



July 18, 2016

Richard L. Scott
Governor, State of Florida
400 S Monroe St
Tallahassee, FL 32399

Re: Algae/Cyanobacteria Bloom in St. Lucie, Martin, Palm Beach and Lee Counties.

Dear Governor Scott:

I am writing on behalf of the Diving Equipment and Marketing Association (DEMA), the hundreds of dive-related businesses and thousands of divers in South Florida, regarding the above referenced issue.

DEMA is a non-profit trade association based in San Diego California, representing the business and consumer interests of the recreational scuba and snorkel diving industries all over the world. DEMA's mission is to bring businesses together to grow the Diving Industry worldwide, and we are actively engaged in promoting diving in Florida.

As you may know, Florida is the #1 scuba diving and snorkeling destination in the world. Divers and dive businesses depend upon a system of healthy Florida diving destinations to sustain their operations and activities. DEMA is highly concerned with the recent bloom of toxic cyanobacteria (often referred to in the media as an "algae" bloom) in St. Lucie, Martin, Lee and Palm Beach Counties and the impact this bloom will have on the recreational diving businesses in these counties, as well as the reputation of Florida as a premier recreational diving location.

The Potential Impact of the Algae/Cyanobacteria Bloom on the Diving Industry

Businesses in the Florida Diving Industry are clearly dependent on both Florida residents and visitors to the state. Almost 25% of divers in the US visit Florida to dive there (See EXHIBIT D, Percentage of Active Divers from the US Diving in Florida).

Although it is difficult to measure the direct impact the cyanobacteria bloom will have on residents participating in diving, [according to one source](#), fewer visitors are traveling to this important diving destination due to the presence (or perception) of the algae bloom. Hotel occupancy appears to be down about 18% when compared to 2015's numbers. If this decline continues to hold, it could mean the loss of hundreds of thousands of dollars in revenues for diving operators who depend on BOTH tourist and residential dollars in the summer to survive, and substantial losses in tax revenues for the state.

Perhaps worse are the long-term ramifications; the loss of Florida's reputation as a premier US diving destination. The algae bloom could cause international and domestic tourists who planned to dive in Florida this year to seek a different diving location in the nearby Caribbean or closer to home. Doing so also endangers future travel to Florida to dive.

Suggestions for the Algae/Cyanobacteria Situation

We appreciate the fact that you issued an [Executive Order](#) on June 29, declaring the presence of this bloom to be an emergency situation in Martin and St. Lucie Counties, and subsequently extended the emergency to cover Lee and Palm Beach Counties. We agree that such action must be taken. But more than this, we urge you to take direct and decisive action that helps mitigate future problems by continuing to work with the federal government on the problem of water storage and discharge from Lake Okeechobee, as well as work to reduce the effects of pollution that includes sewage runoff, and discharges from the phosphate mining industry and agriculture, all of which appear to contribute to this year's need for emergency action. We are also pleased to see that a loan program has been put into place, particularly to help the small businesses most impacted by the spread of the bloom. We also hope you will continue these efforts by following through with legislative policy proposals, and funding mechanisms, at the start of the next Florida legislative session.

How Important is the Diving Industry in Florida?

Florida is second only to California in the number of new diver certifications in the US each year (See EXHIBIT E-Open Water Certifications 2005 to 2015) and South Florida is one of the most important diving regions in the world. The Diving Industry in South Florida depends on sustainable interaction with the marine environment for its very existence, and is aware of the need for long term sustainability of these resources for all citizens of the U.S. The Industry is dedicated to a healthy marine environment and protection of aquatic resources. For these reasons DEMA's annual goals include a mandate to engage in activities which promote the health of aquatic resources while protecting diver access to those resources.

Scuba divers and snorkelers are stewards of a unique environment upon which they depend for recreation and study, and all scuba divers today are educated to maintain proper buoyancy and positioning configuration while diving so as to help prevent accidental damage to natural marine and other aquatic resources. Many divers have sought additional training above their initial diving "certification," in order to better understand how they can protect the aquatic environment, and many have sought and received training to better understand the complex nature of coral reef communities, fishery resources and how to contribute to the knowledge base needed to monitor and protect these environments. With their first-hand observation of these protected areas, divers can encourage also others to protect these resources.

