zone (including the adaptations necessary for each zone).
- Live animal lab: see and touch living organisms from San Diego's tide pools.
- Mussel dissection: anatomy and adaptations.
- Homework for next week: Bring a product from home with kelp ingredients.

Week 3. Kelp Forests

- Show and Tell: kelp products in the home.
- Characteristics and importance of a kelp forest (biodiversity, valuable habitat space).
- Kelp forest residents (invertebrates, fish, and mammals), images, and fun facts.
- Live animal lab: see and touch organisms living in San Diego's local kelp beds.
- Holdfast dissection: what's living in the "root system" of a kelp frond?

Week 4. Below the Photic Zone

- The weirdest creatures on earth! Pictures of deep sea organisms.
- Conditions and adaptations of the deep (light, pressure, temperature). Could we survive?

San Diego Oceans Foundation Ocean in Motion 2009 Proposal

- Hydrothermal vents (harsh, extreme environments with interesting life).
- Giant squid and sperm whale confrontations.
- Activity: who can measure? Comparing student height to that of a giant squid.
- Conservation wrap-up: pollution prevention and respon seafood choices.
- Homework: SDOF postcard of your favorite sea creature.

Week 5: Field Trip (optional)

Schools select the Birch Aquarium at Scripps Institution of Oceanography, Cabrillo National Monument (tide pools), or the Chula Vista Nature Center (see [Field Trips](#), page 6).

Fish and Sharks

This series introduces fish species found in our oceans and bays, from common to really weird, with emphasis on those native to San Diego, and helps settle our students' misconceptions and fears. We discuss contemporary fisheries and our part in the overfishing crisis.

Week 1: "The Weirdos"

- Overview of the different fish classifications (jawless vs. jawed; fins vs. no fins; cartilaginous vs. boney).
- Slide show of the world's weirdest fish: strange adaptations and global distribution.
- Art activity: make your own "weirdo" (maybe even the next to be discovered).
- Homework for next week: If I were a fish, I would be ... info sheet.

Week 2: Osteichthyes: the Boney Fishes

- What makes a fish a fish???
- Fish species native to San Diego--Photo ID, ecological importance, and fun facts.
- U.S. fisheries--the big catch (mackerel, tuna, cod, salmon, maxi mahi).
- Fish dissection: anatomy and adaptations (locomotion, camouflage, sensory systems).

Week 3: Condrichthyes: sharks, skates, and rays

- Compare and contrast sharks and other fish (characteristics, adaptations, reproduction).
- San Diego's sharks and rays.
- Feeding frenzy: What is it and who's involved? Video clip.
- Ecological importance of apex predators.
- Use by humans: shark fin soup, medical research.
- "Food Chain" experiment: taking one species out affects the whole system.
- Homework for next week: list all of the seafood items that you like to eat.

Week 4: Fisheries and Conservation

- Current fishing practices (gear used, effort vs. yield, bycatch, habitat destruction).
- White Sea bass Restocking Project: how aquaculture is trying to help.
- "Fisheries" experiment: how does fishing effort affect aquatic populations?
- Seafood Watch: an easy way to make a positive impact on our oceans.
- Homework: SDOF postcard of your favorite fish.

Week 5: Field Trip (optional)

Schools select SeaWorld: Behind the Scenes, the Birch Aquarium, snorkeling in the La Jolla Cove, or the Chula Vista Nature Center (see [Field Trips](#), page 6).

Marine Mammals, Sea Turtles, and Shorebirds

Constant coastal development, elevated pollution levels, and irresponsible fishing are threatening some wild marine animal populations. Marine mammals, sea turtles, and shorebirds are unfortunately on the top of that list.

Week 1: Pinnipedia: Seals, Sea Lions, and Walruses

- What is a marine mammal and where does it fit into the food web?
- Class discussion: list as many marine mammals as possible. How they are all related?
- *The Marine Mammal Protection Act.*
- Seals vs. sea lions: which is which? (adaptations, characteristics, diet, and distribution).
- San Diego seals and sea lions, La Jolla.
- “Blubber” experiment: how marine mammals can survive in cold seas.

Week 2: Cetacea: The World's Whales

- Whale songs, cries, whistles, and clicks: can you tell the difference?
- Cetacea: are they really related to horses and pigs?
- Comparison of baleen and toothed whales. Which are the biggest, fastest, can dive the deepest, and stay under water the longest?
- Co-operative feeding (Orca video): marine intelligence.
- “Echolocation” game: how whales “see” underwater.
- Sonar (noise pollution for whales); commercial whaling (ITP).

Week 3: The Other Category #1, Manatees, Dugongs, Polar Bears, Sea Otters, and Penguins

- Mermaid or manatee? Legends of the past. How boating affects manatee populations.
- Why are polar bears considered marine mammals? Climate change and the polar bear’s dwindling habitat.
- Sea otters and their role in kelp forest ecosystems.
- “Food Chain” experiment: taking one species out affects the whole system.

