

C. Access Assessment Appendix

Kyle Urso, Lawrence Yassanye

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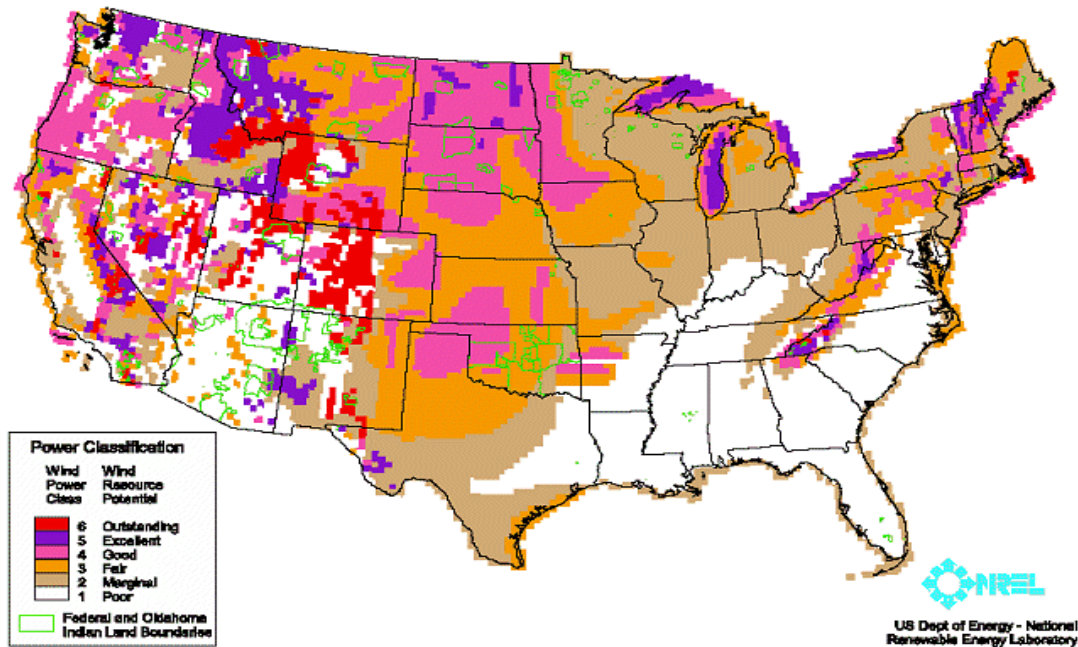
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Solar & Wind Data

Figure 13. Wind Resource Potential

Above figure depicts the power classification throughout the United States. More specifically the US Department of Energy lists the Northeast coast ranging from a good to fair ranking.



The British start-up Quietrevolution developed a vertical axis wind turbine which is not only more aesthetic but is also better at gathering wind near and around buildings, which frequently vary in direction. The Helical wind turbine is also quieter because the blade tip speed is lower.

(<http://www.quietrevolution.co.uk/qr5.htm>)

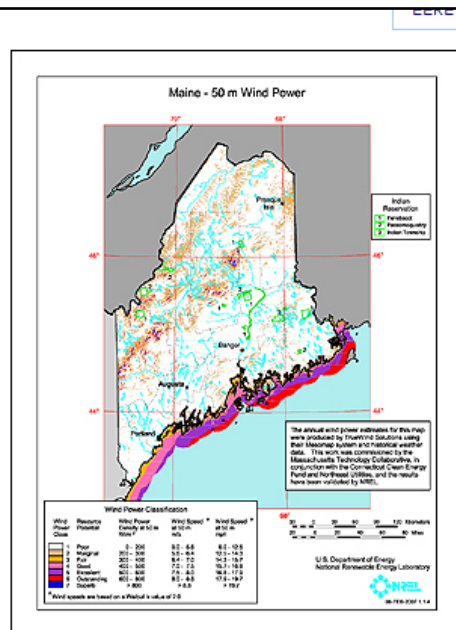


Mariah Power offers a similar turbine, allowing 360 degree of wind direction.

Maine Wind Resource Map

The Department of Energy's Wind Program and the National Renewable Energy Laboratory (NREL) published a new wind resource map for the state of Maine. This resource map shows wind speed estimates at 50 meters above the ground and depicts the resource that could be used for utility-scale wind development. Future plans are to provide wind speed estimates at 30 meters, which are useful for identifying small wind turbine opportunities.

As a renewable resource, wind is classified according to wind power classes, which are based on typical wind speeds. These classes range from Class 1 (the lowest) to Class 7 (the highest). In general, at 50 meters, wind power Class 4 or higher can be useful for generating wind power with large turbines. Class 4 and above are considered good resources. Particular locations in the Class 3 areas could have higher wind power class values at 80 meters than shown on the 50 meter map because of possible high wind shear. Given the advances in technology, a number of locations in the Class 3 areas may be suitable for utility-scale wind development.



This map of Maine shows the wind resource at 50 meters. You can [view a larger version](#) or [download a printable map \(PDF 1.4 MB\)](#). [Download Adobe Reader](#).

More Viewing Options

[Interactive Map](#)

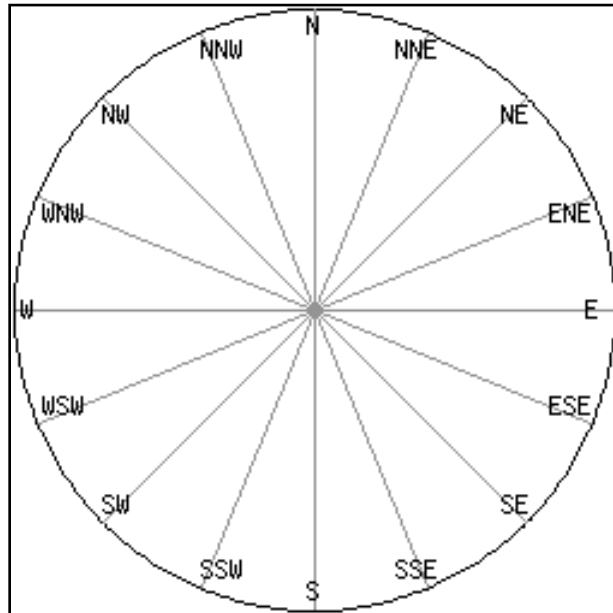
Wind speed table for Conversion of Knots, Beaufort, m/s and km/h.

Knots	Beaufort	m/s	km/h	Label	Effect on sea	Effects on land
1	0	0 - 0.2	1	Calm	Sea like a mirror	Calm. Smoke rises vertically.
1-3	1	0.3-1.5	1-5	Light Air	Ripples with the appearance of scales are formed, but without foam crests	Wind motion visible in smoke.
4-6	2	1.6-3.3	6-11	Light Breeze	Small wavelets, still short, but more pronounced. Crests have a glassy appearance and do not break	Wind felt on exposed skin. Leaves rustle.
7-10	3	3.4-5.4	12-19	Gentle Breeze	Large wavelets. Crests begin to break. Foam of glassy appearance. Perhaps scattered white horses	Leaves and smaller twigs in constant motion.
11-15	4	5.5-7.9	20-28	Moderate Breeze	Small waves, becoming larger; fairly frequent white horses	Dust and loose paper raised. Small branches begin to move.
16-21	5	8.0-10.7	29-38	Fresh Breeze	Moderate waves, taking a more pronounced long form; many white horses are formed. Chance of some spray	Branches of a moderate size move. Small trees begin to sway.
22-27	6	10.8-13.8	39-49	strong Breeze	Large waves begin to form; the white foam crests are more extensive everywhere. Probably some spray	Large branches in motion. Whistling heard in overhead wires. Umbrella use becomes difficult. Empty plastic garbage cans tip over.
28-33	7	13.9-17.1	50-61	Near Gale	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind	Whole trees in motion. Effort needed to walk against the wind. Swaying of skyscrapers may be felt, especially by people on upper floors.
34-40	8	17.2-20.7	62-74	Gale	Moderately high waves of greater length; edges of crests begin to break into spindrift. The foam is blown in well-marked streaks along the direction of the wind	Twigs broken from trees. Cars veer on road.
41-47	9	20.8-24.4	75-88	Severe Gale	High waves. Dense streaks of foam along the direction of the wind. Crests of waves begin to topple, tumble and roll over. Spray may affect visibility	Larger branches break off trees, and some small trees blow over. Construction/temporary signs and barricades blow over. Damage to circus tents and canopies.
48-55	10	24.5-28.4	89-102	Storm	Very high waves with long over-hanging crests. The resulting foam, in great patches, is blown in dense white streaks along the direction of the wind. On the whole the surface of the sea takes on a white appearance. The 'tumbling' of the sea becomes heavy and shock-like. Visibility affected	Trees are broken off or uprooted, saplings bent and deformed, poorly attached asphalt shingles and shingles in poor condition peel off roofs.
56-63	11	28.5-32.6	103-117	Violent Storm	Exceptionally high waves (small and medium-size ships might disappear behind the waves). The sea is completely covered with long white patches of foam flying along the direction of the wind. Everywhere the edges of the wave crests are blown into froth. Visibility affected	Widespread vegetation damage. More damage to most roofing surfaces, asphalt tiles that have curled up and/or fractured due to age may break away completely.
64-71	12	32.7-36.9	118-133	Hurricane	The air is filled with foam and spray. Sea completely white with driving spray; visibility very seriously affected	Considerable and widespread damage to vegetation, a few windows broken, structural damage to mobile homes and poorly constructed sheds and barns. Debris may be hurled about.