The Economic Impact of the Diving Industry

Recreational scuba diving and snorkeling contribute about \$11 billion to the US gross domestic product. In Florida, the recreational diving industry is largely centered in South Florida (including Martin and St. Lucie Counties), where snorkeling accounts for about 4.24 million visitor-days per year. Scuba diving accounts for about 4.56 million visitor-

days annually, and the combination of snorkeling and scuba diving in Florida creates about 26,000 full-time equivalent, tourism-related jobs.

Visitors participating in recreational scuba diving and snorkeling contribute about \$904.4 million to the Florida economy each year. Florida residents learning to dive in the state annually contribute an additional \$20 million in sales of equipment, education and travel to local economies in the state.

The most active divers in the U.S. today participate in diving activities in many areas of the country, and Florida is the number one US-based diving destination for divers living in the United States (See EXHIBIT C– Percentage of Active Divers from the US Diving in Florida). Today’s most active divers fit the following profile:

- Participant’s Age: Mean: 33, Median: 30
- Head of Household: Mean Age: 53
- Participant’s Gender: Males: 65%, Females 35%
- Annual Household Income: 64.4% make between \$100,000 & \$150,000
- Occupation: 53.6% are Managerial/Technical/Professional
- Education: 59.2% have completed college or grad school
- Home Ownership: 91.9% own their home
- Marital Status: 75.9% are married
- Presence and age of children in Household: 23.7% have children between 11 and 17 years of age

(See EXHIBIT D-Demographic Profile of Recreational Diver):

Recreational scuba divers and snorkelers contribute to tourism revenue by purchasing day outings and extended dive trips originating in South Florida, as well as purchasing diving equipment and other diving-related items, and by spending on hotels, food, air and ground transportation, and other secondary items while in South Florida to dive. Divers contribute to sales tax revenues for local counties, municipalities and the state, and to federal and state tax revenues through the creation of diving tourism-related jobs.

Diving is actively conducted under a variety of conditions and in a variety of locations around the state of Florida. In South Florida, including the areas near St. Lucie, Martin and Palm Beach Counties, divers have access to both natural and artificial reefs.

South Florida Tourism: Natural Reefs

Natural coral reefs contribute some \$375 billion in goods and services to the world and according to a 2000 report from the World Resources Institute, coral reefs in the Caribbean (including South Florida) alone contribute \$2.1 billion for dive tourism.

Recreational divers, snorkelers, fishers, and others are attracted by the presence and accessibility of coral reefs. In Florida, coral reefs provide more than 18.4 million visitor days of recreational use (Source: *Coral Reef Ecosystems Value: Enhancing Resilient Communities* presented during Capitol Hill Ocean Week, June 4, 2008, Billy D. Causey, Ph.D., Regional Director, Southeast Region, National Marine Sanctuaries - See EXHIBIT A - Florida Coral Reefs Recreational Use). According to *Socioeconomic Study of Reefs in Martin County, Florida* (Hazen and Sawyer), in Martin County alone, residents and

visitors using the natural reefs in the area generated almost \$6,000,000 in sales and close to \$400,000 in tax revenues. (See EXHIBIT B – Economic Contribution of Natural Reef-Related Expenditures in Martin County). The natural reefs in St. Lucie County are not as prevalent as in Martin County, yet they likely generate similar economic contributions.

In the presentation, *Taking the Heat in Tropical Seas* (Rodney V. Salm, PhD for Capitol Hill Ocean Week, June 4, 2008) the average value of coral reefs was estimated to be about \$813,000/sq. mile for recreational use, food, jobs and other services combined.

South Florida Tourism: Artificial Reefs

Artificial Reefs, including those close to the cyanobacteria bloom in Martin, St. Lucie Counties and Palm Beach, have been shown to contribute significantly to local economies.

According to *Socioeconomic Study of Reefs in Martin County, Florida* (Hazen and Sawyer), in Martin County alone, residents and visitors using the natural reefs in the area generated more than \$7,000,000 in sales and over \$450,000 in tax revenues. (See EXHIBIT C – Economic Contribution of Artificial Reef-Related Expenditures in Martin County). With more than 50 artificial reefs in St. Lucie County, the economic contribution of these structures will be similar.

The expenditures of divers visiting artificial reefs in Florida are estimated at more than \$131 for every \$1 dollar of local and state investment (Source: Jon Dodrill, Florida Fish and Wildlife Conservation Commission). Diving and marine tourism are so influential to the economy that in 2008 the State of Florida legislation which established a matching grant program titled Ships to Reefs (S. 379.249, Fla. Stat.; Ch. 2008-100; SB 432). [The program authorizes](#) the sinking of decommissioned U.S. Military vessels specially cleaned and prepared to increase marine habitat and for use by recreational scuba divers and fishers.

The Recreational Diving Industry, hotels, restaurants, marinas and other businesses associated with diving activities are all dependent on the availability of quality diving and snorkeling sites.

Please consider DEMA resource for information regarding the potential solutions of this problem, and for information regarding the impact to Florida's divers and dive businesses. Once resolved, we believe a strong campaign that helps demonstrate that these issues are solved will contribute greatly to maintaining Florida's reputation as a premier diving destination. DEMA Stands ready to assist in such a campaign, once the outlined issues are resolved.

Thank you for your consideration,



Tom Ingram
President and CEO

EXHIBITS

EXHIBIT A – Florida Coral Reefs: Recreational Use

Recreational Use of Coral Reefs in Florida	
Snorkeling	4.24 million visitor days
Scuba Diving	4.56 million visitor days
Fishing	9.72 million visitor days
Glass-bottom Boats	0.12 million visitor days
TOTAL	18.64 million visitor days
Ref: <i>Dr. Vernon R. Leeworthy, Chief Economist, Office of National Marine Sanctuaries</i>	

EXHIBIT B – Economic Contribution of Natural Reef-Related Expenditures in Martin County Florida

Economic Contribution of Natural Reef-Related Expenditures in 2003 to Martin County, in 2003 dollars				
Round of Spending	Contribution to:			
	Sales ^a	Income ^b	Indirect Business Taxes ^c	Employment ^d
Direct ^a				
Resident	\$3,603,000	\$1,509,000	\$248,000	49
Visitor	\$1,546,000	\$682,000	\$109,000	24
Total	\$5,149,000	\$2,191,000	\$357,000	73
Indirect	\$470,000	\$235,000	\$16,000	6
Induced	\$346,000	\$204,000	\$23,000	4
Total	\$5,965,000	\$2,630,000	\$396,000	84
^a The sales contribution is defined as the value of the additional output produced in the county due to the reef-related expenditures. ^b Total income is the sum of wages, salaries, proprietor's income, profits, rents, royalties and dividends. ^c The indirect business tax contribution is the sum of the additional excise taxes, property taxes, fees, licenses, and sales taxes collected due to the reef-related expenditures. It excludes taxes on profit and income. ^d Employment includes the number of full-time and part-time jobs.				
Source: <i>Socioeconomic Study of Reefs in Martin County, Florida, Hazen and Sawyer</i>				

EXHIBIT C – Economic Contribution of Artificial Reef-Related Expenditures in Martin County Florida

Economic Contribution of Artificial Reef-Related Expenditures in 2003 to Martin County, in 2003 dollars				
Round of Spending	Contribution to:			
	Sales^a	Income^b	Indirect Business Taxes^c	Employment^d
Direct				
Resident	\$2,709,000	\$1,120,000	\$182,000	36
Visitor	\$2,913,000	\$1,263,000	\$204,000	43
Total	\$5,622,000	\$2,383,000	\$386,000	80
Indirect	\$904,000	\$447,000	\$30,000	11
Induced	\$646,000	\$381,000	\$44,000	8
Total	\$7,172,000	\$3,211,000	\$460,000	99

^a The sales contribution is defined as the value of the additional output produced in the county due to the reef-related expenditures.

^b Total income is the sum of wages, salaries, proprietor's income, profits, rents, royalties and dividends.

^c The indirect business tax contribution is the sum of the additional excise taxes, property taxes, fees, licenses, and sales taxes collected due to the reef-related expenditures. It excludes taxes on profit and income.

^d Employment includes the number of full-time and part-time jobs.

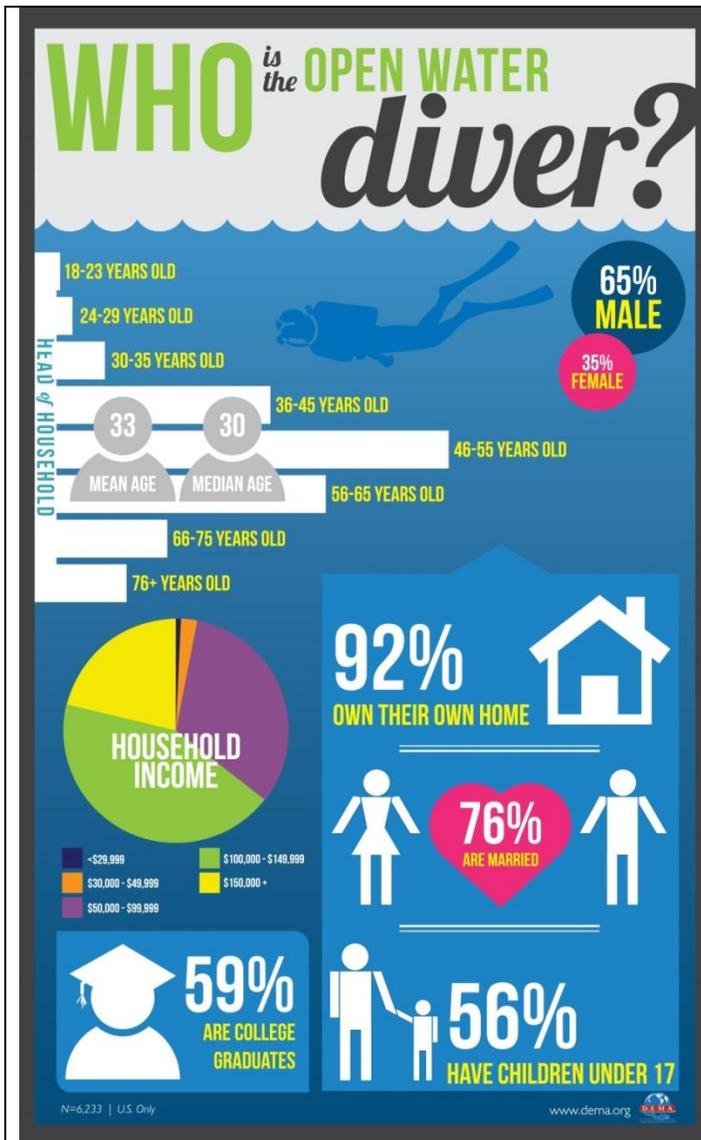
Source: *Socioeconomic Study of Reefs in Martin County, Florida*, Hazen and Sawyer

EXHIBIT D– Percentage of Active Divers from the US Diving in Florida

In the LAST 12 months WHERE did you go on a day dive trip (WITHOUT AN OVERNIGHT STAY) in the US/US Territories (whether on a dive boat, land-based dive location or other)?	
N=6,134	
Answer Options	Response Percent
Florida	23.3%
California	14.5%
Hawaii	7.0%
Texas	5.8%
Pennsylvania	5.0%

Source: *Diver Study 2014*, Diving Equipment and Marketing Association

EXHIBIT D-Demographic Profile of Recreational Diver



Profile of **Open Water-level*** Divers in the US

- Participant's Age: Mean: 33, Median: 30
- Head of Household: Mean Age: 53
- Participant's Gender: Males: 65%, Females 35%
- Annual Household Income: 64.4% make between \$100,000 & \$150,000
- Occupation: 53.6% are Managerial/Technical/Professional
- Education: 59.2% completed college or grad school
- Home Ownership: 91.9% own their home
- Marital Status: 75.9% are married
- Presence and age of children: 23.7% have kids between 11 and 17

*Open Water Divers are entry-level divers

(Source: *Diving Equipment and Marketing Association 2014 Diver Study*)

EXHIBIT E – Open Water (Entry level) Diver Certifications 2005 through 2015

Open Water Certification Statistics: Top Diving States in the US 2005 through 2015

State by State 2005-2015	2005 Total	2006-Total	2007-Total	2008-Total	2009-Total	2010-Total	2011-Total	2012-Total	2013-Total	2014-Total	2015-Total	TOTAL 2005-2015	% of Total 2005-2015
CALIFORNIA	22,572	22,329	21,429	20,464	18,270	18,552	18,765	20,015	20,287	20,451	20,806	223,940	13.52%
FLORIDA	13,688	15,055	14,493	13,933	13,377	13,661	15,226	15,545	13,849	13,793	14,528	157,148	9.48%
TEXAS	10,307	11,058	11,125	11,429	10,741	10,966	11,930	11,773	11,449	11,565	11,779	124,122	7.49%
VIRGINIA/MARYLAND/D.C	7,783	7,597	7,613	7,367	7,081	7,895	7,789	7,711	7,284	6,871	6,617	81,608	4.93%
NEW YORK	7,480	7,481	7,678	7,691	7,105	7,793	7,314	7,178	7,010	6,926	7,166	80,822	4.88%

Source: *Diving Equipment and Marketing Association Certification Census*