Bayberry Garden Club Bayshore Saltwater Flyrodders Belford Seafood Co-op Belmar Fishing Club Bengen Save the Watershed Action Network Berkeley Shores Homeowners Civic Association Cape May Environmental Commission

Central Jersey Anglers Citizens Conservation Council of Ocean County Clean Air Camp Coalition Against Toxics
Coalition for Peace & Justice
Coastal Jersey Parrot Head Club Communication Workers of America, Local 1034

Concerned Busines Concerned Citizens of Bensonhu Concerned Citizens of Bensonhurst
Concerned Citizens of COA
Concerned Citizens of Montauk
Dosil's Sea Roamers
Eastern Monmouth Chamber of Commerce
Environmental Response Network Environmental Response Network Explorers Dive Club Fisheries Defense Fund Fishermen's Dock Cooperative Fisher's Island Conservancy Friends of Island Beach State Park Friends of Liberty State Park Friends of Liberty State Park

Friends of Liberty State Park Friends of Long Island Sound Friends of the Boardwalk Garden Club of Englewood Garden Club of Fair Haven Garden Club of Long Beach Island Garden Club of Norristown Garden Club of Navesink Garden Club of New Jersey Garden Club of New Vernon Garden Club of Oceanport Garden Club of Princeton Garden Club of Ridgewood Garden Club of Rumson

Garden Club of Short Hills Garden Club of Shrewsbury Garden (Lub of Shrewsbury Garden (Lub of Spring Lake Garden Club of Washington Valley Great Egg Harbor Watershed Association Greater Point Pleasant Charter Boat Association Hi-Mar Striper Club Hi-Mar Striper Club

Highlands Business Partnership Highlands Chamber of Commerce Hudson River Fishermen's Association/NJ Interact Clubs of Rotary International Jersey Coast Shark Anglers Jersey Shore Audubon Society Jersey Shore Captains Association Jersey Shore Running Club Junior League of Monmouth County

Junior League of Monmouth County
Junior League of Summit
Kiwanis Club of Manasquan
Kiwanis Club of Shadow Lake Village
Leonardo Party & Pleasure Boat Association
Leonardo Tax Payers Association Main Street Wildwood Marine Trades Association of NJ

Marine Trades Association of NJ Mommouth Conservation Foundation Monmouth County Association of Realtors Monmouth County Audubon Society Monmouth County Friends of Clearwater Montauk Fisherman's Emergency Fund National Coalition for Marine Conservation

National Coalition for Marine Conservation
Natural Resources Protective Association
Navesink River Municipalities Committee
Newcomers Club of Monmouth County
NJ Beach Buggy Association
NJ Commercial Fishermen's Association
NJ Council of Dive Clubs
NJ Environmental Federation
NJ Environmental Lobby
NJ Marine Educators Association
NJ PIRG Citizen Lobby
NJ Mine Educators Association
NJ PIRG Citizen Lobby
NJ Windsurfing Association
Nottingham Hunting & Fishing Club
NYC Sea Gypsies

NYC Sea Gypsies NY/NJ Baykeeper

NY Marine Educators Association
Ocean Advocates
Ocean Conservancy
Ocean County Citizens for Clean Water

Ocean Divas Ocean Wreck Divers Outreach/First Presbyterian Church of Rumson
Picatinny Saltwater Sportsmen Club
Raritan Bay Anglers Club
Raritan Riverkeeper

Riverside Drive Association Rotary Club of Long Branch Saint George's by the River Church, Rumson

orge's by the River Church, Rumson Saltwater Anglers of Bergen County Sandy Hook Bay Catamaran Club Save Barnegat Bay Save the Bay SEAS Monmouth Seaweeders Garden Club

Seaweeders Garden Club Shark River Cleanup Coaltion Shark River Surf Anglers Sheepshead Bay Fishing Fleet Association Shore Adventure Club Shore Surf Club Sierra Club, Shore Chapter

Soroptimist Club of Cape May County South Monmouth Board of Realtors Staten Island Friends of Clearwater Strathmere Fishing & Environmental Club Surfers' Environmental Alliance Surfrider Foundation, Jersey Shore Chapter

Terra Nova Garden Club Unitarian Universalist Congregation of Mon. County
United Boatmen of NY/NJ
United Bowhunters of NJ
Volunteer Friends of Boaters Women's Club of Brick Township Women's Club of Keypo Women's Club of Long Branch Women's Club of Merchantville Zen Society Clean Ocean Action



Ocean Advocacy Since 1984

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Bill Figley, Reef Coordinator NJ Division of Fish and Wildlife P.O. Box 418 Port Republic, NJ 08241

December 6, 2004

RE: New Jersey Draft Artificial Reef Plan

VIA FASCIMILE

Dear Mr. Figley,

Clean Ocean Action (COA, representing 170 organizations) has reviewed the above referenced draft plan submit the following comments.

In general, the Draft Plan works towards ensuring that only appropriate materials be used to develop New Jersey's Artificial Reef Program. However, it is clear that the program is under-funded and lacks supportive resources to be effective. It is important to note that because of content, the document reads much more like a program than a plan. Perhaps the NJDEP should consider revising the title.

Upon careful review of the document to address marine water quality issues there are a few specific issues that we feel still need additional attention. They are as follows:

### 1. TRAC Committee

It is our understanding that the TRAC Committee has only had one meeting thus far and has yet to begin the process of developing, much less implementing, monitoring requirements for the 8-year study on subway cars. The TRAC Committee is an integral part of the reef program and serves the important role of providing balanced and independent scientific and technical advisory regarding future (and current) reef materials. The DEP is urged to activate the committee and allow it to provide the technical and scientific expertise needed for the reef program

# 2. CONCRETE/REEF BALLS ISSUES

This section requires clarification in several areas. Page 66, Section 6.2 Construction Material, 2<sup>nd</sup> states:¶ "Type II Portland cement, which is used to manufacture **Reef Ball habitats**, can be expected to have a life expectancy of 20 to 35 years in the marine environment (American Society of Testing Materials in the Designation Standard Specifications for Portland Cement)."

This statement is misleading for two reasons and should be revised:

- a. Type II Portland Cement ASTM Standards refer to an engineering lifespan and are only appropriate for land-based applications. The biological lifespan (maintaining 90% integrity) of unamended Type II Portland Cement in the marine environment is approximately **100 years**<sup>1</sup>.
- b. Reef Balls are not an appropriate example and should be excluded from this paragraph as they are made with a Microsilica additive, which resists chemical breakdown in marine environments, which increases the lifespan of the Reef Ball to **500 years**<sup>1</sup>.

<sup>1</sup> Information provided by W.R. Grace Concrete and the Reef Ball Foundation

# 3. MISCELANEOUS CABLE

a. Section 6.2.6 Undersea Telecommunication Wire, Page 69

There are several concerns about the appropriateness of using obsolete telecommunication wires as reef materials (100' diameter piles of cable 3' to 10' in profile)

The Plan clearly states that:

• Environmentally hazardous material should not be used:

Page 6, Section 7 (C)

"5. The reef materials shall not be toxic"

"6. The reef materials shall not be hazardous"

- Plastic materials should not be used:
- o Page 69, Section 6.2.7, 2<sup>nd</sup> Sentence: "Lightweight materials, such as plastic or fiberglass, are unacceptable as major components of reef structures"
- O Page 81, 5<sup>th</sup> ¶, 1<sup>st</sup> Sentence: "The use of manmade materials, such as auto tires (not used anymore), plastic (not used), concrete debris and ships, to construct reefs opens the potential for introducing chemical compounds into the marine environment."
- b. There is no scientific evidence to support the statement in this section

"After laying on the ocean floor for 50 to 100 years, they show little sign of wear" A study analyzing failures of ocean communications cable cited commercial fishing operations as the most significant hazard to the cables resulting in damage<sup>2</sup>. On their own these cables may be fairly resistant to deterioration, but many of the older ones have already sustained significant damage while in place. These cables can contain contaminants such as copper wire cores, coal-tarred hemp or polyethylene plastic coverings and lead based stabilizers.

<sup>2</sup> A. J. Munitz. 1966 Analyzing Failures of Ocean Communications Cable. Undersea Technology 7: 45-49.

Cables clearly do not meet the specific conditions stated in Section 1.2 Department Policy and are therefore not appropriate artificial reef material.

### 4. MONOFILLAMENT

It is evident that the structural composition of some of the reef material leads to excessive snagging of fishing tackle and creates an entanglement hazard to marine life. COA recommends future discussions with divers and fishing groups, to develop guidelines to reduce and/or prevent tackle entanglement on reef materials.

# 5. CLEAN UP PROCEDURES

The Plan lacks guidelines for clean-up procedures that are required prior to sinking of materials. All material types need specific clean-up procedures to ensure they are in appropriate condition for reef building.

# 6. LANGUAGE ISSUES

Page 69, 1st Sentence: There is a reference to standards in Paragraph 4. This needs to be clarified and should state:

"standards set forth in paragraph 4 of the Policy Directive 2003-02"

Page 71, Section 6.2.8 Other Suitable Material: The language needs to be clarified to properly reflect the Policy Directive 2003-02, we recommend a change from:

"with the exception of subway cars" to

"with the exception of the proposed study on subway cars"

### 7. FUNDING ISSUES

The success of the artificial reef program in New Jersey is going to require a much more substantial commitment of funding and resources to support the purchase of high quality reef materials and adequate scientific monitoring.

The incorporation of our comments into the final NJ Artificial Reef Plan would ensure proper protection of the marine environment and result in a document that will serve as the foundation for the Artificial Reef Program.

Sincerely,

Cindy Zipf

**Executive Director** 

Jennifer Samson, PhD **Principal Scientist** 

Janipa C. Hamson