Week 4: The Other Category #2, Sea Turtles and Shorebirds

- Sea turtles and the need for conservation (predators, poaching, coastal development, floating trash).
- Marine birds (pelicans, gulls, cormorants, and shearwaters).
- Activity: “Spill Solution”: oil and feathers do not mix.
- Seafood Watch: an easy way to make a positive impact on our oceans.
- Homework: SDOF postcard of your favorite marine mammal, sea turtle or shorebird.

Week 5: Field Trip (optional)

Schools select Cabrillo National Monument (tide pools), Children’s Pool and snorkeling in the La Jolla Cove, or the Chula Vista Nature Center (see [Field Trips](#), page 6).

Field Trips

We give schools the option to select a field trip following our four-part classroom series.

Birch Aquarium: Through creative exhibits, programs, and activities, the Birch Aquarium strives to increase the public’s understanding of marine environments, their residents, and the

conservation efforts necessary for these populations' survival. In addition to a large area lined with tanks, the aquarium offers an outdoor tide pool and plenty of conservation-oriented exhibits.

Cabrillo National Monument: Students jump right into the diverse world of life on a rocky shore with a trip to these vast tide pools. Known as one of the prime tide pool viewing locations in Southern California, this area offers a wide variety of marine algae, invertebrates, and fish.

Chula Vista Nature Center: With a variety of live animal displays and educational presentations, the Chula Vista Nature Center offers a remarkable opportunity. Located on Sweetwater Marsh National Wildlife Refuge on San Diego Bay, this internationally recognized zoo and aquarium promotes marine conservation and environmental stewardship.

La Jolla Cove Snorkeling Trip: The Cove, which is teeming with life, provides everything from rocky shores and kelp beds to marine invertebrates and Garibaldi. We emphasize proper use of gear, snorkeling techniques, ocean hazards, and safety precautions.

SeaWorld San Diego: OIM students take an exciting trip behind the scenes at SeaWorld to view either sharks or marine mammals and sea turtles roaming their enclosures. Students go where the general public seldom does to learn about these wonderful animals, current conservation issues, and some fun facts that only SeaWorld staff are privy to.

How its impacts will be measured

We have set three goals for our OIM project:

Goal 1: More students will attend OIM classroom presentations than in the past.

Goal 2: Student learning outcomes in marine science will improve.

Goal 3: Students will become more interested in marine science.

For the project objectives tied to these goals and how we will measure them, see IV. Objectives of Grant Proposal, page 11.

Specific activities including timeline

Because our OIM project has been operating since 2002, our plans for this grant expand our continuing OIM operation. In addition to the actual OIM classroom sessions and field trips, project director Cheryl Barnes recruits schools to participate, reviews and modifies the program according to evaluation results, and orders supplies. As part of this proposed expansion, OIM staff will perform the following additional administrative functions.

Year 1, 2009-2010 Timeline

June 2009. Project director Cheryl Barnes, SDOF executive director John Valencia, and marketing and development director Heidi van Lydegraf plan outreach campaign to increase participation in San Diego County schools and youth groups.

July 2009. Ms. Barnes and Mr. Valencia prepare and submit a press release announcing the project and the Port District's funding of the program. Ms. Barnes and Mr. Valencia recruit, screen, and hire OIM educator, snorkeling staff.

August 2009. Ms. Barnes and OIM educator begin developing OIM marine sciences pre- and post-test.

September 2009. Ms. Barnes and Mr. Valencia prepare and submit quarterly progress report to the Port.

San Diego Oceans Foundation Ocean in Motion 2009 Proposal

November 2009. Ms. Barnes and OIM educator identify beta sites to validate the OIM marine sciences pre- and post-test.

December 2009. Ms. Barnes and Mr. Valencia prepare and submit quarterly progress report to the Port.

January 2010. Ms. Barnes conducts first beta validation of OIM marine sciences pre- and post-test.

February 2010. Ms. Barnes continues beta validation of OIM marine sciences pre- and post-test.

March 2010. Ms. Barnes continues beta validation of OIM marine sciences pre- and post-test. Ms. Barnes and Mr. Valencia prepare and submit quarterly progress report to the Port.

April 2010. Ms. Barnes and OIM educator revise the OIM marine sciences pre- and post-test according to the beta validation results. Ms. Barnes and Mr. Valencia prepare outreach program to schools for Year 2. Ms. Barnes and Mr. Valencia recruit, screen, and hire second OIM educator.

May 2010. Ms. Barnes conducts final validation of revised OIM marine sciences pre- and post-test.

June 2010. Ms. Barnes and Mr. Valencia prepare and submit quarterly progress report to the Port. Ms. Barnes and OIM educator revise the OIM marine sciences pre- and post-test according to the final validation results to produce the official test.

Year 2, 2010-2011 Timeline

September 2010. Beginning this month, project director administers OIM marine science pre-test at the start of each Week 1 session and the post-test at the end of Week 4. Ms. Barnes and Mr. Valencia prepare and submit quarterly progress report to the Port.

December 2010. Ms. Barnes and Mr. Valencia prepare and submit quarterly progress report to the Port.

March 2011. Ms. Barnes and Mr. Valencia prepare and submit quarterly progress report to the Port.