April 2009

:: Wind directions

Abbreviation	wind direction	Degrees
N	North	0°
NNE	NorthNorthEast	22.5°
NE	NorthEast	45°
ENE	EastNorthEast	67.5°
E	East	90°
ESE	EastSouthEast	112.5°
SE	SouthEast	135°
SSE	SouthSouthEast	157.5°
S	South	180°
SSW	SouthSouthwest	202.5°
SW	Southwest	225°
WSW	WestSouthwest	247.5°
W	West	270°
WNW	WestNorthwest	292.5°
NW	Northwest	315°
NNW	NorthNorthwest	337.5°



Cost Of Supplying Light Reference



Maine

Voluntary Renewable Resources Grants

Incentive Type: State Grant Program

Eligible Renewable/Other Technologies: Solar Thermal Electric, Photovoltaics, Wind, Biomass, Hydroelectric, Geothermal Electric, Fuel Cells, Municipal Solid Waste, Tidal Energy

Applicable Sectors: Nonprofit, Rural Electric Cooperative, Quasi-Municipal Corporations and Districts

Amount: Varies by project

Maximum Amount: \$50,000

Authority 1: 35-A M.R.S.A. §3210

Date Enacted: 1997

Effective Date: 3/1/2000

Authority 2: ME PUC 65.407, Ch. 312

Effective Date: 12/15/1998

Website: http://www.energymaine.com/renewable_programs_voluntary.htm

Summary:

Maine's Voluntary Renewable Resources Grants, supported by the state's Voluntary Renewable Resources Fund and administered by the Maine Public Utilities Commission (PUC), provide funding for small-scale demonstration projects designed to educate communities on the value and cost-effectiveness of renewable energy. Maine's Voluntary Renewable Resources Fund, a public benefits fund, was established in 2000 and is supported by contributions made by consumers on their electric bills. Applications for Voluntary Renewable Resources Grants are available only during specified application periods; funding is made available when a certain amount has been collected as a result of voluntary contributions.

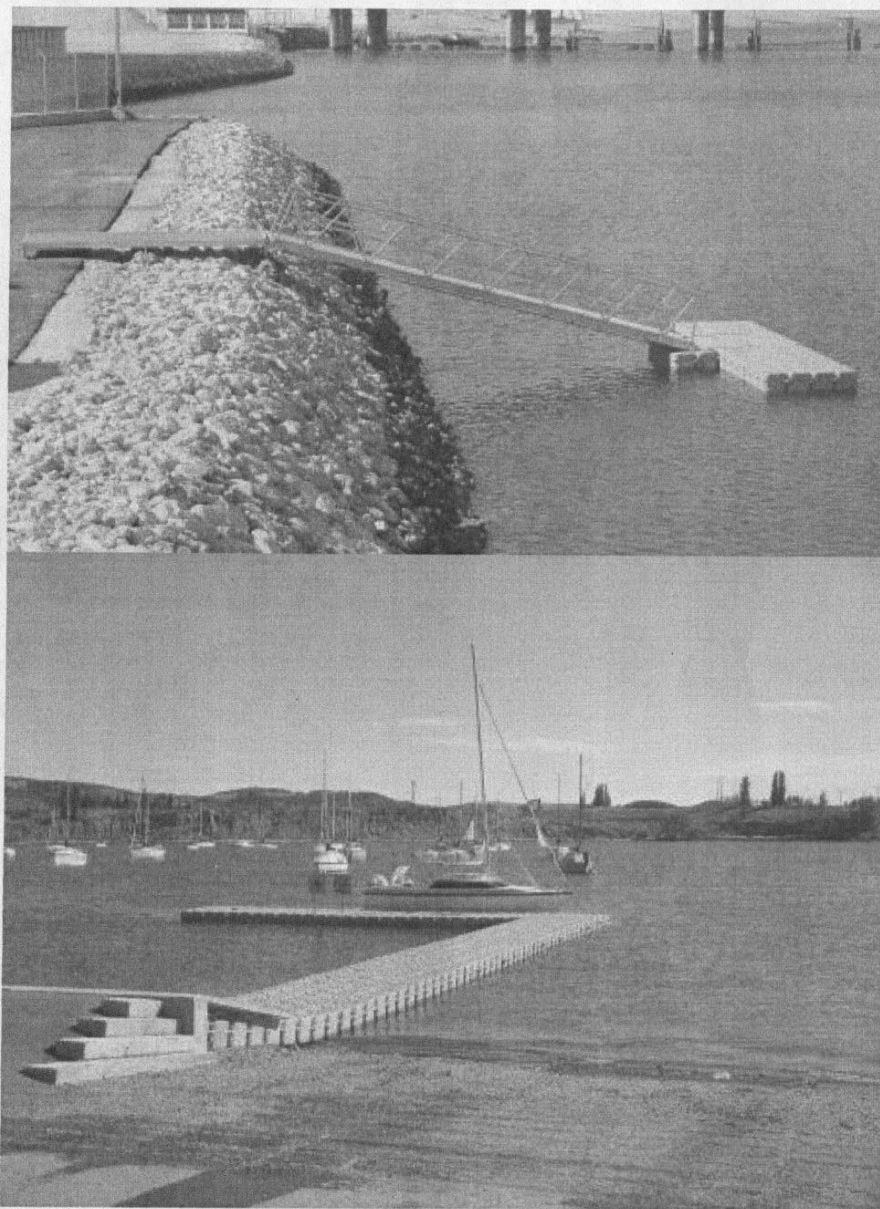
Grants of up to \$50,000 are generally available to Maine-based nonprofit organizations (including community-based nonprofits), electric cooperatives, quasi-municipal corporations and districts, and community action programs. To qualify for grant funding, renewable-energy resources generally must (1) qualify as a small power production facility under Federal Energy Regulatory Commission rules or (2) must not exceed 100 megawatts in capacity and use one or more of the following resources to generate electricity: fuel cells, tidal power, solar energy, wind energy, geothermal energy, hydropower, biomass energy, and/or municipal solid waste used in a generator in conjunction with recycling.



Integral Solar Flood Light Specifications

- Cost
 - \$54.99 (sale price) to \$249.99 (regular price)
- Dimensions
 - 3.5L x 3.5W x 7H inches
- Material
 - Plastic
- Cord Length
 - 20 Feet - each
- Finish
 - Black
- Specialty
 - Flood Lights
- Type
 - Spot Lights
- Illumination Time
 - 8 - 10 Hours
- Light
 - White
- Brand
 - Intermatic / Malibu

Seaflex



Seaflex®

Description

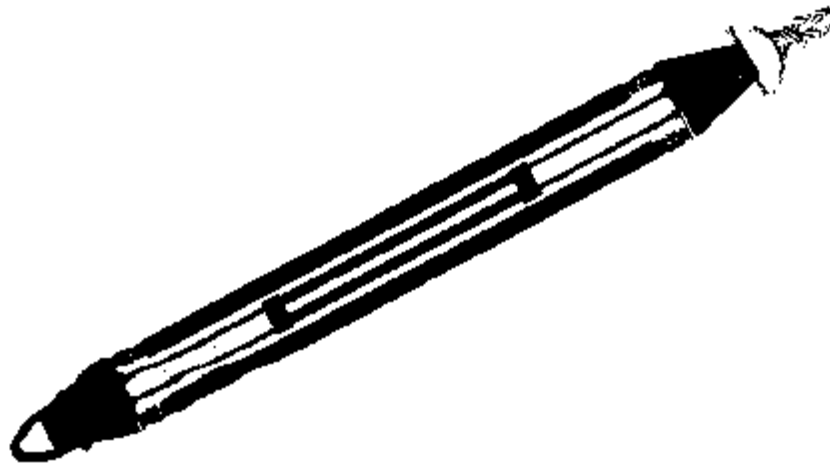
The extreme break load of the ByPass system together with the elasticity of the Seaflex rubber hawsers offers a mooring system prepared to handle any kind of environmental situations.

During normal conditions the Seaflex rubber hawsers will handle all the forces, the bypass will only come into play when unexpected forces such as higher wind speeds or heavier wave action than designed for occur.

ByPass Function

The ByPass system is mainly built from two individual cables of HMPE. The twin cables are looped around a reinforced Delrin spider. On Seaflex reaching the designed elongation the two spider blocks will interlock. The force will now be handled both by the Seaflex rubber hawsers and the ByPass.

The TPU retraction cables ensure separation of the spider blocks during normal working conditions.



Patents Pending

Cable Fibre	HMPE
Bungee Mount, Single Anchor Design	Delrin - Black
Support Plate - Keyed Anchor Support	SS 2343 Stainless Steel
Retraction Cables	Thermoplastic Polyurethane

Seaflex AB Stöcksjö Kustväg 77 SE-90580 Umeå Sweden, Phone +46 90 160650, fax +46 90 160651, info@seaflex.net, www.seaflex.net
 Seaflex Inc 733 Arlington Ave. North Suite 211 St Petersburg FL 33701 USA Phone (310) 548 9100, Fax (321) 406 0612 seaflex.inc@seaflex.net



11 March 2009

SEAFLEX is a strong, reliable, and flexible method for mooring floating docks and other related applications. Thousands of SEAFLEX have been installed in salt, brackish, and fresh water all over the world since we first introduced the concept of elastic rope mooring systems. SEAFLEX can handle the toughest weather conditions and the most exceptional water fluctuations.

The Seaflex Way

Quality is a key concept at Seaflex. Our commitment to quality gives our customers the best solutions in a wide variety of environments. Our solutions are based upon our own experiences drawn from thousands of installations, and these solutions are strengthened by widely accepted calculation models. Projects are well documented using software to store critical data in order to have easy access to the history of projects should that be necessary during the life span of those installations. Our distributors and partners play an important role in our delivery system. They know that SEAFLEX is the top of the line method for marina moorings and that working with Seaflex offers great benefits. We use well-defined methods from our industry and add our own expertise. By being the worldwide market leader in flexible mooring systems we get continuous feedback from around the globe allowing us to continuously improve our products and our delivery. Welcome to The Seaflex Way and to the quality we deliver!

The four defining factors of SEAFLEX

Technology

SEAFLEX provides secure moorings even under the worst weather conditions. The moorings are self-regulating, handle variations in water levels, and are effective with all water depths. The elasticity ensures that moored floating docks and boats are less exposed to unnecessary wear while also protecting marinas and boats in case of storms. Our choice of materials guarantees a minimal risk of corrosion.

Quality

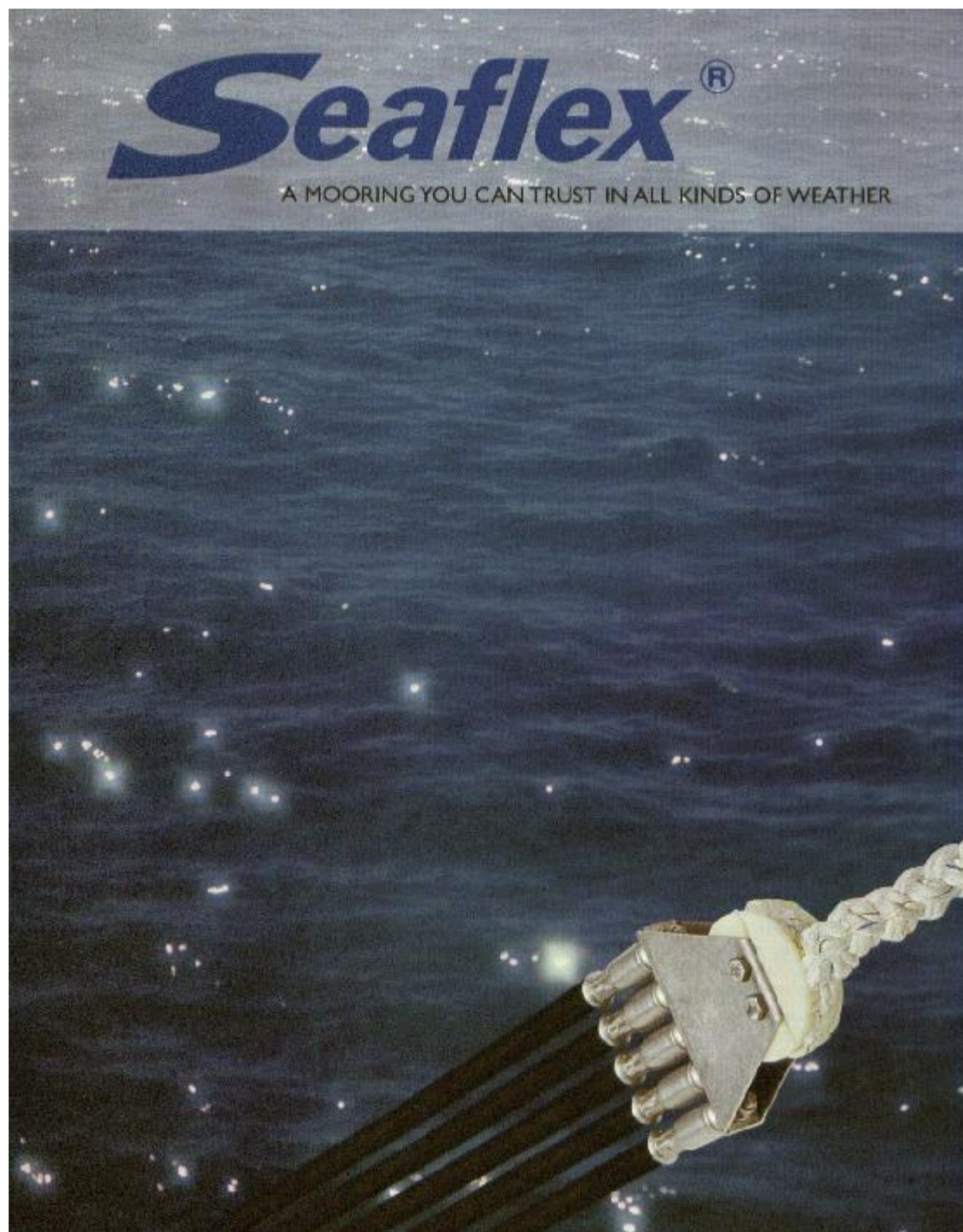
The size of each mooring is calculated from site and weather criteria provided by the client. Factors critical to these calculations are: variations in water level, wind speed, wave height and period, current, water depth, number and size of boats and overall size of the marina. This information is entered into our proprietary JFlex software to determine strength, length, and quantity of moorings needed. All interaction with our customers over the life of the installation follows structured procedures and is well documented.

Environment All SEAFLEX moorings meet the highest international standards for environmental protection. The moorings have minimal corrosion, do not release pollutants into the marine ecosystem, and do not harm the seabed or impact the surroundings. This makes SEAFLEX particularly well-suited for anchoring floating docks and buoys in sensitive marine areas, such as coral reefs, eel grass, and historic sites. A marina moored with Seaflex is naturally much free from noise than any other marina.

TCO – Total Cost of Ownership

A marina moored with SEAFLEX requires substantially less maintenance than marinas with other mooring systems. One reason being the Seaflex technology itself, but this is also due to the exceptionally durable Seaflex components. Consider the difference compared with most cables and winches or chains. Those materials more often must be replaced due to corrosion, wear, and fatigue. Pile guides often require frequent repair or maintenance. Some other advantages with SEAFLEX include low installation cost, fast and easy installation, minimal transportation weight, and effectiveness in water depths not generally conducive to pile anchoring. A SEAFLEX moored marina can also be redesigned and reinstalled at a substantially lower cost than those anchored with most other methods.

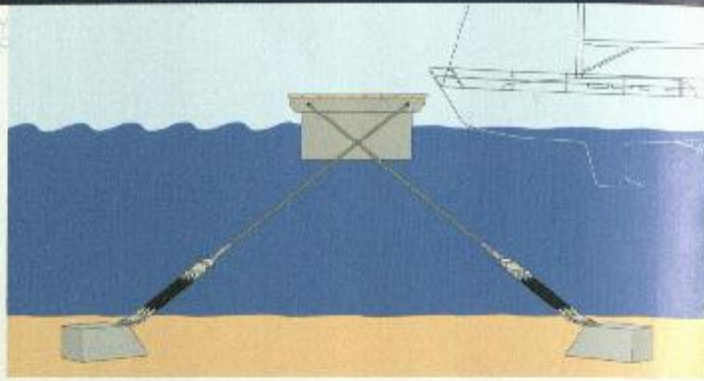
Seaflex AB Ståcksjö Kustväg 77 SE-90580 Umeå Sweden, Phone +46 90 160650, Fax +46 90 160651, info@seaflex.net, www.seaflex.net
Seaflex Inc 735 Arlington Ave North Suite 211 St Petersburg FL 33701 USA Phone (310) 548 9100, Fax (321) 406 0612 seaflex.inc@seaflex.net



SEAFLEX CAN BE CONFIGURED TO WITHSTAND HURRICANES



Seaflex®
A SECURE WAY TO
MOOR FLOATING
DEVICES

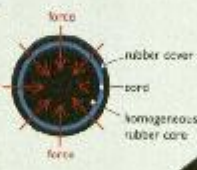


A Seaflex mooring will withstand the worst imaginable weather conditions, it has good resistance to corrosive environments and has an unsurpassed ability to safely and securely resist all wave motion. A Seaflex mooring does not affect sensitive sea beds and requires very low regular maintenance. Whether for entire marinas, wave attenuators, buoys, single pontoons or aquaculture farms, Seaflex is one of the safest mooring systems on the market.

Seaflex keeps pontoons and buoys in place, regardless of tides and wave movements. The unique construction - which allows Seaflex to slowly stretch and then return in a smooth, calm movement - in combination with initial pretensioning, provides progressive resistance to both horizontal and vertical wave motion. A pontoon anchored with Seaflex is never passive to the sea, but instead offers firm resistance that substantially reduces wave movements. In harbors and marinas with heavy traffic, the effects of the swells are dampened and the risk of damage to moored boats is considerably reduced. Navigation buoys anchored with Seaflex do not change position as much as those anchored with chains, a fact that considerably improves marine safety in harbors and narrow channels. Mooring buoys anchored with the Seaflex system provide soft and secure mooring in all weather.

TECHNOLOGY OF THE HIGHEST LEVEL

A Seaflex hawser is built around a homogeneous rubber core. A specially braided cord is wrapped around the core, the outer layer consists of a durable rubber cover. When subjected to stress the cord tightens around the elastic rubber core, providing progressive resistance that dampens the motion from the water. The Seaflex fittings are crimped around the rubber hawser. A single Seaflex hawser is designed to stand up to very high loads - the fittings are designed to withstand even more. A specially manufactured stainless steel shackle fastens Seaflex to the anchor; an integrated thimble holds the polyester rope with a secure grip.

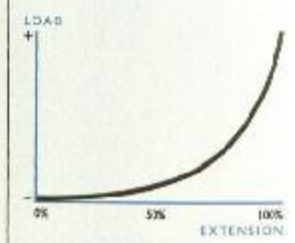


force
rubber cover
cord
homogeneous rubber core



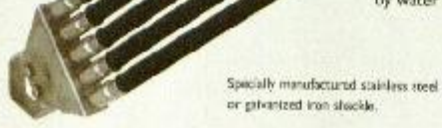
Polystyrene or special fibre rope
Integrated thimble
Stainless steel fittings

The number of Seaflex hawsers fitted in parallel is determined by the active forces. The hawser lengths are determined by water level variations.



LOAD
+
0% 50% 100%
EXTENSION

The figure shows the progressive curve of Seaflex.



Specially manufactured stainless steel or galvanized iron shackle.





SEAFLEX The Mooring System

Safety First

The SEAFLEX unique construction as a progressive expanding or exponential mooring device serves to provide a smooth, damping effect of all movements in water. The number of SEAFLEX rubber hawsers used is dependent on the forces involved. The hawsers length is pre-determined in correlation to the variation in water level. SEAFLEX is extremely safe and maintains the position of the pontoon or buoy independent of water level variations or wave-induced movements. The SEAFLEX system can be dimensioned for application in the strongest hurricanes.

The Environmental Solution

SEAFLEX has no harmful effects on the marine ecosystems and does not damage the extremely sensitive seabed. This is a consequence of SEAFLEX being in a constant state of tension between anchors and pontoon.

SEAFLEX requires little maintenance, is easy to install and remains strong year after year.

SEAFLEX proves to be the most cost effective mooring system on the market.

SEAFLEX 1 or 2 rubber hawsers
Standard model for smaller pontoons and buoys

SEAFLEX 3, 4 and 5 rubber hawsers
Standard model for average size pontoons

SEAFLEX 6, 8 and 10 rubber hawsers
Standard model for large pontoons and wave attenuators

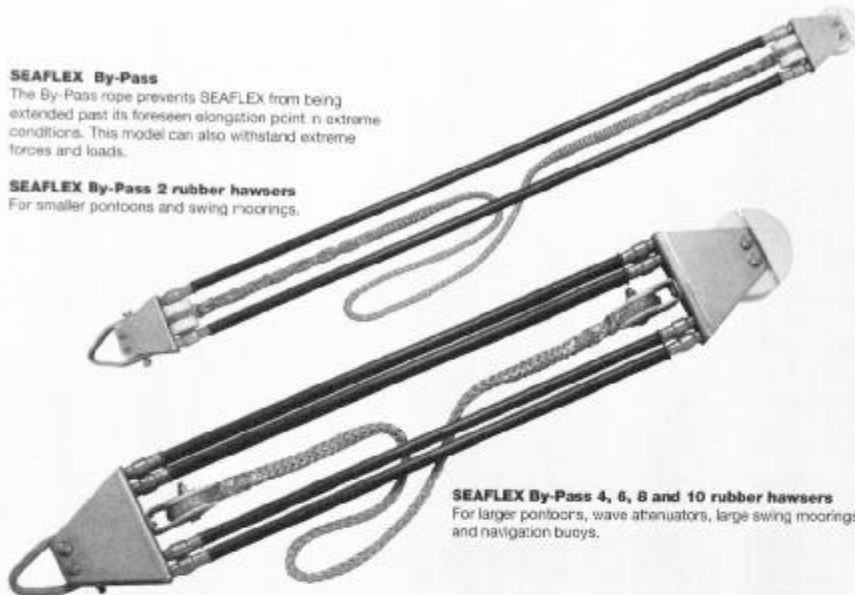


SEAFLEX By-Pass

The By-Pass rope prevents SEAFLEX from being extended past its foreseen elongation point in extreme conditions. This model can also withstand extreme forces and loads.

SEAFLEX By-Pass 2 rubber hawsers

For smaller pontoons and swing moorings.

**SEAFLEX By-Pass 4, 6, 8 and 10 rubber hawsers**

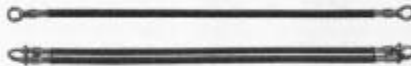
For larger pontoons, wave attenuators, large swing moorings and navigation buoys.

SEAFLEX SPRING

SEAFLEX SPRING with its unique design is the most effective method of shock absorption mooring between land and pontoon. The SPRING can absorb the forces created by load variations. The construction consisting of shock elements made from special rubber and stainless steel fittings combines to create a silent spring with a long life expectancy.

**SEAFLEX EE - Models**

A slight variation in the SEAFLEX construction with specially developed end fittings in stainless steel. Designed for small jetties and buoys.

**SEAFLEX Buoy**

The tough swing mooring for the sensitive environment.

This SEAFLEX Buoy is part of the Gylfau Project which is a European Environmental Project, a new initiative to minimise any impact swing moorings may have on our fragile environment. The project consists of running a test over 2 years where four pairs of moorings are surveyed to establish any differences and their impact on the environment. By comparing conventional chain moorings with the SEAFLEX system the study is designed to measure any of these differences.

**SEAFLEX End fittings**

MODEL EE
Single rubber hawser.

MODEL EE
Twin rubber hawser.

Stainless or galvanised SEAFLEX shackle.

Nylon SEAFLEX Thimble



Seaflex®

Seaflex AB, Strömsjö Kustväg 77, SE-805 80 Umeå, Sweden
Phone +46 90 18 58 50, Fax +46 90 18 06 51, info@seaflex.net, www.seaflex.net

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AN ENVIRONMENTALLY SAFE ALTERNATIVE

Seaflex does not rust or introduce other pollutants into the marine ecosystem. Moreover, there is no chain drag or other bottom damage to the local environment with Seaflex. This makes Seaflex especially suitable for mooring pontoons and buoys in sensitive locations, for instance near coral reefs, vegetation and historic relics.

Sturdy bottom anchors are needed to hold large pontoons in place. During installation, Seaflex is much more convenient and easier to handle than heavy, clumsy chains.

THE SEAFLEX MOORING SYSTEM REQUIRES VERY LOW MAINTENANCE

Seaflex requires considerably less maintenance than other mooring systems. System components are very resilient and do not need to be checked or replaced as often as the parts in other mooring systems.

Chains require a lot of maintenance.

After a number of years chain links may be heavily corroded, worn and fatigued and must be replaced. What initially might have been the most economical alternative will in time incur sky-high maintenance costs.

Piles may require significant maintenance.

Marine organisms which fasten onto the piles, are exposed at low tide and create an undesirable appearance. Piles damaged by bad weather must be repaired or replaced - measures that can prove very expensive over time.

Environmentally friendly, requires low maintenance, silent and with unsurpassed stability - Seaflex, a mooring you can trust in all kinds of weather.

There is a store and a gas station on the pontoon at Graddö in Rösågen, Sweden. Despite high winds and the fact that the pontoon can be covered with 30 cm of ice in the winter, the Seaflex installation has functioned perfectly since 1990.

Like most inventions, the Seaflex mooring system came about by chance.

In the 1960s, Bertil Brandt, a Swedish innovator active within the mining industry, invented a very durable compound rubber for lining ore mills. In 1968, Brandt visited a fishing harbor in Cannes and witnessed the chaos that occurred when the fishing boats berthed. He came up with an idea and constructed a simple and secure rubber mooring arrangement. During his work in Cannes, Brandt realized that mooring single pontoons was an even bigger problem and back home in Sweden he continued to develop a secure mooring system. In 1975, a single pontoon was moored for the first time with Seaflex. Today, there are several thousand Seaflex systems in use throughout the world.

The first large installation was implemented in 1981 at Hummelvik in Stockholm, Sweden. Laboratory tests show that stability has remained at optimum levels despite the severe storms experienced over the years.

April 2009

Seaflex®

MOORING FLOATING DEVICES ALL OVER THE WORLD



MESSINA, ITALY

In the Strait of Messina, Sicily, a Seaflex installation dampens the swell from the large ferries that traffic the channel to the mainland.



VESTMANNAEYJAR, ICELAND

The most famous installation is probably the pen that was constructed for the orca Kelko as one step in his return to freedom. In order to withstand the extremely severe conditions, the pen - which was the size of a soccer field - was moored with Seaflex. The installation was configured for hurricanes and in order to monitor the pen, advanced computerized measuring equipment, remotely controlled via GSM, was installed. The measuring equipment forwarded information about mooring forces, wind directions, wind speeds, wave heights and wave frequencies.



QUEBEC, CANADA

The Seaflex moored navigational buoy holds its position in the narrow channel, regardless of the water level and wave movements.



ROCKY FORK STATE PARK MARINA, HILLSBORO, OHIO

The mooring system of Seaflex and Holix anchors has served this 300 slip marina well. It has handled a couple of 65 knots blows while slips were full without incident and it handles water level variations.



STOCKHOLM, SWEDEN

Swells constantly plague the heavily trafficked channel near Traneberg. This Seaflex mooring, which was installed in 1983, has always worked exactly as expected.

SEAFLEX AB

Stöcksjö Kustväg 77, SE-905 80 Umeå, Sweden
Phone +46 90 15 06 50 Fax +46 90 16 06 51
info@seaflex.net www.seaflex.net

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Residential Docks and Piers:

Inventory of Laws, Regulations, and Policies for the New England Region



Tips for Using This Document

Acronyms and Abbreviations Used in Tables	
ac	acres
BPL	Bureau of Parks and Land
CGS	Connecticut General Statutes
CMR	Commonwealth of Massachusetts Regulations
COP	Certificate of Permission
CRMC	Coastal Resources Management Council
CRMP	Coastal Resources Management Program
CZM	Coastal zone management
DEM	Department of Environmental Management
DEP	Department of Environmental Protection
DES	Department of Environmental Services
DIFW	Department of Inland Fish and Wildlife
DMR	Department of Marine Resources
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
ft	feet
GP	General Permit
MGL	Massachusetts General Law
MRSA	Maine Revised Statutes Annotated
NRPA	Natural Resources Protection Act
N/A	Not applicable
OLISP	Office of Long Island Sound Programs
PGP	Programmatic General Permit
SAV	Submerged aquatic vegetation
SDF	Structures, Dredging, and Fill
SDF/TW	Structures, Dredging, and Fill/Tidal Wetlands
USACE	US Army Corps of Engineers
U.S.C.	United States Code
US FWS	United States Fish and Wildlife Service

Document Layout

This document has been arranged in tabular format so that one can easily compare states' information according to topic. See the sample table below.

Sample Table

Introductory information			
Table #:	Table Title		
State	Topic	Topic	Topic
CT			
ME			
MA			
Town of Falmouth			
NH			
RI			

Acronyms and Abbreviations

Because of space limitations, acronyms and abbreviations often appear in tables without definition. Refer to the table at left for those definitions.

Reference

U.S. National Oceanic and Atmospheric Administration. Coastal Services Center. 2006. *Residential Docks and Piers: Inventory of Laws, Regulations, and Policies for the New England Region*. NOAA/CSC/20622-PUB. Charleston, SC: NOAA Coastal Services Center.

Note: Information on Rhode Island was corrected in October 2006 following the initial August 2006 on-line release of this document.

Residential Docks and Piers: Inventory of Laws, Regulations, and Policies for the New England Region

Introduction

While the homes threatened by erosion and the developer illegally filling in marshlands are the projects that make the headlines, for many state regulatory programs, it's the residential docks and piers that take up the most time. When is a dock too long? What about crossing extended property lines? And at what point does a creek have too many docks?

There are no easy answers to these questions. At the request of the Georgia Coastal Management Program, the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center published in April 2003 an inventory of residential dock and pier management information for the southeastern U.S. This inventory builds upon that effort and includes five New England states and one municipality: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and the Town of Falmouth, Massachusetts. Federal laws, state laws and regulations, permitting policies, and contact information are presented in a tabular format that is easy to use.

Disclaimer

This inventory summarizes residential dock and pier permitting information in general terms and should not be construed to cover every permutation possible under law. For greater detail on the information presented here, see Table 8 of this document, or contact the permitting authorities in Table 1.

Special Thanks to

- Connecticut Department of Environmental Protection, Office of Long Island Sound Programs
- Maine Department of Environmental Protection, Bureau of Land and Water Quality
- Massachusetts Department of Environmental Protection, Wetlands Protection Program and Waterways Regulation Program
 - Falmouth Conservation Commission
- New Hampshire Department of Environmental Services, Wetlands Bureau
 - Rhode Island Coastal Resources Management Council
 - U.S. Army Corps of Engineers

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A list of print and on-line resources used in developing this document.	

1

Table 1: State Summary

State	Federal Approval of State CZM Program ¹	Coastal Population ²	Miles of Coast ¹	Acres of Tidal/Coastal Marsh	Main Permitting Authority for Residential Docks and Piers	Agency Jurisdiction	Statutory Authority: Laws, Regulations, Policies, and Procedures
CT	1980	In 2000: 2,120,734 In 1990: 2,030,017	583	17,608	DEP, OLISP Phone: (860) 424-3034 Web site: http://dep.state.ct.us/olisp/	Activities occurring in tidal wetlands and/or activities waterward of the high tide line.	Structures, Dredging, and Filling Act (CGS Sections 22a-359 through 22a-363f) Tidal Wetlands Act (CGS Sections 22a-28 through 22a-35a) CT Coastal Management Act (CGS Sections 22a-90 to 22a-112)
ME	1978	In 2000: 944,847 In 1990: 885,703	3,478	Not available	DEP, Bureau of Land and Water Quality Phone: (207) 287-3901 Web site: www.maine.gov/dep/blwq/	Construction of permanent structures in, on, or over any protected natural resources (great ponds; coastal and freshwater wetlands; significant wildlife habitats; fragile mountain areas; and rivers, streams, and brooks). Also, construction within 75 ft. of certain protected natural resources.	Natural Resources Protection Act (38 M.R.S.A., Sect. 480A-480BB) DEP Rules, Chapter 310, Wetlands and Waterbodies Protection DEP Rules, Chapter 315, Assessing and Mitigating Impacts to Existing Scenic and Aesthetic Uses
MA	1978	In 2000: 4,783,167 In 1990: 4,494,398	1,519	45,480 ac. salt marsh	DEP Wetlands Protection Program Phone: (617) 292-5695 DEP Waterways Regulation Program Phone: (617) 292-5918 Web site: www.mass.gov/dep/water/	<u>Wetlands Program</u> Activities in wetland "resource areas" (inland swamps, marshes, bogs and wet meadows; coastal salt marshes; land under water bodies; banks of water bodies; floodplains; coastal beaches and dune fields; riverfront areas; fish runs; land containing shellfish). <u>Waterways Program</u> Structures in flowed and filled tidelands, great ponds, and navigable rivers and streams.	MA Wetlands Protection Act (MGL Chapter 131, Section 40), implemented by 310 CMR 10.00: Massachusetts Wetlands Protection Act Regulations MA Public Waterfront Act (MGL Chapter 91), implemented by 310 CMR 9.00: Waterways Regulations
NOTES	¹ Data from NOAA OCRM Web site at www.coastalmanagement.noaa.gov/mystate/welcome.html , except CT miles of coast from DEP OLISP, Falmouth miles of coast from Conservation Commission, and NH miles of coast from DES Wetlands Bureau. ² Data from unpublished NOAA OCRM document "Population of Coastal Counties," except Town of Falmouth coastal population from official site of the U.S. Census Bureau at www.census.gov .						

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Table 1: State Summary (continued)

State	Federal Approval of State CZM Program ¹	Coastal Population ²	Miles of Coast ¹	Acres of Tidal/Coastal Marsh	Main Permitting Authority for Residential Docks and Piers	Agency Jurisdiction	Statutory Authority: Laws, Regulations, Policies, and Procedures
TOWN OF FALMOUTH	N/A	In 2000: 32,660 In 1990: 27,960	70	112 ac. tidally restricted salt marsh	Falmouth Conservation Commission Phone: (508) 495-7445 Web site: www.town.falmouth.ma.us/dep/rt.php?depkey=concom	Resource areas (see FWR 235-2), lands within 100 ft. of resource areas, lands and waters within the Black Beach/Great Sippewissett Marsh District of Critical Planning Concern, lands and waters within the Waquoit Bay Area of Critical Environmental Concern.	Falmouth Wetlands Regulations (Code of the Town of Falmouth, Chapter 235)
NH	1982	In 2000: 389,592 In 1990: 350,078	13	Approx. 6,200 ac. salt marsh	DES, Wetlands Bureau Phone: (603) 271-2147 Web site: www.des.state.nh.us/Wetlands/	In tidal areas, all submerged lands up to the highest predictable tide line; a buffer zone extending 100 ft. from the highest observable tide line; salt marsh; sand dunes; tidal flats. Also, nontidal wetlands and surface waters including freshwater wetlands, lakes, ponds, rivers, streams, and intermittent streams.	NH Revised Statutes, Chapter 482-A: Fill and Dredge in Wetlands NH Code of Administrative Rules, Chapters Wt 100-800
RI	1978	In 2000: 1,048,319 In 1990: 1,003,464.	384	4,066 ac. estuarine emergent and estuarine shrub-scrub wetlands	CRMC Phone: (401) 783-3370 Web site: www.crmc.ri.gov	Tidal waters, shoreline features, areas adjoining shoreline features up to 200 ft. inland; watersheds of poorly flushed estuaries; freshwater wetlands in the vicinity of the coast; statewide construction of certain facilities.	RI Coastal Resources Management Program, As Amended, Sections 100-300. Often referred to as "The Red Book" Special area management plans are also in effect for multiple areas.
NOTES	¹ Data from NOAA OCRM Web site at www.coastalmanagement.noaa.gov/mystate/welcome.html , except CT miles of coast from DEP OLISP, Falmouth miles of coast from Conservation Commission, and NH miles of coast from DES Wetlands Bureau. ² Data from unpublished NOAA OCRM document "Population of Coastal Counties," except Town of Falmouth coastal population from official site of the U.S. Census Bureau at www.census.gov .						

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U.S. ARMY CORPS OF ENGINEERS INTERACTIONS WITH STATE GOVERNMENTS

The U.S. Army Corps of Engineers (USACE) is the federal agency charged with oversight of the nation's navigable waters. Residential docks and piers are permitted pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344). Section 404 permits are required only for projects placing dredged or fill material in navigable U.S. waters. To implement these laws, USACE has divided the nation into divisions and smaller districts based largely on watershed boundaries. The states included in this document are all part of the North Atlantic Division, New England District, but the way that USACE district offices and state governments work together differs from state to state.

Generally, USACE issues three types of permits:

- Individual permits—requires full public review.
- Regional permits—a form of general permit issued for a state, region, county, or other area. Regional permits are issued by the district engineer when permitted activities are similar in nature and cause minimal individual and cumulative environmental impact. A Programmatic General Permit (PGP), a type of regional permit, can be issued when it reduces duplication of regulator efforts among local, state, or federal agencies. The PGP grants permitting authority to a state, local, or federal government agency to act for USACE in certain circumstances. All states in this document currently have PGPs for permitting docks and piers.
- Nationwide permits—another form of general permit issued by the chief engineer through the federal rulemaking process.

Table 2: State-USACE Interactions

State	Summary of Office Interactions
CT	PGP expires May 31, 2011. Category 1 activities are not screened by USACE. Category 2 activities require application to USACE, as well as screening at a monthly "joint processing meeting" between DEP, USACE, FWS, EPA, and NMFS. Applicants for Category 2 activities must have written authorization from USACE. All agencies participating in the joint process meetings can push an application into Category III, which requires a USACE individual permit.
ME	PGP expires October 11, 2010. Category 1 activities are not screened by USACE, and the applicant may proceed if not contacted by USACE within 30 days. Category 2 activities require interagency screening by USACE, USFWS, EPA, and NMFS to determine if activities result in minimal impacts to the aquatic environment. Structures and floats in navigable waters are considered Category 2 projects. Screenings are held at USACE every three weeks, or as necessary. After interagency review, applicants are notified in writing that their projects are either authorized, authorized with special conditions, or that individual permit review is required.
MA	PGP expires January 20, 2010. Small docks and piers are considered Category 1 activities and require no notification to USACE, but USACE is notified of application when applicant fulfills state public notice requirements. Applicants sometimes provide structure plans to USACE to ensure Category 1 standards have been met. For non-Category 1 activities, state applications are screened at a bimonthly interagency meeting between USACE, USFWS, USEPA, NMFS, and the state CZM Office. After screening, the committee either grants written authorization to proceed or requires individual permit review.
NH	PGP expires June 2, 2007. Projects with impacts up to three acres may be considered under the PGP. Projects permitted by DES as "minimum impact" may proceed without authorization from USACE. Projects permitted as "minor impact" may proceed 30 days after DES permitting unless applicant receives notification from USACE stating otherwise. Projects permitted as "major impact" must await authorization from USACE, which is issued within 30 days of DES permit. In NH, any project in tidal area is considered "major impact." USACE and other relevant federal agencies meet weekly, if practicable, to review all projects approved by DES. If concerns exist, USACE may request more information, require modification to the proposal, or require individual permit.
RI	PGP expires February 11, 2007. Category 1 projects require no authorization or review by USACE. Category 2 projects must undergo interagency screening at monthly meetings between USACE, USFWS, EPA, NMFS, DEM, and CRMC. If any agency expresses concern within their area of expertise, projects require an individual USACE permit. For Category 1 and 2 activities, applicants apply to the appropriate state resource agencies only, and those agencies will incorporate the USACE PGP authorization into their permits.

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Table 3: Permitting Framework and Process

State	Management Framework	Summary of Permitting Process	Permit Applications Received	Permits Issued
CT	- Dock construction requires one of three permits. - Streamlined GP exists for docks meeting specific criteria. - Public notice and comment is not required for GP but is required for a full permit. - A streamlined permitting process exists for dock maintenance, modification, and authorization of unpermitted structures. - Applicants are encouraged to have a pre-application meeting with OLISP to discuss dock design and determine the appropriate permit process.	One of three permits is required: - GP for structures meeting stringent size and location requirements. Typically issued within three months. GP docks also called "4/40 docks." - SDF Permit for structures not meeting GP standards. Typically issued in 6-12 months. SDF process includes public notice and public comment period. - SDF/TW Permit for structures near tidal wetland vegetation. Typically issued in 6-12 months. SDF/TW process includes public notice and public comment period. Public hearing held if 25 people petition.	2003	
			172	162
			2004	
			177	159
ME	- Structures must meet all standards within the NRPA. Standards interpreted with scenic rules, and wetlands and waterbodies protection rules. - Structures in place less than seven months per year require no permit. - Maintenance or repair of less than 50% of structure requires no permit. - Replacement of structure is eligible for streamlined Permit by Rule. - Permitted docks greater than 500 sq. ft. require a submerged land lease from BPL.	- Applicant submits NRPA permit application to DEP, usually with copy to town. - DEP transmits copies of application to USACE, BPL, DMR and DIFW as appropriate. - DEP decision can be appealed within 30 days. - Successful applicants must begin construction within two years and should finish within five years. - NRPA permits do not have to be renewed.	2003	
			235	234
			2004	
			278	278
MA	- MA Colonial Ordinance distinguishes "Commonwealth Tidelands" from "Private Tidelands." Private tidelands are privately owned, but the public's right to fish, fowl, and navigate there is maintained. - Two permits typically required for dock construction. - All dock applications require public notice. - State wetlands permitting is typically handled by local Conservation Commissions. - State waterways licenses are granted for up to 30-year terms and give applicants permission to build structure and occupy state lands.	<u>Wetlands Program</u> Permits issued by local Conservation Commissions. See Falmouth information. DEP coordinates application process and decides on permit appeals. <u>Waterways Program</u> - Applicant submits application for Waterways Permit. A simplified procedure is available for structures meeting criteria. - After license is issued, applicants must record license against deed of property within 60 days. - Applicant must request Certificate of Compliance within 60 days of completion of project but no later than five years from license issuance. - Waterways licenses valid for up to 30 years. - Simplified renewal process is being developed.	2003	
			Not available	Not available
			2004	
			Not available	Not available

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Table 3: Permitting Framework and Process (continued)

State	Management Framework	Summary of Permitting Process	Permit Applications Received	Permits Issued
TOWN OF FALMOUTH	- Falmouth implements state DEP Wetlands Program regulations and town regulations. - Town regulations are generally more stringent than state regulations. - Public hearing held within 21 days of receipt of permit application. - Town permits must be renewed every three years. - No permit required for routine maintenance, or replacement of destroyed structure within two years.	- Applicant submits application called Notice of Intent requesting permit called Order of Conditions, which gives permission to build structure in accordance with standard conditions. - Conservation Commission issues public notice and holds public hearing within 21 days of receipt of Notice of Intent. - Successful applicants must file Certificate of Compliance within three years of permit issuance. - Three years after permit issuance, Conservation Commission assesses project for adverse impacts. If impacts are found, mitigation is required within one year. If impacts are not found, a simplified process for a five-year renewal is available.	2003	
			18	18
			2004	
			38	38
NH	- Tidal docks typically include three components: a fixed pier, ramp, and float. Ramps and floats must be removed seasonally. - Construction of docks and piers in tidal waters requires a state permit and written authorization from USACE. - Streamlined Permit by Notification exists for maintenance of above-water components. - Permits for dock construction expire after five years. - Public notice is not required, but all abutting property owners must be notified of application.	- Applicant notifies all abutters in writing. - Applicant submits original and four copies of Standard Dredge and Fill Application to city or town clerk. - City or town clerk forwards application to DES and copies to appropriate local bodies. Local bodies may issue comment to DES, and DES must address each comment in permit decision. - If authorized by DES, USACE and other federal agencies review and issue written decision within 30 days. - Applicant must file certificate of compliance with DES upon completion of project.	2003	
			20	20
			2004	
			11	11
RI	- CRMC Assent acts as permit. - CRMC Assent includes USACE authorization and is the only permit required for PGP Category 1 and 2 projects. - Most Assents expire after 50 years, although some are issued for shorter periods. - Minor repairs require a maintenance permit, design changes require Certification of Maintenance, and repair to 50% or more of structure requires new Assent.	- Applicants submit application for CRMC Assent. "Category A" applications generally meet standards but may include minor variances. "Category B" applications, which may include more significant variances, must include written request for variance. - CRMC issues public notice and takes comments for 30 days for all dock applications. Category B projects must also undergo full council review. - Successful applicants are issued a registration plate, which must be displayed on structure. - If construction is not begun within three years, applicant may apply for up to four 1-year extensions. - After 50 years, owners must apply for new Assent or remove dock.	2003	
			72	65
			2004	
			127	124

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Table 4: Environmental Concerns and Permit Enforcement

State	Environmental Impacts of Concern to State	Permit Enforcement
CT	- Visual impacts. - Direct, cumulative environmental impacts (e.g., impairment or destruction of tidal wetlands, intertidal flats, shellfish beds, and SAV). - Navigation. - Water quality impacts.	DEP has one staff member dedicated to permit enforcement, but all DEP permit analysts share enforcement duties. DEP sometimes works with municipal staff on enforcement. The public is also involved in enforcement and sometimes reports offenders. Permit analysts or municipal staff perform site inspections after the applicant files a start work notification. Field notice of violation and stop work advisories may be issued. After construction, applicant submits "as-built plans," which are compared to original plans submitted with permit application. Administrative orders for removal and remediation of violations may be issued. These orders include the right to an adjudicatory hearing. Fines can be levied only if violators enter into a consent order, or pursuant to litigation via the attorney general's office.
ME	DEP is equally concerned with all impacts addressed in the NRPA.	DEP has staff dedicated to enforcement. Abutters and other citizens can report concerns to designated "on-call" DEP staff. DEP attempts to check compliance of at least 50% of all permitted structures. Project managers initially check compliance after construction. Staff can then take formal action, such as consent agreements or litigation, against violators.
MA	<u>Wetlands Protection Program</u> - Water quality—from leaching, spillage, runoff, and turbidity. - Water circulation and sediments—from scouring, erosion, and sedimentation. - Disruption of growing areas and spawning habitat—for important vegetation (e.g., eelgrass) and shellfish beds. - Disruption of habitat or corridors of rare animal species and wildlife that depends on wetland habitat.	<u>Wetlands Program</u> Distributes enforcement duties among staff, but certain staff may undertake more enforcement than permitting or compliance according to program workload. <u>Waterways Program</u> One staff member focused on enforcement. DEP generally uses a deterrent model, selectively and strategically enforcing a limited number of high-profile violations every year. Enforcement decisions by DEP can be appealed by dock owners.
TOWN OF FALMOUTH	Impacts to shellfish habitats, water quality, and eelgrass habitat; erosion of coastal banks; damage to salt marshes and their overall productivity.	Manpower is limited. Conservation Commission rarely checks for unpermitted or noncompliant structures, but when these structures are found, commission issues an "enforcement order." A hearing is then held to determine the legal status of the dock. Fines are rarely used.
NH	Impacts to sand dunes, tidal marshes, eelgrass beds, wildlife habitats (e.g. nesting shore bird habitats), and fish spawning.	DES has dedicated enforcement staff members who occasionally perform field inspections. Most enforcement occurs after DES receives complaints from municipal bodies. DES may suspend, revoke, or modify permits, or may report irreversible unauthorized projects to attorney general's office.
RI	Impacts to wetlands, coastal habitat, eelgrass populations, and existing uses.	Two CRMC staff members make up enforcement team, which periodically checks for unpermitted structures. Citizens also assist in enforcement, reporting illegal structures and activities. CRMC may issue fines for violations: - Up to \$500 for unauthorized construction or activity on tidal waters, shoreline features, and adjoining areas - Up to \$250 for unauthorized activity elsewhere - Up to \$100 for unauthorized maintenance

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Table 5: Permit Specifications I

State	Property Restrictions	Dock Location	Maximum Dock Length	Maximum Walkway Width	Minimum Walkway Height	Maximum Square Footage
CT	One point of access per property. Docks should be centered along waterfronts.	GP docks cannot be located in areas of SAV or tidal wetlands. For other docks, when sensitive coastal resources (SAV, tidal wetlands, intertidal flats, shellfish areas) cannot be avoided, special guidelines apply.	GP docks cannot extend further than to a depth of -4 ft. mean low water or a distance of 40 ft. from mean high water, whichever is shortest. Other docks are generally limited to the length necessary to achieve reasonable access to navigable water.	GP docks cannot have any fixed pier component wider than 4 ft. All docks generally should not exceed 4 ft. in width.	5 ft. above ground at mean high water for lowest horizontal component of fixed pier. Otherwise, stairs or other accessway with appropriate signage is required to ensure pedestrian access to beach.	For GP docks, 220 sq. ft. waterward of mean high water. Floors should not exceed 100 sq. ft. unless larger size is justified. Shared docks are encouraged and can often be larger than individual docks.
ME	N/A	N/A	Permitted structures typically 50-150 ft., or the minimum length necessary to achieve intended use.	Permitted structures typically 4-6 ft. wide.	Permitted structures typically four times the height of existing emergent vegetation.	N/A
MA	<u>Wetlands Program</u> N/A <u>Waterways Program</u> Setback of 25 ft. from property lines where feasible.	<u>Wetlands Program</u> No residential docks and piers in Designated Port Areas. <u>Waterways Program</u> No residential docks and piers in state-designated Areas of Critical Environmental Concern, unless an approved resource management plan is in place.	<u>Wetlands Program</u> No longer than the distance necessary to reach navigable water depths. <u>Waterways Program</u> One-fourth width of the water body.	<u>Wetlands Program</u> Typical width is 3 ft. <u>Waterways Program</u> N/A	<u>Wetlands Program</u> N/A <u>Waterways Program</u> 5-ft. clearance between pier decking and high water mark, or alternative measures to ensure pedestrian access to beach.	N/A

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Table 5: Permit Specifications I (continued)

State	Property Restrictions	Dock Location	Maximum Dock Length	Maximum Walkway Width	Minimum Walkway Height	Maximum Square Footage
Town of Falmouth	Setback of 10 ft. from property lines or extended property boundaries into intertidal or tidal zone.	Docks cannot prohibit or unreasonably impede legitimate passage along a beach, or navigation over waters for recreational or aquacultural purposes. No new docks or piers in FEMA V-Zone (areas subject to flood waters with great velocity) unless applicant demonstrates public benefit from project.	100 ft. beyond mean high tide, or 100 ft. beyond the landward edge of a salt marsh if present.	Typical width is 4 ft.	N/A	Terminal "T" or "L" of a residential dock cannot exceed 100 sq. ft.
NH	One structure per property. Setback of 20 ft. from adjacent property lines and imaginary extensions, unless applicant produces written, notarized permission from affected neighbor.	N/A	100 ft. for permanent pier, and maximum of 150 ft. for entire structure.	4 ft. for permanent pier.	Height above maximum salt marsh elevation cannot be less than width of walkway for permanent pier.	400 sq. ft. for permanent pier. Typically, 90 sq. ft. for ramp. Float area depends on allowable slip count, which is determined by shoreline frontage.
RI	Residential structures must exist on applicant's property. Setback of 25 ft. from extension of abutting property lines, unless affected owners do not object, or dock is shared.	Docks and piers must be 50 ft. from approved mooring fields, and three times the USACE-authorized project depth from federal navigation projects.	Lesser of 25% of distance to opposite shore (from mean low water) or 50 ft. seaward of mean low water. Docks in coves cannot exceed 2/3 the length of the cove. Docks in eelgrass areas must provide for 5 ft. between top of float and eelgrass.	4 ft. for docks, floating docks, and piers.	Stringers must be at least 3.5 ft. above grade of coastal wetlands. Walkway must be 5 ft. above mean high water to provide for public access.	150 sq. ft. for terminal floats. 80 sq. ft. for fixed terminal "T" or "L" sections.

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Table 6: Permit Specifications II

State	Floats	Covered Areas and Storage Enclosures	Slip Allowance and Boat Hoists
CT	In intertidal flats and SAV areas, only fixed piers are recommended. If need for float is justified, floats are permissible if they include mechanisms to prevent resting on ground. Floats that rest on substrate are permissible in less sensitive areas.	Decks, gazebos and other structures unnecessary for boating access are not permitted waterward of the high tide line.	Slip allowance is based on structure use. Applicants should include berthing arrangements on plans included in the application package.
ME	Only temporary floats are usually permitted, but permanent slips are not prohibited.	New boathouses and other non-water-dependent uses are not permitted. Storage enclosures are permitted if water dependent.	Residential docks are usually permitted with temporary floats only, but permanent slips are not prohibited. Boat hoists not permitted.
MA	<u>Wetlands Program</u> Floats must be at least 1.5 ft. from bottom at low tide, 4 ft. from bottom at low tide if over eelgrass, and 2.5 ft. from bottom at low tide if over oyster beds. <u>Waterways Program</u> Temporary bottom-anchored moorings, floats, or rafts, and associated ramps, can be permitted annually by a municipal harbor master, provided the city or town has an approved local permitting program.	<u>Wetlands Program</u> N/A <u>Waterways Program</u> Boat houses and covered areas generally discouraged but not banned. Storage enclosures allowed within reasonable limits.	<u>Wetlands Program</u> N/A <u>Waterways Program</u> Facilities with ten or more berths are regulated as marinas.
TOWN OF FALMOUTH	Floats must be at least 3 ft. above bottom at extreme low water and be fixed with a hoop roller or other approved fastening system.	Covered areas permitted but must be included in original structure plan and be in compliance with all other structure design specifications and performance standards. Oil or fuel may not be stored on the dock or pier.	For individual docks, only a single boat at the terminus of the dock is permitted. More slips are allowed for common docks (for two or more contiguous eligible properties) and community docks (for loading/unloading and tying up dinghies).
NH	Floats are allowed but must be removed seasonally.	New boathouses over water are not permissible, but seasonal canopies over boat slips may be permitted. Permanent containers are not permitted.	Slip counts determined by water frontage of parcel. Two slips allowed for first 75 ft. of frontage, plus one slip for every additional 75 ft.
RI	New structures cannot have both a terminal float and a fixed terminal T or L section. Floats must be in minimum water depth of 18 in., typically cannot cover SAV, and cannot rest on bottom.	Structures ancillary to residential boating facilities are prohibited.	Up to four recreational vessels permitted. Two boat lifts per dock permitted in specific water types only.

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Table 7: Permit Specifications III

State	Planning Requirements	Maintenance and Reconstruction	Fees
CT	Projects must be consistent with any approved local Harbor Management Plan. If shellfish lease areas exist near the project, applicant must include names and addresses of those lease holders with application. Significant impacts to shellfish, interstate ramifications, or required approval from state siting council or FERC trigger pre-construction adjudication, including a public hearing and cross-examination.	COPs may be issued for substantial maintenance or repair of existing permitted structures, and authorization, maintenance or repair of unpermitted structures built before January 1, 1980. COP decisions typically issued within 90 days. Replacement of decking and replacement of up to 25% of piles in any given year does not require COP.	- General Permit: \$700 - SDF or SDF/TW Permit: \$525 plus \$0.80 for each sq. ft. over 650 sq. ft. - COP: \$400
ME	N/A	Streamlined Permit by Rule available for replacement of structures.	NRPA permit: \$364 Submerged Land Lease (if required): \$100, plus annual rental fee determined by legislature.
MA	<u>Wetlands Program</u> N/A <u>Waterways Program</u> Projects must conform with applicable zoning and Municipal Harbor Plans.	<u>Wetlands Program</u> N/A <u>Waterways Program</u> Routine maintenance and repair of licensed structures is required. This includes replacement of structure components with materials of the same size and quality, restoration of structures within two years of catastrophic events, and demolition and removal of unused structures.	<u>Wetlands Program</u> Included in local Conservation Commission application fees. <u>Waterways Program</u> - Application fee: \$65 - