

m. **LICENSES/PERMITS HELD BY CMS**

PUC BOAT TRANSPORT LICENSE – see attached

JAMESTOWN/NEWPORT FERRY – PUC LICENSE – see attached

RI Retail Sales Permit, expires 6/30/16

RI DEM UST permit, expires 9/30/2015

RI DEM Storm Water (RIPDES) permit - current

RI Dept. of Labor & Training - Weights & Measures inspection date 7/29/15

RI Dept. of Labor & Training – EPA - TIER II REPORTING under SARA Title III, Section 312 (40 CFR § 370.25) is current - Feb.2015 for Calendar Year 2014

Town of Jamestown Retail Sales License, expires 2/28/2016

RI Litter Control Participation Permits for calendar year 2015

RI Public Utilities Commission licenses for calendar year 2015

Solar Roof has a PUC # to generate and sell power to National Grid

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DIVISION OF PUBLIC UTILITIES AND CARRIERS
89 JEFFERSON BOULEVARD
WARWICK, RHODE ISLAND 02888

**COMMON CARRIER OF
CERTIFICATE OF OPERATING AUTHORITY**

MC # 1146
Conanicut Marine Service, Inc.
One Ferry Wharf
Jamestown, RI 02835

The above named carrier has complied with all applicable provisions of Title 39, Chapter 12, of the General Laws of Rhode Island, and is hereby granted authority from the Division to engage in the intrastate transportation of:

Boats

The person, firm, partnership or corporation named herein may engage in the above described operations provided all operations are in conformance with the provisions of Title 39, Chapter 12 of the General Laws of Rhode Island, 1956, as amended, and the rules and regulations issued under authority thereof. Ownership, management, or control of the authority granted herein shall remain in the name(s) listed above. In the case of a corporation, the officers, directors, managers, and/or shareholders shall remain as is, without change, unless otherwise approved by the Division.

**Thomas F. Ahern
Administrator**

THIS CERTIFICATE MUST BE PROMINENTLY DISPLAYED AT THE BUSINESS LOCATION OF THE LICENSEE.



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DIVISION OF PUBLIC UTILITIES AND CARRIERS

89 JEFFERSON BOULEVARD
WARWICK, RHODE ISLAND 02888

WATER CARRIER
CERTIFICATE OF OPERATING AUTHORITY

MC # W-1162

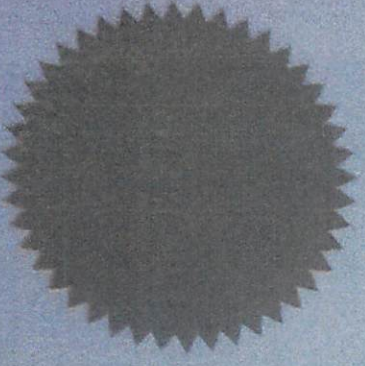
Conanicut Marine Services, Inc.
One Ferry Wharf
Jamestown, RI 02835

The above named carrier has complied with all applicable provisions of Title 39, Chapter 3, of the General Laws of Rhode Island, and is hereby granted authority from the Division as a Water Carrier, and may engage in the intrastate transportation of

Passengers between One Ferry Wharf, Jamestown, RI and Bannister Wharf, Newport, RI

The person, firm, partnership or corporation named herein may engage in the above described operations provided all operations are in conformance with the provisions of Title 39, Chapter 3 of the General Laws of Rhode Island and all the rules and regulations issued under authority thereof. Ownership, management, or control of the authority granted herein shall remain in the name(s) listed above. In the case of a corporation, the officers, directors, managers, and/or shareholders shall remain as is, without change, unless otherwise approved by the Division.

Thomas F. Ahern
Administrator



THIS CERTIFICATE MUST BE PROMINENTLY DISPLAYED AT THE BUSINESS LOCATION OF THE LICENSEE.

CONANICUT MARINE SERVICES INC
KATHERINE
1 FERRY WHARF
JAMESTOWN, RI 02835

Your identification number is 050356126 01

The identification number listed on your permit may contain x's in the first five digits. This is for security purposes only. Please detach at the perforation and retain this portion for your records.

State of Rhode Island and Providence Plantations
DEPARTMENT OF REVENUE
DIVISION OF TAXATION



FEE: \$10.00

ID: XXXXX6126 01

Permit to Make Sales at Retail
UNDER THE SALES AND USE TAX ACT

NAME AND LOCATION OF BUSINESS (IF NOT SAME AS BELOW)
CONANICUT MARINE SERVICE INC
KATHERINE
1 FERRY WHARF
JAMESTOWN, RI 02835

ISSUED TO:
CONANICUT MARINE SERVICES INC
KATHERINE
1 FERRY WHARF
JAMESTOWN, RI 02835

This permit, which authorizes the holder to collect the sales/use tax, is not assignable and is valid only for the person in whose name it is issued and for the transaction of business at the place designated. When the holder of this permit ceases to conduct the business for which it is issued at the place named, the permit must be returned to the Tax Administrator for cancellation. The ID Number, which appears in the upper left-hand corner, should be shown in all sales and use tax returns and in correspondence relative to the tax.

THIS PERMIT MUST AT ALL TIMES BE CONSPICUOUSLY DISPLAYED AT THE PLACE FOR WHICH IT IS ISSUED.

DAVID M. SULLIVAN TAX ADMINISTRATOR

DATE: 06/29/2015

EXPIRES 06/30/2016

DEPARTMENT OF REVENUE
DIVISION OF TAXATION

Permit to Make Sales at Retail
UNDER THE SALES AND USE TAX ACT



FEE: \$ 10.00
ID.: XXXXX6126 00

CONANICUT MARINE SERVICES
D/B/A THE JAMESTOWN FERRY

NAME AND
LOCATION OF
BUSINESS
IF NOT SAME
AS BELOW:

ISSUED
TO:

CONANICUT MARINE SERVICES
D/B/A THE JAMESTOWN FERRY
1 FERRY WHARF
JAMESTOWN

This permit which authorizes the holder to collect the sales/use tax is not assignable and is valid only for the person in whose name it is issued and for the transaction of business at the place designated. When the holder of this permit ceases to conduct the business for which it is issued at the place named, the permit must be returned to the Tax Administrator for cancellation. The ID Number which appears in the upper left-hand corner, should be shown in all sales and use tax returns and in correspondence relative to the tax.

**THIS PERMIT MUST AT ALL TIMES BE
CONSPICUOUSLY DISPLAYED AT THE
PLACE FOR WHICH IT IS ISSUED.**

RI 02835-1205 DAVID M. SULLIVAN TAX ADMINISTRATOR

DATE: 08/20/2015 **EXPIRES** 06/30/2016

The identification number listed on your permit may contain x's in the first five digits. This is for security purposes only. If so, your permit number is your federal id number.



STATE OF RHODE ISLAND

Department of Environmental Management
Office of Waste Management



UNDERGROUND STORAGE TANK FACILITY CERTIFICATE OF REGISTRATION

This certifies that **CONANICUT MARINE SERVICES, INC.**

has been duly registered pursuant to Rule 6.00 of the regulations for Underground Storage Facilities Used for Petroleum Products and Hazardous Materials based upon factual representations contained in the Applications for Registration. Any substantial modifications to the systems at this facility or changes in information contained in the Applications must be reported to the Department.

Facility Address:

1 FERRY WHARF
JAMESTOWN, RI


Supervising Engineer, Office of Waste Management

This certificate effective 1 October 2014 and expires 30 September 2015 or until 45 days following the issuance of a fee invoice.

This Certificate cannot be transferred to any other person, facility or location without the express written approval of the Director. This Certificate acknowledges only that the above-referenced facility has complied with the registration requirements of Rule 6.00 and DOES NOT indicate this facility's compliance with any other section of the regulations. This Certificate may be suspended, modified or revoked in accordance with the Regulations.

The following tank(s) have been duly registered at the facility:

TANK NO.	STATUS	SUBSTANCE	CAPACITY
3	In Use	Gasoline	6250
4	In Use	Diesel	6250
5	In Use	Diesel	6250



**RHODE ISLAND DEPARTMENT OF LABOR AND TRAINING
DIVISION OF WORKFORCE REGULATION AND SAFETY
OCCUPATIONAL SAFETY UNIT**

www.dlt.state.ri.us

Fee schedule as mandated by GL 47-1-5.1 for services performed by a
Certified Sealer assigned by the Director of Labor and Training under GL 47-1-1.1

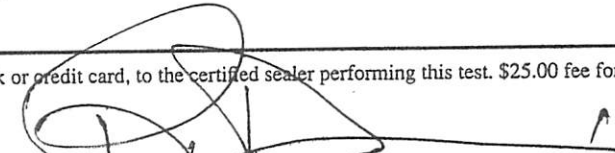
CERTIFIED SEALER OF WEIGHTS AND MEASURES FOR THE STATE OF RHODE ISLAND

This is to certify that I have tested and/or approved for use, in accordance with the National Institute of Standards and Technology Handbook 44, the balances, measuring devices, and other weights and measures apparatus for the person or company: CONANICOT, MARINE

Mechanical/Electronic Scale with NETP Certification	Cost Each		No. Units
Capacity of less than 35 pounds	\$ 12.00		\$
Capacity of 35.01 pounds to 300 pounds	\$ 30.00		\$
Capacity of 300.01 pounds to 5,000 pounds	\$ 34.00		\$
Capacity of over 5000.01 pounds per hour	\$ 36.00		\$
Retail precious metal scale/Pharmacy scale	\$ 30.00		\$
Gasoline Measuring Devices (test and/or approve) per meter	\$ 18.00	3	\$ 54.00
Verification of price and computation at multi-grades per multi-grade	\$ 12.00		\$
		Total	\$ 54.00

Note to Owner/Manager: Fees shall be paid by cash, check or credit card, to the certified sealer performing this test. \$25.00 fee for returned checks. \$5.00 credit card processing fee.

7/29/15
Date


Certified Sealer of Weights and Measures

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF REVENUE
DIVISION OF TAXATION
ONE CAPITOL HILL, PROVIDENCE, RI 02908

12/01/2014

CONANICUT MARINE SERVICES INC
THE JAMESTOWN
1 FERRY WHARF
JAMESTOWN RI 02835-0000

DETACH HERE

STATE OF RHODE ISLAND	*****	*****	*	*****
DIVISION OF TAXATION	* * *	* * *	* * *	*
	*	* * *	*	*****
LITTER CONTROL PARTICIPATION PERMIT	*	* * *	*	*
CLASS A	*****	*****	*	*****

THIS PERMIT IS ISSUED TO THE BUSINESS LOCATION INDICATED BELOW IN ACCORDANCE WITH R.I.G.L. SECTION 44-44-3.1. THIS PERMIT MUST AT ALL TIMES BE CONSPICUOUSLY DISPLAYED AT THE PLACE FOR WHICH IT IS ISSUED.

CONANICUT MARINE SERVICE INC
THE JAMESTOWN
1 FERRY WHARF
JAMESTOWN RI 02835-0000

TAXPAYER ID 050356126 01

DATE 12/01/2014

DAVID M. SULLIVAN
TAX ADMINISTRATOR

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF REVENUE
DIVISION OF TAXATION
ONE CAPITOL HILL, PROVIDENCE, RI 02908

12/01/2014

CONANICUT MARINE SERVICES
D/B/A THE JAMESTOWN FERRY
1 FERRY WHARF
JAMESTOWN RI 02835-1205

DETACH HERE

STATE OF RHODE ISLAND	*****	*****	*	*****
DIVISION OF TAXATION	* * *	* * *	* *	*
	* * *	* * *	* *	*****
LITTER CONTROL PARTICIPATION PERMIT	* * *	* * *	* *	*
CLASS C	*****	*****	*	*****

THIS PERMIT IS ISSUED TO THE BUSINESS LOCATION INDICATED BELOW IN ACCORDANCE WITH R.I.G.L. SECTION 44-44-3.1. THIS PERMIT MUST AT ALL TIMES BE CONSPICUOUSLY DISPLAYED AT THE PLACE FOR WHICH IT IS ISSUED.

CONANICUT MARINE SERVICES
D/B/A THE JAMESTOWN FERRY
1 FERRY WHARF
JAMESTOWN RI 02835-1205

TAXPAYER ID 050356126 00

DATE 12/01/2014

DAVID M. SULLIVAN
TAX ADMINISTRATOR

State of Rhode Island and Providence Plantations

Town of Jamestown

LICENSE

License Number: 15-16-H48

TO: Conanicut Marine Services, Inc.
dba: the Conanicut Store
20 Narragansett Avenue
Jamestown, RI 02835

FOR THE HOURS OF: 7:00 am and no later than 5:00 pm

LICENSING DATE: March 1, 2015 to February 28, 2016

This license is issued subject to all ordinances of the Town of Jamestown as well as Rhode Island General Law

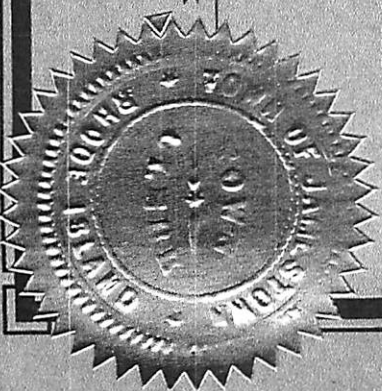
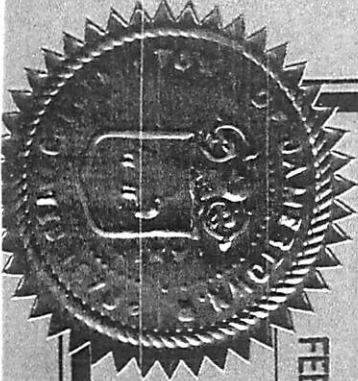
Signed and sealed by order and in behalf of the Jamestown Town Council:

FEB 23 2015

Date of Issue

Cheryl A. Fernstrom
Cheryl A. Fernstrom, CMC, Town Clerk

POST THIS LICENSE IN A CONSPICUOUS PLACE





STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

PUBLIC UTILITIES COMMISSION
89 Jefferson Blvd.
Warwick RI 02888
(401) 941-4500

Chairperson Margaret E. Curran
Commissioner Paul J. Roberti
Commissioner Herbert F. DeSimone, Jr.

October 21, 2013

William Munger, President
Conanicut Marine Services, Inc.
20 Narragansett Avenue
Jamestown, RI 02835

RE: CMS Solar – Docket No. 4420

Dear Mr. Munger,

The Commission has completed its review of the supplemental documentation submitted on behalf of Conanicut Marine Services, Inc. on October 18, 2013¹ regarding the ACP Solar I facility's assigned GIS number. The supplied information received indicates that the facility began Commercial Operations on October 4, 2013 and that the facility has been assigned the NEPOOL-GIS Asset Identification Number MSS43685.

Commission staff has determined that the supplied documentation is acceptable, and as authorized in Commission Orders No. 21147 and No. 21187 in Docket No. 4420, Commission Staff has assigned to the CMS Solar facility the unique Rhode Island Public Utilities Commission Eligible Renewable Energy Resource Facility Certification Number RI-4420-N13. Renewable Energy Certificates associated with the production of energy from the CMS Solar facility, which are minted on or after October 21, 2013, are eligible for the Rhode Island Renewable Energy Standard.

If you have any questions regarding this matter, please contact Dilip Shah, Special Projects Coordinator, at (401) 780-2109.

Sincerely,


Luly E. Massaro
Commission Clerk

cc: James Webb - Administrator, NEPOOL GIS
Dilip Shah - RI PUC

¹ Submitted by authorized representative Julien Amouyal, Project Engineer for Conanicut Marine Services, Inc.

n. **ENVIRONMENTAL PRACTICES – GREEN MARINA**

- Marina Dock Age - March 2011 issue
- Marina World – November/December 2009 issue
- Association of Marina Industries Advocate – October 2012 issue
- Marina Dock Age – May/June 2014
- Jamestown Press – Boat yard on display Monday – 10/17/2013 issue

Safety/Security

**Preventing
dock damage**

Product Focus:

Dredging

Special Issue:

Environmental



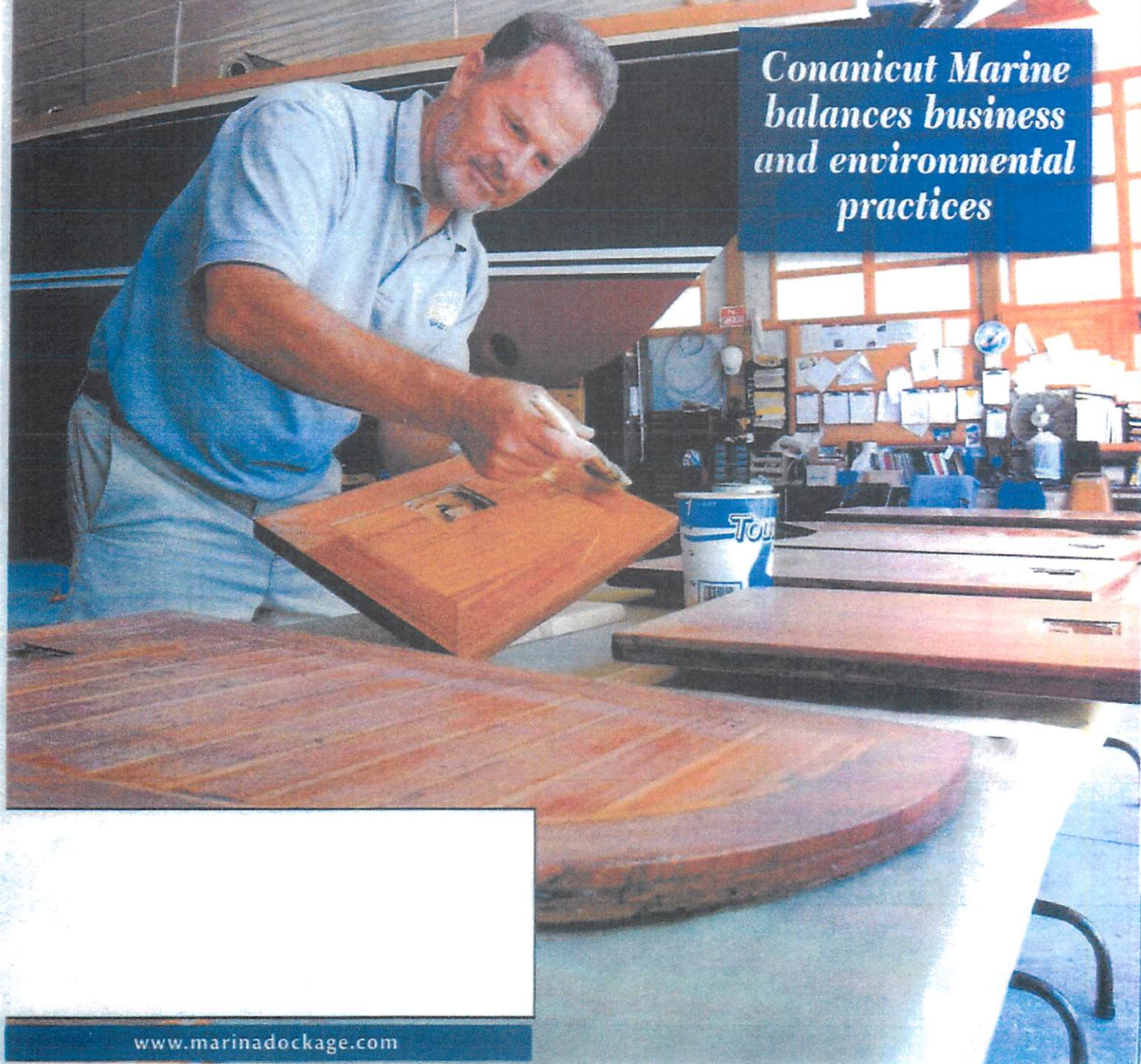
Responsibility

March 2011
\$8.95

Marina[®] DOCK AGE

The magazine dedicated to marina & boatyard management

*Conanicut Marine
balances business
and environmental
practices*



www.marinadockage.com



Cover story

Implementing business practices that balance economic growth and the environment

by Jerome A. Koncel

One of the most vexing questions facing today's marinas and boatyards is how to balance economic growth with environmental responsibility. The thin line between growing a facility and protecting and enhancing the environment seems to be on everyone's mind these days.

While management consultants and business analysts don't always agree on the best ways to achieve this balance, they usually begin by emphasizing the importance of strong, dedicated leadership, one whose commitment and perseverance shine forth in big capital projects and day-to-day operations. There's no better example of this than Conanicut Marine Services Inc. in Jamestown, R.I., where Bill Munger's dedication to the environment shows up in words and actions.

Business philosophy

From the time Munger purchased the Conanicut boatyard in 1974, he was committed to designing, building and operating an environmentally friendly marina. Over the years, Munger has spent a considerable amount of time and put a great deal of money into this goal. "That's the reality of taking this stand. It costs more upfront to design, build and operate an environmentally friendly marina," Munger said.

Munger's business philosophy was simple: he wanted to operate a profitable marina/boatyard, while minimizing the facility's environmental impacts wherever possible. In this latter effort, Munger credited Neil Ross and Paul Dodson, founding fathers of the International Marina Institute, for guiding his actions. "They were not only great teachers but also great coaches



Conanicut Marine Services in Jamestown, R.I., is a leader in designing, building and operating an environmentally friendly marina.

who got boatyard and marina managers thinking about ways to have a more positive impact on the environment," Munger said.

In the early 1980s, at a time when environmental awareness was just emerging on the nation's conscience, Munger joined the American Boat Builders and Repairers Association (ABBRA) and served as president during 2003-2004. At ABBRA annual meetings, there were always numerous sessions on environmental matters.

"Since 1974, Conanicut Marine Services Inc. has spent significant dollars enhancing an environmentally friendly marina and boatyard facility through ongoing infrastructure improvements, best management practices and employee training," Munger said. "Although boatyards have been slow to embrace the concepts of clean boatyards and environmentally friendly facilities, I have been doing this all my life."

Compared to other facilities in New England, Conanicut Marine Services is relatively young. Although Munger purchased the boatyard in 1974, it wasn't until the 1980s when Munger purchased a 10-acre parcel of raw land and began building a boatyard infrastructure over the next 25 years that the business really took off. "When we grew our business, we also tried to be forward thinking about the environment," Munger said.

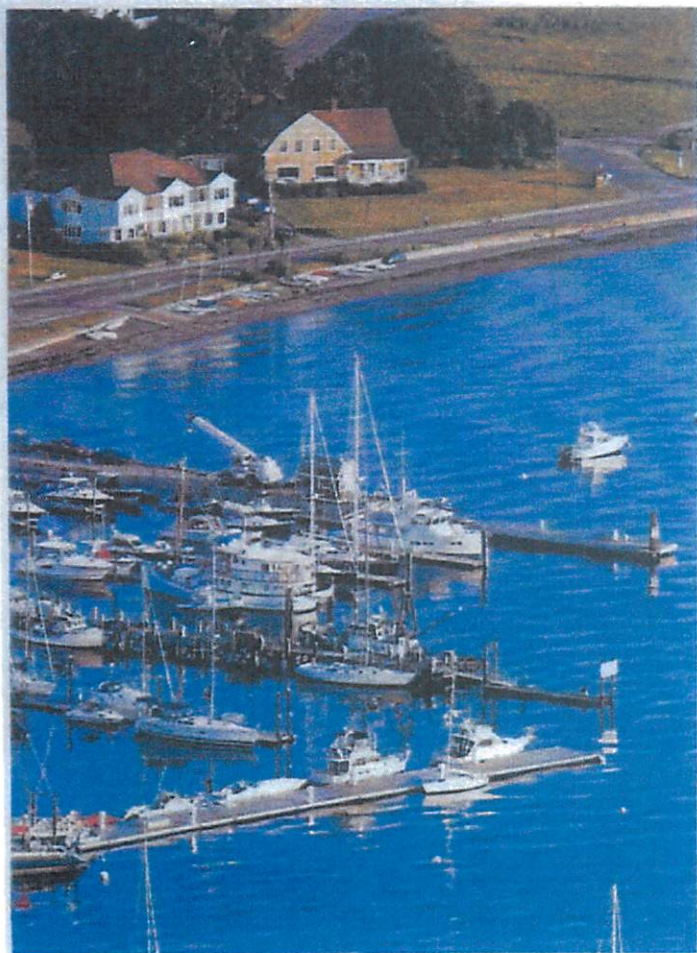


Photo credit: Onnie van der Wal

So does it cost more money to be environmentally friendly? Munger answered affirmatively. "There are construction and equipment costs from the outset, but thereafter there are ongoing labor, equipment maintenance, waste shipment and manifest management costs," Munger said.

Munger is the first to admit that one of the big challenges in running an environmentally friendly marina is keeping up-to-date with ever changing federal and state environmental laws/permits, recordkeeping requirements and training. "To help you with these laws and regulations, I recommend you retain a very detail minded environmental consultant," Munger noted.

Actions

A notable example of how environmental compliance comes into play involves Narragansett Bay. About 15 years ago, Munger said, the state declared the bay a "no discharge zone," so he purchased a customized pumpout boat to pump holding tank sewage from the boats in the marina. In addition to his own customers, Munger made this service available to the boating public that used Narragansett Bay and saw increased usage every boating season. He is particularly pleased that the marina's transient boaters are all using their holding tanks and the portable pumpout service.

The marina's environmental efforts begin with recycling. It recycles all bottles, cans, plastics and cardboard paper. It also recycles aerosol cans, oil, antifreeze, fuel filters, batteries, fluorescent lamps/bulbs and metal scrap. In addition, Conanicut Marine is a participating boatyard with the Rhode Island Marine Trades Association shrinkwrap recycling program.

To minimize the boatyard's environmental impact, Munger is very proactive. Conanicut Marine Services was one of the first boatyards to employ dustless sanders in the 1980s. Munger described the first generation of dustless sanders as being very heavy and to say that they worked was being very generous. "My staff was reluctant to use these sanders, but they are still around the industry," Munger noted. "Fortunately, our staff now uses Dynabraid equipment for dustless sanding operations, and they are a joy to use."

Conanicut Marine Services performs all of its repair work, that is, grinding, painting and bottom and keel work at specific indoor sites. He has 8,100 sq. ft. of indoor shop space with three bays, and nothing gets out the door, including wet sanding residues and floor particles. This is no accident, as Munger thought about these operations when he designed, engineered and built the boatyard.

To improve working conditions and shop efficiency, Conanicut is installing an air compressor unit to control volatile organic compounds (VOC) in the paint shop. "By removing the smells, we expect more productivity from our employees," Munger added.

The boatyard has installed an oil burning heater in its workshop that uses drained oil collected during the summer to heat the facility in the winter.



Photo credit: Jeff McDonough

This is the newest boatshed at Conanicut Marine Services, and it includes an air compressor for removing paint fumes.

For continuous washing of boat bottoms, the marina has installed a closed loop collection and processing system on its 3,200-foot collection pad to prevent washwater from contaminating the environment. A drain collects contaminants, and the contaminated washwater goes to a holding tank. When the tank fills up, the boatyard calls a licensed waste hauler for proper disposal. "We're a 100 percent contained facility," he said.

To handle fuel spills and emergencies, the fuel dock has a standard first responders emergency kit. To handle more serious issues requiring oil booms and absorbent pads, the boatyard has partnered with the Jamestown Fire Dept. on a fully stocked emergency response trailer on nearby land.

Stormwater recycling is accomplished through a 6,000-gallon water recycling system that captures roof runoff to a holding tank for use in future boatyard washwater operations. The marina collects enough water to support all of its boat washing activities.

The marina is an active participant in the Rhode Island Save Energy program. This voluntary program requires the marina to undergo an energy evaluation and replace light fixtures with more energy efficient ones as the older ones need replacement.

Landscaping around the marina is not only aesthetically pleasing but also environmentally functional. The marina maintains wide vegetated buffers around the boatyard facility, maintaining berms and swales, as well as generous grassy areas to manage rainwater flows. The driveways are made of pervious gravel with shell surfaces.

Stakeholder involvement

Munger knew any environmental actions wouldn't be effective without the buy-in from his two largest stakeholders: employees and customers.

In recruiting employees, Munger makes sure they all have the same environmental mindset as he does. He then holds formal staff training sessions yearly, as well as ongoing sessions designed to highlight environmental and safety concerns. These informal meetings happen weekly with crew and management

members to discuss daily operations.

When asked who leads the annual training sessions, Munger said he retains Rob Gallagher of Gallagher Environmental Consulting Services, a detail-oriented environmental consultant who is up-to-date with all changes in the environmental/safety area. Munger handles the weekly staff meetings.

Compliance with existing environmental rules and regulations governing marinas and boatyards is no easy task, Munger noted. Off the top of his head, Munger checks off Annual Right to Know, OSHA, RCRA, DOT, Storm Water Prevention and Pollution, Spill Prevention and Control and Countermeasures, and numerous other EPA and Rhode Island Dept. of Environmental Management safety and environmental plans requiring written plans and training programs. "These are the laws every marina and boatyard needs to comply with," Munger noted.

In addition to these required laws and regulations, Conanicut Marine implements other programs to limit the boatyard/marina's environmental impact. "For example, we use nontoxic antifreeze for winterizing and environmentally friendly products when maintaining vessels," Munger said.

In addition to the training sessions, Conanicut Marine has developed best management practices and posted them next to the employee time clocks. Munger advises all marinas interested in running an environmentally friendly facility to consult the Clean Marina handbooks available in their respective states.

Customer education

To get boater buy-in, Munger depends on educating customers and making them aware of their environmental responsibilities. He considers this task the greatest challenge facing marina and boatyard managers these days.

When boaters approach Conanicut Marine to sign their winter and/or summer contracts, the boatyard makes environmental awareness an integral part of the procedure. Conanicut Marine gives each customer a three-page list of best management practices they are expected to follow. For example, the boatyard makes it clear that only municipal solid waste can be disposed of in its dumpsters.

"Clean Boating Tips" is a newsletter telling boaters about their responsibilities to contain trash, recycle, be careful fueling, clean with environmentally friendly products and protect sensitive habitats.

Conanicut Marine doesn't tell its boating customers how they should maintain and clean their vessels, but it provides very specific guidelines. These guidelines vary from how boaters should dispose of sewage to proper fueling practices to green cleaning products. See our Web site, www.marinadockage.com, for more detailed information.

In addition to customers, Conanicut Marine requires independent and subcontractors to sign in with the marina before beginning any work. They must have proof of insurance and sign a contract saying they will follow all of the boatyard's directives. "This is not something boatyard owners should gloss

over," Munger said. "Boatyard owners must pay strict attention to what's going on in their yards, what's going into their dumpsters and what's flowing into their waters."

Munger pointed out that regulators in his area are becoming much more vigilant in regard to environmental inspections. Dumpster dives and dirt samples are becoming more common in the Northeast, according to Munger. "At the end of the day, it is the property owner, not the customer or contractor, who is responsible for environmental compliance," Munger noted.

The benefits

Although being environmentally responsible is mandated by environmental regulations and regulators, Munger said that there's much more marinas/boatyards can do to move beyond compliance, and many of these efforts will cost very little.

From a management perspective, Munger asserted that running an environmentally responsible marina has real benefits. He cited the use of dustless sanders as one example. While it costs more upfront to purchase this technology, if one compares the number of hours spent sweeping the floors and cleaning the workshop, they're far less with the dustless sanders. "At the end of the day, there's no mess to clean up," Munger said.

Another item that Munger is particularly proud of is the



Some of the boats docked at the marina during the boating season from April 15 to October 15.

clean burn used oil heater. "Every boatyard operating in a cold weather climate should be heating their shop with used oil," Munger said.

While Conanicut Marine Services Inc. considers itself an environmentally friendly boatyard/marina, Munger doesn't shirk his responsibility of doing business on time and under budget. This is always a challenge, but Munger believes having the right equipment and easy to clean, efficient facilities goes a long way in keeping operating costs manageable.

From his perspective, Munger believes that environmental responsibility is the right thing to do and benefits everyone. "Our customers and employees all appreciate an environmentally responsible marina/boatyard," Munger said. ↴



EXPERIENCE MATTERS

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- Sediment Testing Analysis • Spoil Site Design
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The CMS dock office overlooking sailboats in the marina.

Green lessons – the hard way

In the eight years since *Marina World* last interviewed Bill Munger, owner of Conanicut Marine Services in Jamestown, Rhode Island, he has expanded his offerings and learned a great deal about sound environmental practices. *Sarah Devlin reports*

Picking up green practices at a marina can happen because the owner or manager feels environmental responsibility; it could result from a desire and need to be compliant with government regulations; or it could be due entirely to the fact that a green practice is sometimes the best solution. Conanicut Marine Services' practices are a result of all three.

Conanicut Marine, named for the island upon which it sits across Narragansett Bay from the bustling sailing destination of Newport, Rhode Island, started in the back of a pickup truck in the early 1970s. Since then, it has developed into a major boatyard, a marina with 1,200ft (366m) of fixed pier dockage, 100 floating pier slips and 160 deep-water embedment-type moorings at depths ranging from 6ft to 55ft (2m to 17m), a chandlery, 169 moorings, 100 slips, 10 acres (4 hectares) of land and 40,000 sq ft (3716 sq m) of indoor storage capable of holding approximately 200 boats.

Waterfront facility and pump-out inflatable.



"We grew slowly, shingle by shingle," says Bill Munger, who started the business with his wife May by driving to various marinas and working on boats. He garnered his love of 'messin' with boats' from his father who was a boatbuilder. "We rented, bought and finally built buildings for infrastructure. We got a bigger truck, then a bigger trailer, continued to grow," he adds.

Conanicut Marine's primary customer is the yacht owner. "We specialise in servicing fine yachts. We have inside storage and customers who want to step aboard a

boat in the spring and have everything perfect," he says. In all, around 100 boats are yard maintained and there is a good selection of equipment to perform a variety of yard tasks, including 10-ton, 30-ton, 60-ton and recently acquired 20-ton air-ride trailers, plus a 17-ton mobile truck crane with a hook height up to 118ft (36m).

The mechanic shop provides service and parts for all major engine systems, inboard or outboard, and staff include ABYC-certified marine electricians who receive annual technical continuing education.

Conanicut Marine's paint shop offers airless applications of advanced coatings, traditional refinishing and dust-free varnishing within climate-controlled service bays. On top of all this, the company rents out its crane service for land-lubber construction projects.

Green and compliant

Over the years, Munger - who became a Certified Marina Manager (CMM) in the 1990s - has focused on environmental regulations, primarily because he has been unwittingly non-compliant and now strives to make certain others understand how quickly one can be fined and how simple it is to be compliant once all the rules are understood. Conanicut's practices run from an aggressive recycling campaign to portable pump-outs and include everyday practices such as using propylene glycol antifreeze rather than ethylene glycol, which is more harmful to the environment.

Much of this is based on his personal

Indoor repairs for power and sail boats.



GOING GREEN: MARINAS & YARDS



Taylor Point storage and repair site.
Photo: Onne Van der Waal.

dealings with the United States Environmental Protection Agency (USEPA). Although he asserts he didn't feel targeted by the EPA, he certainly contends "they were paying attention, looking for pinholes to stick a knife in."

Environmental practices have always been part of Conanicut's business. "This is nothing new to us," Munger says. "We thought we were 100%. We were surprised."

It would be an overstatement to say he 'works the speaking circuit' when it comes to regulations, but he has shared his past and his views with many interested parties at various trade shows, such as the International Boatbuilders' Exhibition and Conference (IBEX) and the International Marina & Boatyard Conference (IMBC). He is regularly tapped for his experience with US environmental rules for small businesses based on the fact that he got 'pinched', as he calls it, for a slight training gap back in 2004.



CMS crane on state owned pier.

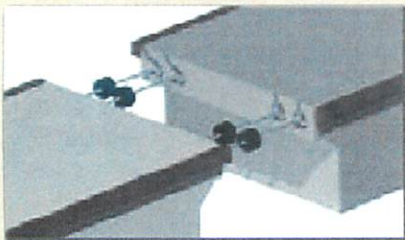
For years, Munger obligated the Conanicut staff of 15 to participate in training regarding hazardous-waste manifests as mandated by the Resource Conservation and Recovery Act (RCRA). "Only two people signed those manifests, so in 2004 I asked only those two to take the training," he says. As it turned out, the marina was cited and was forced to pay a fine for 15 people.

Another such incident occurred regarding the rather contentious issue of storm water run-off. Conanicut Marine currently leases its waterfront property as well as some of its docks through the town of Jamestown.

Since the run-off happens on town property, Munger was led to believe Conanicut was not responsible. He was wrong.

There's more. "In the northeast, indoor storage is key," says Munger. As such, all of Conanicut's repairs happened inside what was known as the 'Valley Street' facility about half a mile from the waterfront. Munger had been led to believe, again, that he was exempt from permitting and fines related to outdoor repairs. Again, he was wrong. This time. "I didn't file for an exemption," he says. "One

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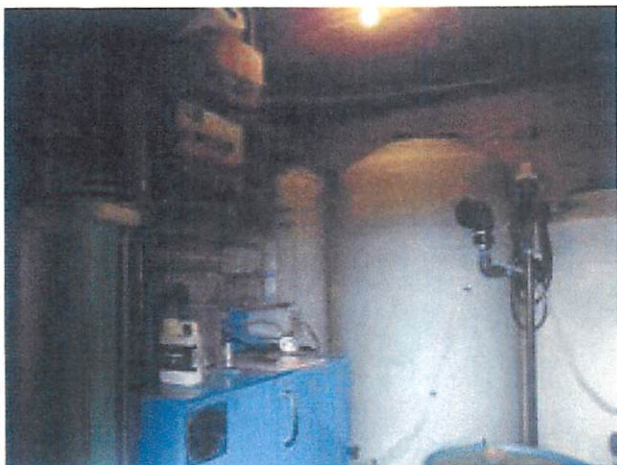


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Water filtering system in the water treatment room.



Bill Munger inspecting the recycling units.

piece of paper was all I needed. I didn't even know it existed." His solution was to hire a competent consultant to help him sort through the USEPA regulations.

Not incidentally, Munger has since sold the Valley Street facility to the local arts community for studio and gallery space because it is no longer compliant with staging requirements regulated by the US Occupational Safety and Hazard Administration (OSHA).

Munger's current storage and repair facilities, a 10-acre inland site called 'Taylor Point', started out green because the town could not supply him with water. So, to acquire water for power washing and the like, rainwater is collected into a gutter from two of four building roofs - a 30 x 210ft and 30 x

150ft (9 x 64m and 9 x 46m) watershed area. The water drains through a preliminary filter into a 4,000-gallon (15,000-litre) underground cistern and is pumped through an oil/water separator made by Electropulse before being reused.

Water from overspray is also collected and reused through sloped grounds and troughs. Munger notes that there is some talk of regulating overspray. One can assume it's related to the amount of lead (now illegal) used in anti-fouling paints in the past, but regulating overspray with any accuracy, he says, will be nearly impossible.

Waste oil, however, can be regulated and recycled very easily. The Conanicut crew uses Moeller vacuum cans to remove oil from a boat

without spillage. That oil is dumped into a filtering device and ultimately used to heat the approximate 3,500 sq ft (325 sq m) mechanic shop. This, Munger claims, paid for itself in under two years and is a practical solution for the waste oil. All watery oil is placed in a clearly marked drum and hauled away by a licensed contractor.

Recyclable materials are also hauled away, at very little cost. "It's actually cheaper for us to recycle," Munger says. And boat owners eagerly separate their trash. "They get into it," he claims.

Customers and subcontractors

"Boaters don't realise the trash they toss away at home doesn't have the same rules as

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Power washing in the yard.

the trash they toss away at the marina," says Munger. "They figure 'I throw this away at home' so it's okay."

If an EPA inspector finds anything in the dumpster, whether it was dumped by boatyard/marina personnel, a seasonal boater or a transient slip user, the yard gets the fine. And those fines can be rather significant.

Due to his boatyard being inland while his marina is on the waterfront, Conanicut paid hefty fines for doing what Munger and his crew initially thought was the right thing to do - disposing of used oil.

"People would leave drained oil next to the dumpster down by the waterfront," Munger says. "We knew we had to get it away from the waterfront and we would bring it back to the boatyard [half a mile away] where we have the ability and the room to properly dispose of it."

"We got hit for transporting hazardous waste without a permit."

With permitting in place and slight changes in Rhode Island laws regulating hazardous waste, oil is less of an issue for Conanicut. But, "that worker who comes down here to varnish a cap rail? He can't transport the thinner. We keep a barrel on site." No small task considering the lack of space Conanicut has at its waterfront facility.

Now, Munger maintains the appropriate disposal units for his customers and he labels his dumpsters. "We educate our customers about waste disposal," he says. "Here, we have two dumpsters: one for household items and the second for yard waste." Plus, he is vocal and clear about his environmental policies, while strictly enforcing methods to reduce waste at his facilities.

"The dumpster diving by USEPA taught us that nothing is off limits," Munger noted in a presentation at IMBC in 2008. "Marinas and boatyards are liable for the contents of the dumpsters on-site regardless of who generated the waste."

Hazardous materials include such items as spent paint filters; spent resins, paints, coatings, epoxies and varnishes; spray paint cans; grease; sealants; solvents; chlorinated solvents; strippers; oil filters; used oil for

burning on site versus waste oil; waste fuels (gas, diesel, etc.); glass fibre waste; antifreeze; contaminated rags that are dripping versus non-dripping; and, blood, or bodily-fluid contaminated clothing or materials.

"Dumpsters may need to be locked and surveillance cameras may be necessary to monitor yard activity during off hours," Munger stated at the presentation.

In 1998, Narragansett Bay became a No Discharge Zone (NDZ), so boaters must use pump-out systems at either local marinas or ashore. Before the legislation was in place, however, Munger had a solution. In 2004, he purchased an inflatable boat expressly for pumping out waste. When the system was first introduced to his customers, Conanicut's seasonal boaters who required a pump-out would raise a pennant. This, Munger contends, raised awareness throughout the mooring field. Five years later, seasonal boaters sign up ahead of time for weekday pump-outs while the weekends are reserved for transients. The service is included in the mooring fee and has been mandatory for all Conanicut customers since before the bay became an NDZ.

On the subject of subcontractors and environmental regulations and awareness, Munger has this to say: "Some we utilize to fill in the gaps. We affiliate the good ones to fill in the gaps and we qualify them so they can help out, but there's a process to go through. We educate our customers and subcontractors on the importance of knowing and following environmental regulations. Most independent contractors aren't up to speed on USEPA regulations."

In the long run, Munger has learned to accept subcontractors in his yard but he works very hard to educate them about USEPA regulations and, he admits, it's 'risky'.

"If they throw material into the dumpster or on the ground we get fined," he declares. "Some of those guys aren't familiar with the rules so we do our best to educate them. We take the good ones under our wing."

"But the contractor who puts materials in the back of his truck and takes it back to [his own facility]... he's breaking the law and probably doesn't know it."

Promoting awareness

'It is understood that Conanicut Marine Services is an environmentally friendly marina and boatyard and subscribes to and enforces pollution prevention procedures...'

So starts the 'Environmental Responsibility' code on the back of Conanicut Marine's hauling and storage contract. Each seasonal boater must sign a pledge to follow Conanicut's guidelines. Guests also receive a 'Best Management Practices' document that outlines some of the procedures they must follow in order for Conanicut to remain compliant. The document reads, in part, 'The EPA, DEM, OSHA, Fire Marshall and other regulatory bodies continue to pressure boatyard and marinas to comply with many regulations...we are highlighting some of the more important ones that require your cooperation...These laws are well intended and by following them we can all do our part to eliminate or reduce environment pollutants flowing into the soil, water and air'.

Here are a few of those abridged guidelines:

- All operations requiring sanding, stripping or grinding of paints must be done in a manner that contains the dust and debris.... must not be performed on windy days when sanding cannot be reasonably contained.
- No one, other than Conanicut Marine employees, is permitted to grind, cut or drill lead.
- All full or empty aerosol cans are regulated and cannot be put into the regular trash dumpster. Please remove from CMS property.
- All empty or partially full paint cans... must be removed from CMS property immediately after use. Never discard any solvent, paint, stain or coating into sinks, on the ground, or into the bay or into a dumpster.
- To minimise spills and drips due to oil changes, a no-spill pump system should be used to draw crankcase oils through the dipstick tube. Used oil, fuel and oil filters and oily rags... must not be put into the dumpster. A plastic bag should be placed over used filters prior to their removal to capture any drips.
- Do not power wash your own boat.
- Wash the boat hull above the waterline by hand. Cleaners and detergents must be phosphate-free and biodegradable. Avoid detergents containing ammonia, sodium hypochlorite, chlorinated solvents, petroleum distillates or lye.
- Dumpsters are only to be used to discard household waste.

Included with these guidelines, Conanicut offers a flyer on boating tips, including a reminder that fuel expands when it heats up, a suggestion that trash overboard be considered a 'crew overboard' practice, advice on how to properly dispose of oil-soaked rags, operating procedures that protect sensitive habitat and locations of recycling bins.



October 2012



Association of
Marina Industries

ADVOCATE

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CLEAN MARINA & ENVIRONMENTAL NEWS

Webinar: Invasive Species Management and Clean Marina Best Practices

Marinas, boaters and stakeholders from around the country are invited to learn about best management practices for preventing the spread of aquatic invasive species (AIS) during a Clean Marina Webinar scheduled for 2-3:30 p.m. on Wednesday, Nov. 7.

This is the third webinar in a series of workshops to support Clean Marina programs in the Great Lakes region, hosted by Michigan, Ohio and Wisconsin Sea Grant programs. The webinar is free, but you must pre-register by November 6. Once registered, you will receive a confirmation email with log-in information.

Attendees will learn about:

- Potential environmental impacts of boat cleaning for AIS

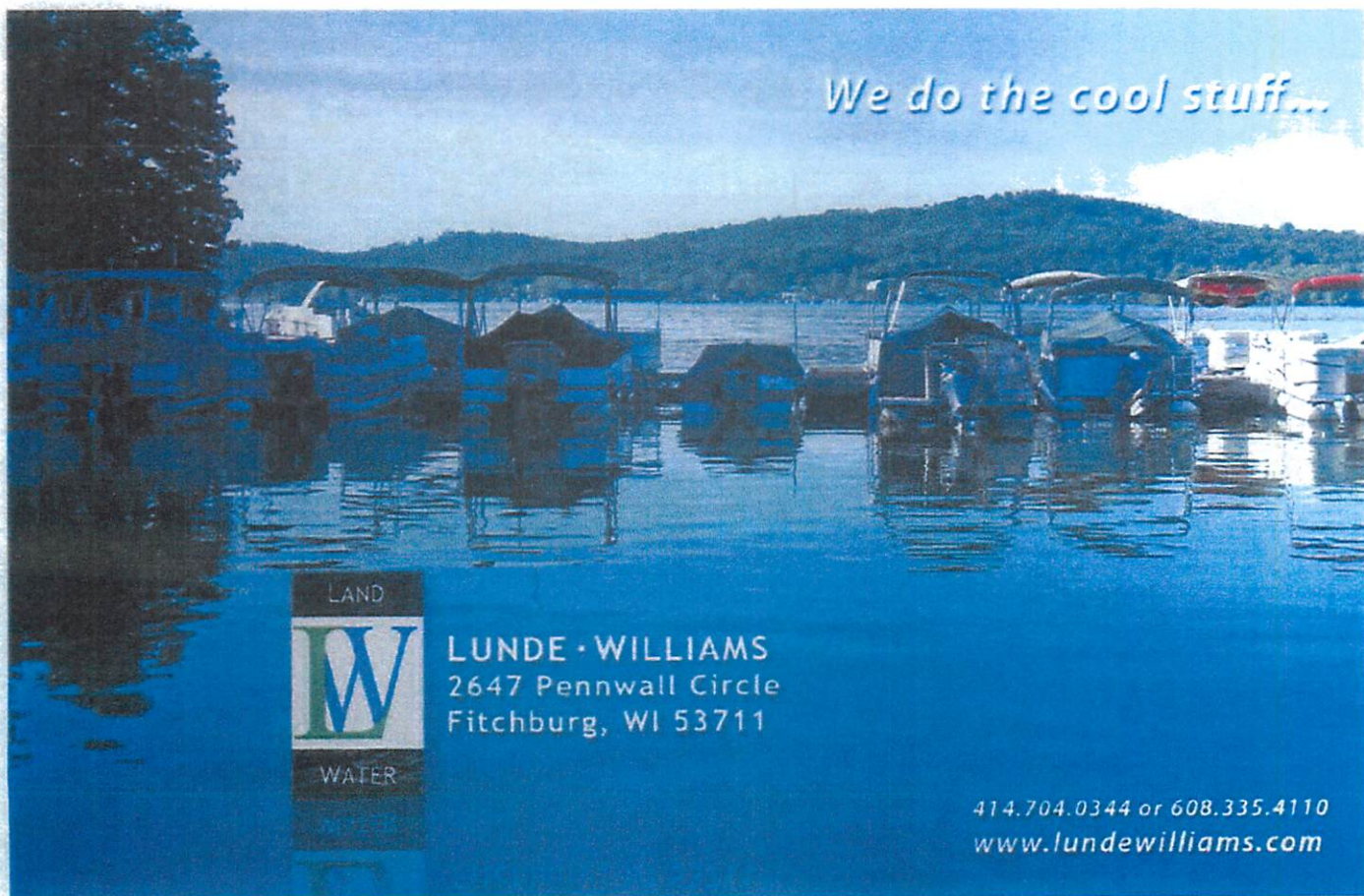
- Best practices for managing transport and reporting of AIS at marinas and boatyards
- State requirements within the Great Lakes region
- Online resources available for marinas and boaters
- Management options for boat cleaning at marinas and boatyards
- How to engage boaters in the prevention of AIS, including boat cleaning best practices

Conanicut Marine Goes Green with Solar

Updated facilities can save nearly 200,000 kwh yearly

The Conanicut Marine Services boatyard has been operating on 10 acres at Taylor Point for more than 30 years. During that time the yard's four sheds have serviced recreational, competitive and commercial vessels of all sizes. Now,

Clean Marina & Environmental News Continued on Page 13



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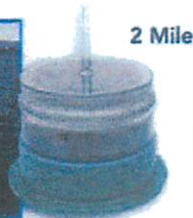
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Clean Marina & Environmental News Continued from Page 12

new solar arrays are being installed on two of the yard's buildings that will provide clean power for the operation of the entire facility.

The work on the solar arrays is being done by a company called Efficient Energy Solutions, also known as E2SOL, a 3-year-old renewable energy developer and general contractor headquartered in East Greenwich. E2SOL boasts that it innovates renewable energy technologies, develops custom project solutions, and offers products designed to maximize energy consumption efficiencies.

E2SOL develops projects related to wind, solar and micro-hydro power. In addition to a solar hotwater installation, E2SOL's previous work includes the sale and installment of a 50-kilowatt wind turbine for Safe Way Auto Center in Bristol. The company has also acquired the land rights to 56 acres in Massachusetts for the development of a 6-megawatt solar farm.

In December of last year, E2SOL entered into a contract with Conanicut Marine Services for the sale and installation of a new solar power array. According to Anthony Baro, the project director, E2SOL was hired to replace the roofs on two buildings and install a 126-kilowatt solar array on the facility. The updated facility has the potential to net meter approximately 184,548 kilowatt hours per year of the electrical power at Conanicut Marine Services through National Grid's net metering program. The result will be a savings of nearly 4,000 tons of greenhouse gas over the course of the system's 25-year lifespan. That savings is equivalent to the energy used for 7.5 million auto miles.

The boatyard project is the largest renewable energy facility to be developed in the state's marine trades industry thus far. The effort is supported by a team of at least 15 local professionals, including Jack's Electric of Jamestown. Other contractors on the job include F&S Electric, Munro Distributing and Capital Roofing. Work on the project is now approximately 50 percent complete. The new power system is expected to be fully functional later this fall.

According to Bill Munger, owner of Conanicut Marine, the move to solar power was a natural progression for his company. "We've always been proactive in the environmental world."

Munger explained that two of the four boat sheds at his yard have roofs that face south. This allows them to gather

Clean Marina & Environmental News Continued on Page 13

Clean Marina & Environmental News Continued from Page 12

the maximum amount of sunlight. Each of the two roofs is 210 feet long, creating a total of 420 linear feet of south-facing roofs. "The foundation to hold panels was already there, so it seemed kind of silly not to do something good with all that space."

Munger said that by participating in National Grid's net metering program, the solar arrays will not only provide power for the entire yard, but will produce excess power that can then be sold back to the utility company.

The decision to work with E2SOL came about when Munger saw the company's booth at the Newport

International Boat Show two years ago. Munger said the two had an interesting conversation about conservation. The contractor offered to do an analysis of the electrical use at all of Munger's facilities, which include the boatyard, the marina and the retail store on Narragansett Avenue.

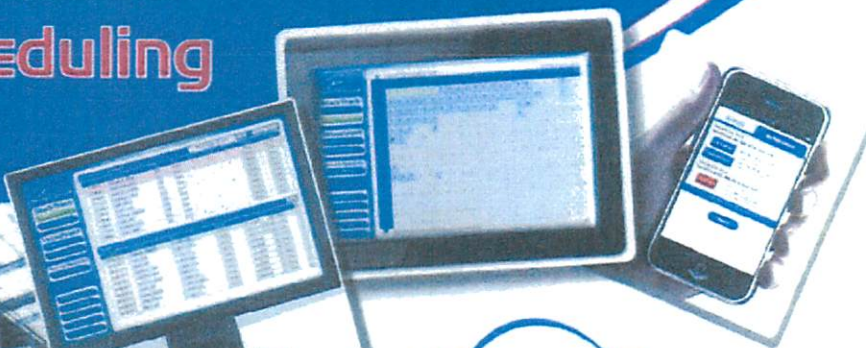
"He did extremely comprehensive number crunching on what we were using for electricity and what we were paying," Munger said. "He was proactive to come out and do the research on his nickel."

Munger said the more he got into the process, the more interesting it became. Keeping in mind that the foundation for the project was already in place, he decided to go forward.

The upgrade to solar power at the boatyard may prove to be the end of the line as far as Conanicut Marine facilities are involved. Munger said that none of his other buildings have roofs that face south. As an example he cited the roof at the retail store at 20 Narragansett Ave., where the roof faces in the opposite direction. That would necessitate the installation of a rack system to hold the solar array, which means that it would not be economically feasible.

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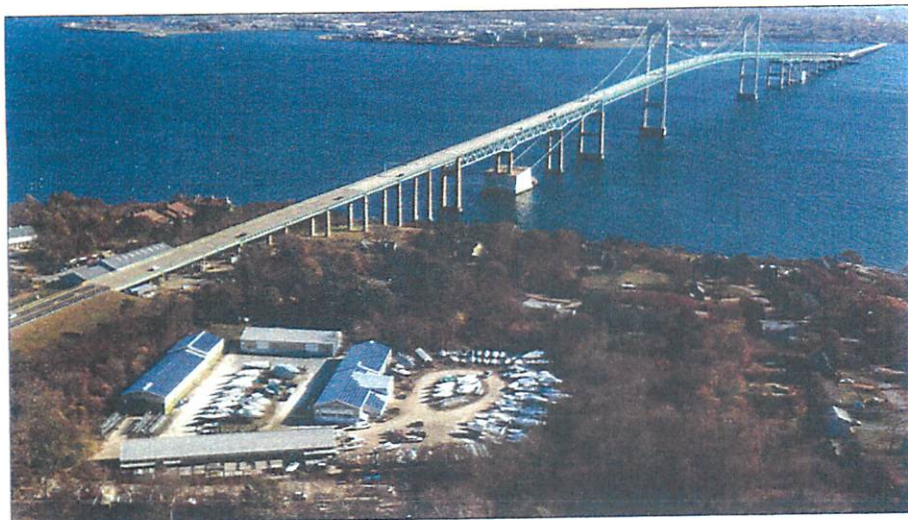

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Conanicut Marine and Kingman Go Solar

by Neil Ross



The 10-acre boatyard at Conanicut Marine in Rhode Island is located inland on Jamestown Island beside the Newport Bridge. This inland location is on much less expensive land both to purchase and for property taxes, and eliminates many of the environmental regulations that apply to waterfront yards.

In recent years, using solar power to produce electricity has become more feasible and popular for homes, businesses, boats and now marinas. This is the story of one marina with a new solar system, including comments from another marina with four years experience in New England. Each day is not always sunny there, and often it can be overcast or downright cloudy with rain or snow. Both are full-service marinas, and they are genuinely happy with their solar systems, which demonstrates that solar electricity production can work in many marinas with large boat storage buildings with big roofs. One thing is certain in the future: the cost of electricity will continue to increase, while the cost of solar systems will decrease.

Solar Boatyard

Conanicut Marine Service in Jamestown, Rhode Island, is convinced that the marina's solar energy production makes sense and was the right thing to do, according to Bill Munger, owner and marina developer since 1974. Like most full-service marinas and boatyards, he has four large boat repair and storage sheds, not shaded by trees or buildings,

which are just right for solar panels. His two south-facing buildings, each 210 feet long, were converted to produce solar power. This 10-acre boatyard is inland from the marina and next to the large Newport Bridge.

Conanicut is similar to most marinas with open framed buildings under the roof, which allow relatively easy solar installation, as compared to converting a school or factory roof whose ceilings are full of insulation, heater/AC system ducts, sprinkler pipes, lights and other obstacles that complicate solar connections.

The solar power system was developed by E2SOL, LLC (Efficient Energy Solutions) of East Greenwich, Rhode Island. Construction started April 1, 2013 on the solar panel 128.31-kilowatt (kW) electric system, based on the 546 EcoSolargy 235-watt photovoltaic modules integrated with two Solectria Renewables PVI-60 Inverters.

"We went live in October 4, 2013, and our first six months of operation, during record breaking winter months of short days, snow, sub-freezing temperatures, heavy rains and some sunny days, the solar panels produced 66,000-kWh of power through April 2, 2014, "far exceeding the total combined electric needs of our

three separately located marina, boatyard and ships store. That production offset 39 tons of carbon dioxide emissions, or 5,780 gallons of gasoline," Munger said. "With a solar system nominally rated at 178,813 kilowatt hours per year (kWh/yr), I am eager to see how it does in the clear sunny spring and summer days. So far during the sun's brightest mid-day hours the panels are producing at full capacity."

With the glass solar panels laying flat on the south sloping sides of building roof, Munger said, "this eliminates extra wind resistance, unlike panels held up on brackets on a flat roof, and allows snow to quickly slide off when the sun warms the dark panels."

A federal 50 percent tax grant, through the American Recovery and Reinvestment Act of 2009 Federal Incentive Program, covered about one-third of the cost of the solar system.

"When I received a \$150,000 check, combined with a five-year rapid depreciation, that put us over the top. Some states have state credits or grants that, when coupled with the federal credit, could drop the cost by 50 percent making solar a home run," Munger said. "My total project cost of \$650,000 included replacing two 20-year-old roofs with new aluminum covers at a cost of \$55,000 each. My solar system was not yet a profit center with its 10-year bank note. To make it revenue neutral, I converted to a 15-year note."

"I've been told that the panels could lose one to two percent production per year with an estimated 25-year service life. For maximum efficiency, we plan to powerwash the glass panels every year to clean away accumulated bird droppings and dirt."

Selling Electricity

"The building conversion was the easy part," Munger said. "The interesting component is that my yard is now under public utility commission regulation, so we can sell even more power back to the utility company. Going solar makes the



Attending Conanicut Marine Services solar launch on October 21, 2013 (from left to right): RI Governor Lincoln Chafee; Rhode Island Marine Trades Association (RIMTA) President Andy Iyska; RIMTA Executive Director Wendy Mackie; RI Department of Environmental Management (DEM) Director Janet Coit; Conanicut Marina Owner Bill Munger CMM; the real Conanicut Boss, May Munger; and RI Coastal Resources Management Council Chair Ann Maxwell Livingston

marina an electric power plant. Even though small scale, it meant having to convince the electric company that this marina will sell its power under a signed contract. It also meant that I needed to redo all my power lines, add new transformers, and connect into the grid system main distribution lines that fortunately were nearby."

Munger said that under the 15-year agreement, the Public Utility Commission and Rhode Island National Grid will buy the power at a set 25.5 cents per kWh rate, while the marina's 24.6 cents compared to homeowners who pay 17 cents per kWh for the electricity.

In the near future, Munger plans to build two new storage buildings with solar panels that will double the marina's production. "Fortunately these can be done because all the electric utility permits are in place. I see a bright solar energy future and am convinced that this is helping both the environment and my business," Munger said.

He tells others considering solar production to begin by visiting other solar marinas in the state to learn from their experiences and what hurdles they faced.

Munger didn't have any other examples in Rhode Island, so as the first, Conanicut will be the go-to marina there. He also suggested that owners

work with a solar company with a solid track record for marina installations that knows what to do and how to do it, and hire a law firm familiar with solar power projects to help get public utility permits.

"Understand that with every problem that comes up, there may be six to ten other obstacles in the process, needing many cooperative players to get the conclusion required," Munger said.

There are intangible but real benefits to going solar. "The boating public is environmentally aware and appreciates all my green efforts. Everyone likes solar power in my town – the Rhode Island Department of Environmental Management, the Governor's office, and the general public. Conanicut has a green button on our website that lists all our Clean Marina practices and a solar view for all to see," Munger said.

Rhode Island's Governor Lincoln Chafee wrote, "Investments in renewables and energy efficiency are playing an increasingly important role in the advancement and growth of businesses, and Conanicut Marine's environmental leadership is a great example."

"Conanicut Marine Services is an important leader in the marina community and a prime example of an establishment that is committed

to the environment," Director Janet Coit of the Rhode Island Department of Environmental Management said. "The new solar photovoltaic system at Conanicut's Taylor Point boatyard is the largest marine-based renewable energy facility in the state. Not only do projects like these enhance energy efficiency, but they also boost jobs in the green economy. Kudos to Conanicut Marine Services for employing sustainable practices to protect Rhode Island's air and water quality and conserve energy. Through its dedicated efforts, the company is setting a high bar for others to reach." Director Coit last fall designated Conanicut Marine Services as an official Rhode Island Clean Marina.

Displaying great enthusiasm about his solar system, Munger said, "On a bright sunny day, I often use my iPhone to check the solar meters on our website. I get all excited seeing when we've max out production to the panel limit. Even on overcast days, we are still producing power."

Massachusetts Solar

Kingman Yacht Center in Cataumet, Cape Cod, Massachusetts, turned on its 110-kilowatt solar system December 4, 2009, marina owner Scott Zeien said. "Since then it has generated 22 percent of our annual electricity usage each year," he said. "I have a quarter-acre of roofs, with 775 solar panels across the south-facing sides of three storage buildings. Usually there is one week in April when my electric meter actually spins backwards, because I am making more electricity than being used. Even on cloudy, overcast days we produce 30 to 50 percent of the electricity generated on sunny days. My only problem with solar is when the street power goes off due to a storm or other grid interruption. Without a big block of huge, very expensive batteries, I have no way to store this energy," Zeien said.

Zeien got both federal and state money that covered about 50 percent of the cost of rebuilding the marina's entire electric system, reroofing two of the three buildings to accept the panels, and installing the solar panels. Since going live, through April 2, 2014, the system has generated 484,000 kWh of power.



The full 100kW system at Kingman Yacht Center in Cataumet, Cape Cod, Massachusetts spans three roofs

"That offsets 290 tons of carbon dioxide emissions, or the equivalent of not burning 42,744 gallons of gasoline," Zeien said. "Compared to wind generation that is frequently down for maintenance, my solar system is consistent, reliable and maintenance free."

"If I were doing it again, the financing deals would be different. I would look at leasing solar systems. Otherwise, I am not sure I'd change anything. I've spent a lot of money on environmental initiatives, but nothing has been as worthwhile as my solar initiative, environmentally or

economically," Zeien said.

Zeien concluded that he would expand much more if he could find the real estate to build more solar production. He would again hire Beaumont Solar Company, who handled all the permits, construction, solar system installation, computer monitoring system, and everything from start to solar production.

Solar Advantages

Both marinas in Jamestown, Rhode Island and Cape Cod, Massachusetts are full-service with significant boatyard

and winter storage facilities. Each uses the same Solectria Renewables solar systems. Both proactively have a solar link in the "green" section on their websites that allow owners to monitor at any time, from anywhere, how their solar systems are operating. That's an added advantage everyone, including customers and public, who can also see how the solar system is working and producing, and that is good public relations for the marina.

Being a clean and green marina is the modern way to go, but while most practices cost money, a few even save money, such as when Conanicut burns waste oil to heat one work building in winter. But solar can both save and earn money for the marina. Bill Munger and Scott Zeien agree that solar is definitely a bright idea whose time has come. ↴

Neil W. Ross is the founding president of the International Marina Institute, now of Neil Ross Consultants in Kingston, R.I. He can be reached via email at neilross@cox.net.

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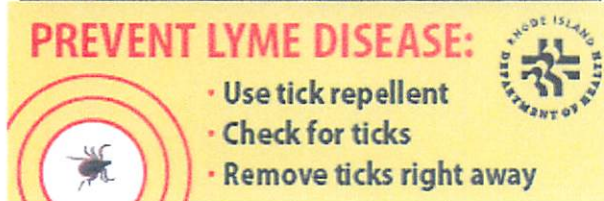
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2013-10-17 / News

Boat yard on display Monday

Gov. Chafee will be in town to commend local initiative

Conanicut Marine Services will welcome Gov. Lincoln Chafee to its Taylor Point boat yard to see the unveiling of a new addition that has transformed the company into a leader in environmental stewardship for the Rhode Island marine trades.

Attendees will get their first glimpse at the yard's new solar photovoltaic system and its operation, which is the largest renewable energy facility to be developed in the state's marine trades to date. The system will not only provide 100 percent solar power to the 10-acre Taylor Point yard, it will also provide power to National Grid under the state's distributed generation program, saving a significant amount of fossil fuel over the years to come.

The unveiling takes place on Monday, Oct. 21, at the Taylor Point boat yard. The public is welcome. Doors open at 8 a.m.

Conanicut Marine Services will also be designated as a clean marina by the Coastal Resources Management Council. The statewide program is designed to reward marinas that go beyond regulatory requirements by applying innovative pollution-prevention practices to their day-to-day operations.

According to Bill Munger, owner of the marina, factoring the environment into business decisions has been a part of the company's way of operating since it was founded.

"My wife and I founded the business in 1974, and we've built it shingle by shingle all these years," said Munger. "But as we've grown we've always had an environmentally conscious mindset, and we've tried to do the right thing in the boating world."

The photovoltaic system is the most recent in a long line of innovations used at the marina, including systems to protect both air and water quality.

The Taylor Point yard – the company's inland facility that complements its waterfront marina and chandlery – has four boat sheds, two of which face south. When Munger went in search of a way the sunlight exposure on those sheds could be tapped, he met Anthony Baro of E2SOL, a firm in East Greenwich that develops projects related to wind, solar and microhydro power.

E2SOL designed a system that utilizes the roof space on each of the two south-facing sheds, which are both 210 feet long, and coordinated with several local professionals on the installation. The 128-kilowatt solar array will save nearly 4,000 tons of greenhouse gas over the next 25 years, the equivalent of roughly 7.4 million automobile miles.

"Conanicut Marine Services is an important leader in the marine community and offers an outstanding example for other marinas to follow by employing renewable energy and green practices in their operations," said Janet Coit, director of the state Department of Environmental Management.

Coit will speak at the event, along with Chafee, Munger and Baro.

Wendy Mackie, CEO of the Rhode Island Marine Trades Association, looks at the event as a great learning opportunity for the local community and other business owners.

"The health of the outdoor environment is critical to our industry, and to our lives here in the Ocean State," said Mackie. "I hope many business owners in Rhode Island will attend this event, to learn and see what can be possible with an environmentally conscious mindset."

o. CMS LOCATIONS – PHOTOS

- Marina Past and Present
- Taylor Point boat yard parking
- Ship Store and Chandlery
- Jamestown Newport Ferry & Katherine









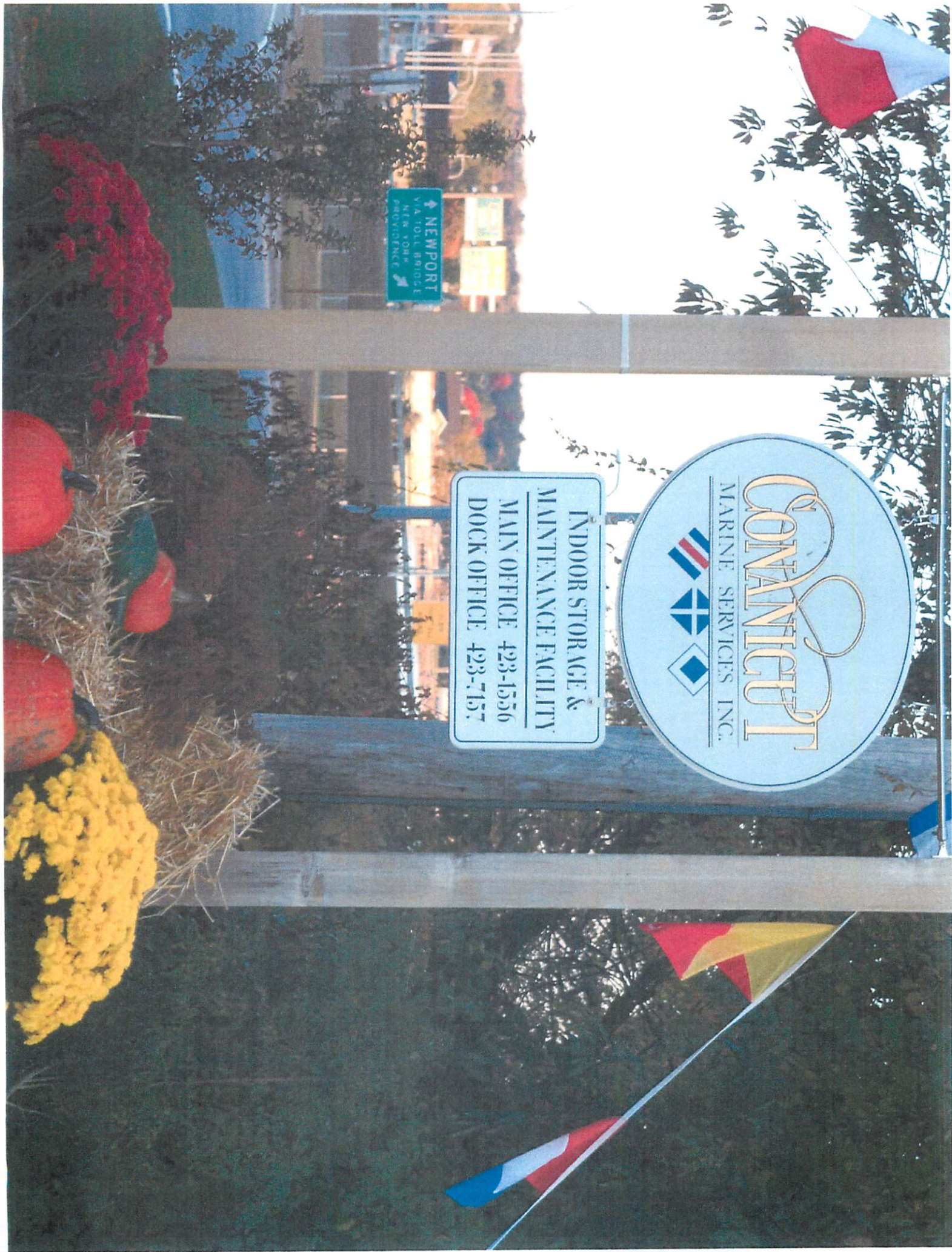


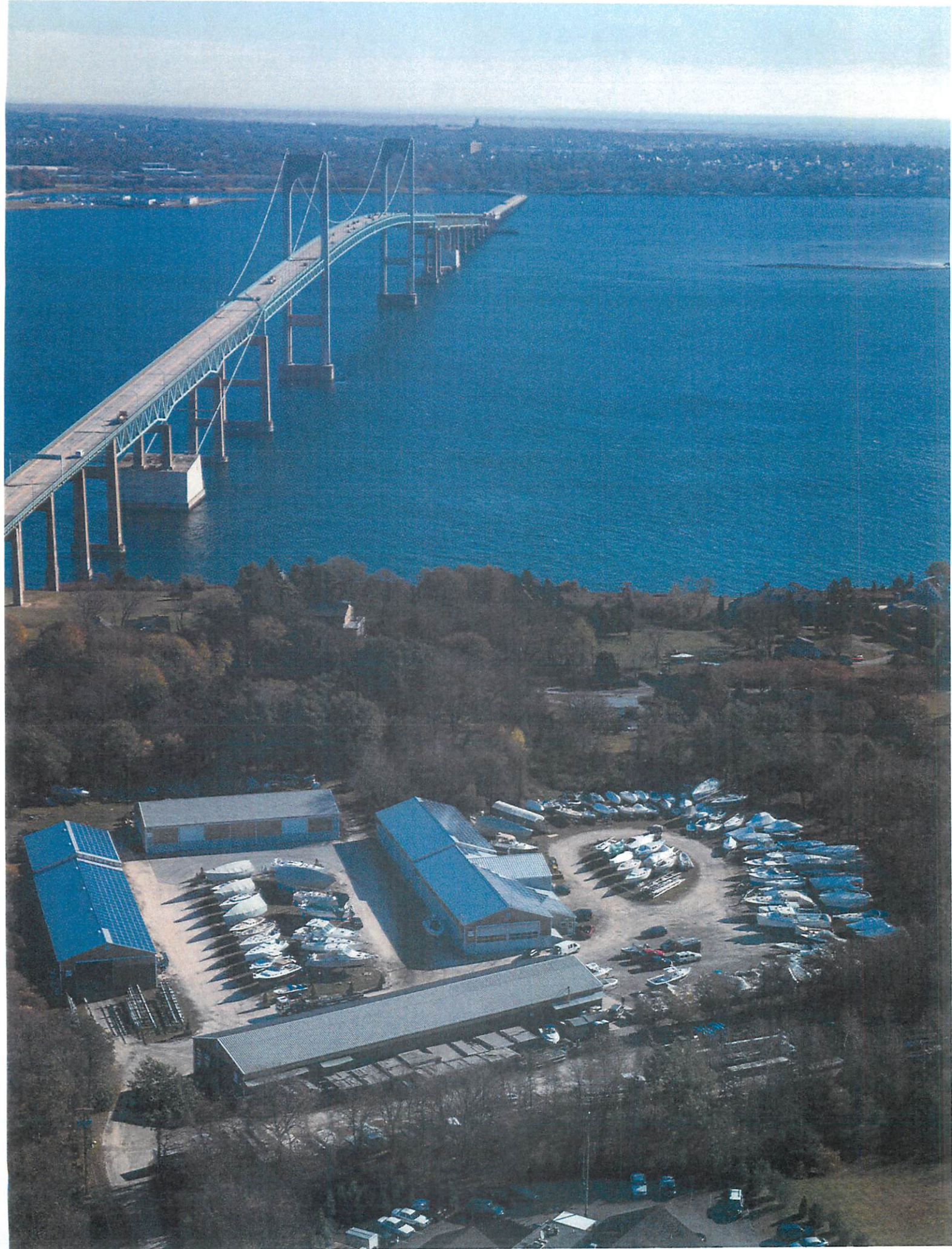




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p. **SUPPORT OF EVENTS ON VETERAN'S SQUARE PHOTOS – Section 4.b.m.**

- Christmas Tree delivery & Set up
- Santa & Mrs. Claus visit Jamestown – arriving at East Ferry
- RI Annual Boat Show
- Flag Flying from Crane at East Ferry with fireworks



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Lynn Fiorenzano, 401-783-0783,
info@silverspringmarine.com

MIDDLETOWN

West Marine
379 W Main Rd Middletown, RI 02842
401-841-9880

BRISTOL

Bristol Marine & Fleet Yacht Sales
99 Poppasquash Road, Bristol, RI 02809
Matt Leduc, 401-226-1816,
matt@fleetyachtsales.com

WARWICK

Marinemax, Inc.
1 Masthead Drive, Warwick, RI 02886
Steve Arnold, 401-265-5202,
steve.arnold@marinemax.com

JAMESTOWN

Conanicut Marine Services & Latitude
Yacht Brokerage
1 East Ferry Wharf, Jamestown, RI 02835
Ryan Miller, 401-835-0069,
ryan@latitudeyacht.com

Admission: FREE - There is NO admission fee so come down and see all the boats and great vendors.

Parking: FREE - Parking is available at all five locations.





q. **CMS INTERNAL PLANS AND BEST MANAGEMENT PRACTICES – NOTE: Due to the volume of these plans we have listed them below and can make them available for review.**

- **CRMC OPERATION & MAINTENANCE PROGRAM – As submitted to CRMC on April 21, 2008 which includes copies of CMS Site plans for north and south basins, CMS Storm Water Pollution Prevention Plan – Pollution Control Plan, CMS Spill Prevention Control & Countermeasure Plan, CMS Contingency plan, JFD letter regarding jointly owned Hazard Material Response Equipment Inventory, CMS Emergency Response Sheet, CMS Source Reduction and Recycling Plan, CMS Clean Boating Tips-Maintain Your Vessel Wisely flyer, CMS Sub-Contractor Environmental Letter, RI DEM Authorization as a Certification Agent in the RI No-Discharge Compliance Program, CMS Hurricane Plan.**
- **FUEL DOCK SAFETY RULES & PROCEDURES & CMS FUEL SPILL EMERGENCY RESPONSE SHEET (which was compiled by CMS and reviewed by John Leo of RI DEM).**
- **BEST MANAGEMENT PRACTICES SHEET**
- **CMS FIRE PREVENTION PLAN**