April 2011. Ms. Barnes and Mr. Valencia prepare outreach program to schools for Year 3.

June 2011. Ms. Barnes and Mr. Valencia prepare and submit quarterly progress report to the Port.

Year 3, 2011-2012 through Year 5, 2013-2014 Timeline

The schedule for Years 3 through 5 is the same as the schedule for Year 2 with the addition of the following activities in June of Year 5.

June 2014. Ms. Barnes, OIM educator, and Mr. Valencia prepare, submit, and present the final report to the Port District and the BPC, EC and/or the Environmental Services Department staff. Ms. Barnes, OIM educator, and Mr. Valencia prepare and set up the lobby display for the Port Administration Building describing the project.

Why our proposed project is important

We designed OIM to solve the following critical problems:

San Diego Oceans Foundation Ocean in Motion 2009 Proposal

Problem: As of 2007, over 11 percent of San Diego County's nearly 3,000,000 residents live below the poverty line.¹ Many of the youth of the county (people under 18 made up nearly one quarter of the population in 2007), have never seen the ocean. *Solution:* OIM brings the ocean and the bay to students. Because we focus on Title I schools, we primarily serve disadvantaged children. With our traveling classroom exhibits, labs, and hands-on activities, our OIM educators present the reality of San Diego's marine ecosystems to young people anywhere in the county.

Problem: The Science Content Standards for California Public Schools have only minimal marine science components, making education in San Diego marine ecology a rare element of our San Diego County students' formal education. *Solution:* With the Science Content Standards for California Public Schools as our base, OIM provides grade-appropriate marine science instruction focusing on the San Diego Bay and shoreline. Our students get a headstart in the study of marine science and ecology.

Problem: San Diego's economy, since its founding, has been tied to our beautiful natural bay, with shipping and the U.S. Navy as two main centers of activity today. Our regional economic health is tied to the health of the bay. *Solution:* SDOF has promoted ocean stewardship since 1984. With OIM, we present the interconnected nature of all elements of our community: security, commerce, fishing, recreation, and conservation, to children who will grow up prepared to make good decisions regarding our beautiful bay.

Problem: People who don't know about a problem, either by viewing it outside their backyard, or learning about it in school, have a hard time proposing solutions for the problem. *Solution:* As a K-12 program, OIM presents marine science to children and youth from the coast to the inland reaches of the San Diego Bay watershed. We help students see how their actions upstream have a real effect downstream.

How our project benefits San Diego Bay

While we cannot guarantee that our students will make good decisions about the use and management of the bay, but we can say that with OIM, our children learn real science about the San Diego Bay and understand the importance of environmental stewardship.

Partnerships to complete the project

We collaborate with SeaCamp, Outdoor Outreach, YMCA, and San Diego school districts. We also benefit from volunteer hours from science educators and residents in the community.

III. Qualifying Experience

Since 2002, OIM has brought marine science education to the youth of all socioeconomic levels throughout San Diego County:

- 2002 The first four months of the OIM program were funded entirely by an anonymous donor. This gift enabled us to provide **free** education to students in seven different school districts and to develop curriculum based on the Science Content Standards for California Public Schools. After the initial funding expired, SDOF continued OIM as a fee-for-service program. We offered one 1-hour session per child and served almost 700 San Diego students in the first year.
- 2003 We expanded the program to include snorkeling trips for underserved youth, and live animal laboratories.

¹ U.S. Census Bureau State and County Quick facts, San Diego County, <http://quickfacts.census.gov>.

San Diego Oceans Foundation Ocean in Motion 2009 Proposal

2009 We are expanding the curriculum to offer four 1-hour sessions per child plus an optional field trip. We are also doubling our outreach to serve 1,600 youth per year by the end of year 5.

To fit our proposal within the page limit, the following table lists schools and youth groups we served in 2008 with the number of students reached. We will be happy to provide the records from 2002 through 2007 upon request. We have provided three contacts from 2008. Also upon request, we will be happy to provide additional contacts.

| Date served | Summary |
|-------------|---|
| 2002 | 22 schools or youth groups serving 4,017 youth over a total of 54 weeks |
| 2003 | 11 schools or youth groups serving 172 youth over a total of 11 weeks |
| 2004 | 18 schools or youth groups serving 1,376 youth over a total of 28 weeks |
| 2005 | 18 schools or youth groups serving 966 youth over a total of 38 weeks |
| 2006 | 15 schools or youth groups serving 602 youth over a total of 20 weeks |
| 2007 | 6 schools or youth groups serving 760 youth over a total of 6 weeks |

| Date served | School or organization | No. of youth | Program | No. of weeks | Total youth | |
|--|--|-------------------|---------------|--------------|-------------|---|
| 2008 | | | | | | |
| February | Rosa Parks Elementary | 175 | Invertebrates | 1 | 175 | |
| March | Bay Park Elementary | 150 | Invertebrates | 1 | 150 | |
| | Carmel Del Mar Middle School | 75 | Invertebrates | 1 | 75 | |
| | Bernardo Heights Middle School | 60 | Invertebrates | 1 | 60 | |
| April | Carmel del Mar Middle School | 40 | Invertebrates | 1 | 40 | |
| | Montgomery Middle School, Johnathan Ton, Principal, 858-496-8330 | 30 | Invertebrates | 1 | 30 | |
| | Little Lake Elementary | 75 | Invertebrates | 1 | 75 | |
| | Ibarra Elementary School | 25 | Invertebrates | 1 | 25 | |
| | Flying Hills Elementary School | 50 | Invertebrates | 1 | 50 | |
| | Pacific Beach Middle School | 40 | Invertebrates | 1 | 40 | |
| | Scripps Ranch High School | 50 | Invertebrates | 1 | 50 | |
| | Torrey Pines Elementary | 75 | Invertebrates | 1 | 75 | |
| | June | Harborside School | 7 | Snorkeling | 1 | 7 |
| | | Public Day | 5 | Snorkeling | 1 | 5 |
| Lincoln High School, Mel Collins, Executive Principal, 619-266-6500 | | 5 | Snorkeling | 1 | 5 | |
| July | EI Cajon Valley High School, Paul Dautremont, Principal, 619-401-4700 | 12 | Snorkeling | 1 | 12 | |
| | Public Day | 10 | Snorkeling | 1 | 10 | |
| | San Pasqual Middle | 10 | Snorkeling | 1 | 10 | |
| | Phoenix House Drug Rehab Center | 7 | Snorkeling | 1 | 7 | |
| | Reach for Tomorrow | 15 | Snorkeling | 1 | 15 | |
| | Woodglen Vista | 11 | Snorkeling | 1 | 11 | |
| | BLCI | 13 | Snorkeling | 1 | 13 | |
| | Morongo | 7 | Snorkeling | 1 | 7 | |

San Diego Oceans Foundation Ocean in Motion 2009 Proposal

| Date served | School or organization | No. of youth | Program | No. of weeks | Total youth |
|-------------|-------------------------------|--------------|------------|--------------|-------------|
| August | SDYCS-YET | 12 | Snorkeling | 1 | 12 |
| | Monarch School | 12 | Snorkeling | 1 | 12 |
| | Scouts | 17 | Snorkeling | 1 | 17 |
| | Scouts | 12 | Snorkeling | 1 | 12 |
| | Public Day | 12 | Snorkeling | 1 | 12 |
| | Scouts | 11 | Snorkeling | 1 | 11 |
| | Scouts | 18 | Snorkeling | 1 | 18 |
| | Scouts | 15 | Snorkeling | 1 | 15 |
| September | Scouts | 11 | Snorkeling | 1 | 11 |
| | Scouts | 10 | Snorkeling | 1 | 10 |
| | Lincoln High School | 11 | Snorkeling | 1 | 11 |
| | Keiller Leadership Academy | 12 | Snorkeling | 1 | 12 |
| October | Albert Einstein Academy | 12 | Snorkeling | 1 | 12 |
| | San Diego Coop. Middle School | 12 | Snorkeling | 1 | 12 |

IV. Objectives of Grant Proposal

Historically through OIM, we have reached 700 San Diego students each year. For the next five years, starting in 2009-10 and continuing through 2013-14, we propose to double our OIM outreach to 1,600 youth and to seek out schools and organizations serving underprivileged youth located within the watershed of the San Diego Bay.

We have tied the following objectives and measurements to our OIM goals. **At no point will participating children or youth be identified by name in our reports on our results.**

Goal 1: More students will attend OIM classroom presentations. *Objective:* By the end of each year, approximately 18% more children or youth will have attended four hours of OIM in-classroom presentations than the year before (year one, 825 students; year two, 975 students; year three, 1150 students; year four, 1355 students; year five, 1600 students). *Measurement:* Ms. Barnes will maintain attendance logs for all OIM activities.

Goal 2: Student learning outcomes in marine science will improve. *Objective:* Starting with year two, 50 % of students will increase their scores by the end of each year on a test of marine science by at least 10 raw points. *Measurement:* During the first year of funding, we will develop grade-appropriate tests in marine science aligned with the Science Content Standards for California Public schools to serve as pre- and post-tests. During years two through five of funding, Ms. Barnes will administer this test as a pretest before the first OIM classroom meeting, and she will administer the same test as a post-test after the final OIM classroom meeting. Then Ms. Barnes will compare results.

Goal 3: Students will become more interested in marine science. *Objective:* By the end of each year, more students will say they have done a marine-related “environmental” activity outside the classroom than before they took the OIM classes. *Measurement:* Ms. Barnes will interview students after the last OIM classroom session.

V. Cost Proposal

The following Income and Expenses table and budget narrative provide our cost proposal.

San Diego Oceans Foundation Ocean in Motion 2009 Proposal

| Income | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total | Expenses | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total |
|-------------------------|----------------|----------------|----------------|----------------|----------------|------------------|-------------------------------|----------------|----------------|----------------|----------------|----------------|------------------|
| | \$ | \$ | \$ | \$ | \$ | \$ | | \$ | \$ | \$ | \$ | \$ | \$ |
| Program fees | | | | | | | Personnel | | | | | | |
| School fees | 7,500 | 8,500 | 9,095 | 9,732 | 10,413 | 45,240 | Project director | 29,853 | 31,047 | 32,289 | 33,581 | 34,924 | 161,693 |
| Nonprofit fee | 6,500 | 7,750 | 8,293 | 8,873 | 9,494 | 40,910 | OIM educator I | 37,674 | 39,181 | 40,748 | 42,378 | 44,073 | 204,055 |
| Subtotal | 14,000 | 16,250 | 17,388 | 18,605 | 19,907 | 86,149 | OIM educator II | 0 | 39,181 | 40,748 | 42,378 | 44,073 | 166,381 |
| Fundraising | | | | | | | Snorkeling staff | 5,000 | 5,200 | 5,408 | 5,624 | 5,849 | 27,082 |
| Oceans Benefit Gala | 25,000 | 26,750 | 27,000 | 28,890 | 30,912 | 138,552 | Snorkeling interns (4) | 15,000 | 15,600 | 16,224 | 16,873 | 17,548 | 81,245 |
| Dive-A-Thon | 40,000 | 42,800 | 40,000 | 42,800 | 45,796 | 211,396 | OIM assistant | 28,000 | 29,120 | 30,285 | 31,496 | 32,756 | 151,657 |
| Subtotal | 65,000 | 69,550 | 67,000 | 71,690 | 76,708 | 349,948 | School staff interns (2) | 43,200 | 44,928 | 46,725 | 48,594 | 50,538 | 233,985 |
| Grants | | | | | | | Subtotal | 158,727 | 204,257 | 212,427 | 220,924 | 229,761 | 1,026,097 |
| Port of San Diego | 84,182 | 134,483 | 134,455 | 139,833 | 145,426 | 638,380 | Marketing and outreach | | | | | | |
| SDG&E | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 75,000 | Van wrap | 2,500 | 0 | 0 | 0 | 0 | 2,500 |
| Private grants | 18,000 | 21,000 | 22,000 | 22,000 | 22,000 | 105,000 | Subtotal | 2,500 | 0 | 0 | 0 | 0 | 2,500 |
| Corporate grant | 18,000 | 33,000 | 30,000 | 30,000 | 30,000 | 141,000 | Operating | | | | | | |
| Donations | 12,500 | 22,000 | 20,000 | 20,000 | 20,000 | 94,500 | Gas allowance | 10,010 | 20,821 | 21,654 | 22,520 | 23,421 | 98,425 |
| Subtotal | 147,682 | 225,483 | 221,455 | 226,833 | 232,426 | 1,053,880 | Printing | 8,500 | 17,680 | 18,387 | 19,123 | 19,888 | 83,577 |
| Merchandise | | | | | | | Rhino lining | 3,000 | 0 | 0 | 0 | 0 | 3,000 |
| | 0 | 0 | 0 | 0 | 0 | 0 | Liability insurance | 4,000 | 4,160 | 4,326 | 4,499 | 4,679 | 21,665 |
| Subtotal | 0 | 0 | 0 | 0 | 0 | 0 | Vehicle insurance | 5,000 | 5,200 | 5,408 | 5,624 | 5,849 | 27,082 |
| | | | | | | | Miscellaneous expenses | 650 | 1,352 | 1,406 | 1,462 | 1,521 | 6,391 |
| | | | | | | | Subtotal | 31,160 | 49,213 | 51,181 | 53,229 | 55,358 | 240,140 |
| | | | | | | | Program expense | | | | | | |
| | | | | | | | Live animal labs | 7,500 | 15,600 | 16,224 | 16,873 | 17,548 | 73,745 |
| | | | | | | | Specimen | 2,500 | 5,200 | 5,408 | 5,624 | 5,849 | 24,582 |
| | | | | | | | Subtotal | 10,000 | 20,800 | 21,632 | 22,497 | 23,397 | 98,326 |
| | | | | | | | Capital and equipment | | | | | | |
| | | | | | | | Mask, snorkel upgrades | 3,200 | 3,328 | 3,461 | 3,600 | 3,744 | 17,332 |
| | | | | | | | Dissection supplies | 5,700 | 11,856 | 0 | 0 | 0 | 17,556 |
| | | | | | | | Craft and project supplies | 6,250 | 13,000 | 13,520 | 14,061 | 14,623 | 61,454 |
| | | | | | | | Aquarium supplies | 7,500 | 7,800 | 0 | 0 | 0 | 15,300 |
| | | | | | | | Subtotal | 22,650 | 35,984 | 16,981 | 17,660 | 18,367 | 111,642 |
| SUBTOTAL | 226,682 | 311,283 | 305,842 | 317,128 | 329,042 | 1,489,977 | SUBTOTAL | 225,037 | 310,254 | 302,222 | 314,311 | 326,883 | 1,478,706 |
| In kind | | | | | | | In kind | | | | | | |
| Volunteer service hours | 31,216 | 32,465 | 33,763 | 35,114 | 36,518 | 169,076 | Volunteer service hours | 31,216 | 32,465 | 33,763 | 35,114 | 36,518 | 169,076 |
| Subtotal | 31,216 | 32,465 | 33,763 | 35,114 | 36,518 | 169,076 | Subtotal | 31,216 | 32,465 | 33,763 | 35,114 | 36,518 | 169,076 |
| TOTAL | 257,898 | 343,748 | 339,606 | 352,241 | 365,560 | 1,659,053 | TOTAL | 256,253 | 342,719 | 335,985 | 349,424 | 363,401 | 1,647,782 |

San Diego Oceans Foundation Ocean in Motion 2009 Proposal

| Cost Proposal | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | | Total Years 1-5 | |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------------|---------|
| | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ |
| Personnel Project director @ \$24/hr year 1 Cheryl Barnes, OIM project director. Oversees program, 20 hrs/wk (1040 hrs) @ \$24.96/hr year 1 = \$25,959 x 15% (1.15) burden rate = \$29,853 year 1. Annual 4% (1.04) increase. | 0 | 29,853 | 0 | 31,047 | 0 | 32,289 | 0 | 33,581 | 0 | 34,924 | 0 | 161,693 |
| OIM Educator I @ \$15.75/hr year 1-5 To be hired year 1. Runs program year round, 40 hrs/wk (2080 hrs) @ \$15.75/hr year 1 = \$32,760 x 15% (1.15) burden rate = \$37,674 year 1. Annual 4% (1.04) increase. | 0 | 37,674 | 0 | 39,181 | 0 | 40,748 | 0 | 42,378 | 0 | 44,073 | 0 | 204,055 |
| OIM Educator II @ \$16.38/hr year 2-5 To be hired year 2. Works with other OIM educator to run program year round, 40 hrs/wk (2080 hrs) @ \$16.38/hr year 2 = \$34,070 x 15% (1.15) burden rate = \$39,181 year 2. Annual 4% (1.04) increase. | 0 | 0 | 0 | 39,181 | 0 | 40,748 | 0 | 42,378 | 0 | 44,073 | 0 | 166,381 |
| Snorkeling staff @ \$100/presentation \$100/presentation x 50 presentations = \$5,000 year 1. Annual 4% (1.04) increase. | 5,000 | 0 | 5,200 | 0 | 5,408 | 0 | 5,624 | 0 | 5,849 | 0 | 27,082 | 0 |
| Snorkeling interns @ \$75/trip \$75/trip x 50 trips = \$3,750 per intern x 4 interns = \$15,000 year 1. Annual 4% (1.04) increase. | 15,000 | 0 | 15,600 | 0 | 16,224 | 0 | 16,873 | 0 | 17,548 | 0 | 81,245 | 0 |
| OIM assistant @ \$100/presentation \$100/presentation x 288 presentations = \$28,800 year 1. Annual 4% (1.04) increase. | 28,000 | 0 | 29,120 | 0 | 30,285 | 0 | 31,496 | 0 | 32,756 | 0 | 151,657 | 0 |

San Diego Oceans Foundation Ocean in Motion 2009 Proposal

| Cost Proposal | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | | Total Years 1-5 | |
|---|---------------|-----------------|---------------|------------------|---------------|------------------|----------------|------------------|----------------|------------------|-----------------|------------------|
| | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ |
| School staff interns @ \$75/presentation \$75/presentation x 288 presentations = \$21,600 per intern x 2 staff interns = \$43,200 year 1. Annual 4% (1.04) increase. | 43,200 | 0 | 44,928 | 0 | 46,725 | 0 | 48,594 | 0 | 50,538 | 0 | 233,985 | 0 |
| Subtotal | 91,200 | 67,527 | 94,848 | 109,409 | 98,642 | 113,785 | 102,588 | 118,337 | 106,691 | 123,070 | 493,969 | 532,129 |
| Marketing & Outreach Van Wrap To identify the SDOF OIM project and the Port's generous support. One-time cost. | 1,250 | 1,250 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,250 | 1,250 |
| Subtotal | 1,250 | 1,250 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,250 | 1,250 |
| Operating Gas allowance 91 miles average RT between SDOF offices and schools for 200 presentations = 91 x 200 = 18,200 miles @ \$0.55/mile (GSA rates, January 2009) = \$10,010 year 1. Doubled in year 2. Annual 4% (1.04) increase. | 5,005 | 5,005 10,010 | 10,410 | 10,410 20,821 | 10,827 | 10,827 21,654 | 11,260 | 11,260 22,520 | 11,710 | 11,710 23,421 | 49,212 | 49,212 98,425 |
| Printing Brochures, workbooks, and other printed items, branded with the Port of San Diego's logo, as appropriate, @ \$0.94/student x 9,017 students = \$8,500 year 1. Doubled in year 2. Annual 4% (1.04) increase. | 5,300 | 3,200 8,500 | 11,024 | 6,656 17,680 | 11,465 | 6,922 18,387 | 11,924 | 7,199 19,123 | 12,401 | 7,487 19,888 | 52,113 | 31,464 83,577 |
| Rhino lining Prevents saltwater erosion to SDOF van @ \$3000. One-time cost. | 1,000 | 2,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,000 | 2,000 |
| Liability insurance To cover 30% (.3) of our \$4,000 premium = \$1,200 year 1. Annual 4% (1.04) increase | 2,800 | 1,200 4,000 | 2,912 | 1,248 4,160 | 3,028 | 1,298 4,326 | 3,150 | 1,350 4,499 | 3,276 | 1,404 4,679 | 15,166 | 6,500 21,665 |

San Diego Oceans Foundation Ocean in Motion 2009 Proposal

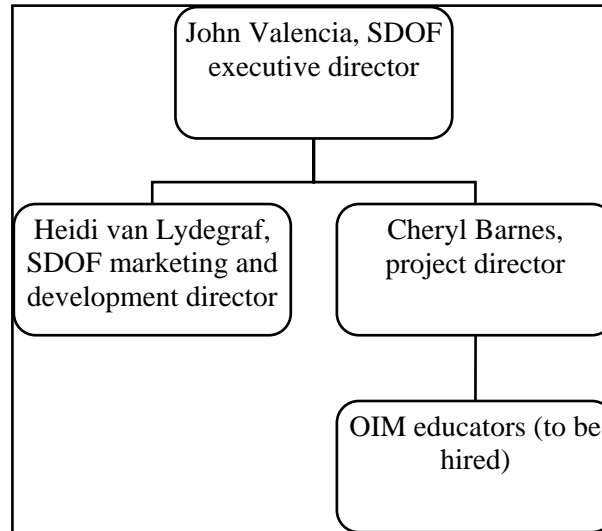
| Cost Proposal | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | | Total Years 1-5 | |
|--|---------------|----------------|---------------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|
| | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ |
| Vehicle insurance For SDOF van to cover 30% (.3) \$5,000 year 1. Annual 4% (1.04) increase. | 3,500 | 1,500 5,000 | 3,640 | 1,560 | 3,786 | 1,622 | 3,937 | 1,687 | 4,095 | 1,755 | 18,957 | 8,124 |
| Miscellaneous expenses Collecting permit for each OIM educator (1 permit year 1; 2 permits years 2-5). Annual 4% (1.04) increase. | 650 | 0 | 1,352 | 0 | 1,406 | 0 | 1,462 | 0 | 1,521 | 0 | 6,391 | 0 |
| Subtotal | 18,255 | 12,905 | 29,338 | 19,874 | 30,512 | 20,669 | 31,732 | 21,496 | 33,002 | 22,356 | 142,839 | 97,301 |
| Program expense | | | | | | | | | | | | |
| Live animal labs Diving equipment, collection containers & bubblers, one set per OIM educator (one educator year 1; two educators years 2-5). \$7,500 year 1. Double in year 2. Annual 4% (1.04) increase. | 7,500 | 0 | 15,600 | 0 | 16,224 | 0 | 16,873 | 0 | 17,548 | 0 | 73,745 | 0 |
| Specimen For classroom presentations, one set per educator (one educator year 1; two educators years 2-5), \$2,500 year 1. Double year 2. Annual 4% (1.04) increase. | 2,500 | 0 | 5,200 | 0 | 5,408 | 0 | 5,624 | 0 | 5,849 | 0 | 24,582 | 0 |
| Subtotal | 10,000 | 0 | 20,800 | 0 | 21,632 | 0 | 22,497 | 0 | 23,397 | 0 | 98,326 | 0 |
| Capital and equipment | | | | | | | | | | | | |
| Mask and snorkel upgrades For Summer Snorkeling trips, 40 sets @ \$80 ea = \$3,200 year 1. Annual 4% (1.04) increase. | 3,200 | 0 | 3,328 | 0 | 3,461 | 0 | 3,600 | 0 | 3,744 | 0 | 17,332 | 0 |
| Dissection supplies To perform the fish dissections, one set per OIM educator (one educator year 1; two educators years 2-5), \$5,700 year 1. Double year 2. One time cost. | 3,200 | 2,500 5,700 | 6,656 | 5,200 11,856 | 0 | 0 | 0 | 0 | 0 | 0 | 9,856 | 7,700 17,556 |

San Diego Oceans Foundation Ocean in Motion 2009 Proposal

| Cost Proposal | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | | Total Years 1-5 | |
|--|----------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|----------------|
| | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ | SDOF \$ | Port \$ |
| Craft and special project supplies Projects from the curriculum, one set per OIM educator (one educator year 1; two educators years 2-5). \$6,250 year 1. Double year 2. Annual 4% (1.04) increase. | 6,250 | 0 | 13,000 | 0 | 13,520 | 0 | 14,061 | 0 | 14,623 | 0 | 61,454 | 0 |
| Aquarium supplies (stationary and portable) To contain the animals we collect, one set per OIM educator (one educator year 1; two educators years 2-5). \$7,500 year 1. Year 2 = \$7,500 x annual 4% (1.04) increase = \$7,800 year 2. | 7,500 | 0 | 7,800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15,300 | 0 |
| Subtotal | 20,150 | 2,500 | 30,784 | 5,200 | 16,981 | 0 | 17,660 | 0 | 18,367 | 0 | 103,942 | 7,700 |
| SUBTOTAL | 140,855 | 84,182 | 175,770 | 134,483 | 167,767 | 134,455 | 174,478 | 139,833 | 181,457 | 145,426 | 840,327 | 638,380 |
| In kind | | | | | | | | | | | | |
| Volunteer service hours 1600 hours x \$19.51/hr, national volunteer hourly rate, = \$31,216 year 1. Annual 4% (1.04) increase. | 31,216 | 0 | 32,465 | 0 | 33,763 | 0 | 35,114 | 0 | 36,518 | 0 | 169,076 | 0 |
| Subtotal | 31,216 | 0 | 32,465 | 0 | 33,763 | 0 | 35,114 | 0 | 36,518 | 0 | 169,076 | 0 |
| TOTAL | 172,071 | 84,182 | 208,235 | 134,483 | 201,530 | 134,455 | 209,591 | 139,833 | 217,975 | 145,426 | 1,009,403 | 638,380 |

VI. Personnel

OIM will employ project director Cheryl Barnes and an OIM educator (to be hired), who will report to SDOF executive director John Valencia and work with SDOF marketing and development director Heidi van Lydegraf.



John Valencia, Executive Director

Mr. Valencia holds a Bachelors of Business Administration, Marketing & Finance with two minors in Non Profit Management and Leadership from the University of San Diego. John, a San Diego native, brings ten years of non profit experience, an entrepreneurial spirit, and a sincere devotion for the ocean. John has served as Executive Director for two other San Diego non profits and was CEO for an international light manufacturing company. John has been recognized for his dedication to the non profit sector with Kiwanis Club's Outstanding Community Involvement Award, American Humanic's Community Award, and San Diego's Person of the Year Award. John is currently working on his Master's degree in Non-Profit Management. In his free time, John can be found surfing at La Jolla Shores or Solana Beach.

Heidi van Lydegraf, SDOF marketing and development director

Ms. van Lydegraf earned a Bachelor of Arts degree with a major in Communications with an Advertising Concentration and Business minor from Loyola College of Maryland. Heidi brings over a decade of marketing and sales management experience, most recently having consulted for Fortune 500 companies. Heidi's love of the ocean began in 1988 when she was certified as a PADI Scuba diver in Micronesia.

Cheryl Barnes, Project director qualifications

Ms. Barnes graduated from San Diego State University in 2006 with a Bachelor's in Marine Biology. Through her work at SDOF, Cheryl hopes to increase awareness about our impaired waters while providing simple environmental solutions for both children and adults.

OIM Educator qualifications

The OIM Educator will possess a passion for inspiring young minds about our beautiful marine ecosystems. With a background as a teaching professional, able to communicate clearly and energize a room, the SDOF OIM Educator must be able to plan and execute lesson plans as directed by the OIM Director.

VII. Subconsultants

For the past four years, Outdoor Outreach (<http://outdooroutreach.org/index.htm>) has provided volunteers to work on our OIM project and has signed up their young clients to participate in OIM. Outdoor Outreach's comprehensive outdoor programs support underserved youth in San Diego County who are at risk for school dropout, substance abuse, violence and unintended pregnancy. Outdoor Outreach is the only agency in San Diego and one of just a few in the country that uses outdoor physical experiences to provide youth with the support, relationships, resources and opportunities they need to become successful adults. Since its founding in 2001, Outdoor Outreach has taken more than 3,500 youth on over 1,000 outings, including rock climbing, snowboarding, surfing, snorkeling, mountain biking, and backpacking. In 2008, Outdoor Outreach served 750 youth through 250 outings.

VIII. Non-Profit Status

For proof of San Diego Oceans Foundation's non-profit status, see the attached letter from the Internal Revenue Service, dated June 8, 1990, stating we are a 501(c) (3) organization.

IX Applicant Disclosure

No citations for environmental violations have been issued to San Diego Oceans Foundation or our Subconsultants from any regulatory agency within the last five years.

X. Agreement

We accept the sample agreement, including acceptance of the insurance and indemnification clauses, attached to the March 11, 2009 Request for Proposals, Environmental Projects Benefiting San Diego Bay, San Diego Unified Port District. We understand the Port reserves the right to change the insurance requirements based on the perceived risk of the proposed project. The project and cost proposal narrative will be the basis of Attachment A - Scope of Services, and Attachment B - Compensation and Invoicing.

XI. Conflict of Interest

San Diego Oceans Foundation is not performing services of any kind, for any person or entity that would conflict with the services to be provided to the Port under this agreement. Further, should SDOF be selected pursuant to this RFP, SDOF agrees that we will not perform services which would conflict with the services to be provided under this RFP.

XII. Additional Information

We have received letters of support from three organizations who work with SDOF and contribute to our programs. Because of space limits, we have not included them in our proposal. We will be happy to provide copies upon request.

Attachment A: Respondent's Equal Opportunity Program

See attached.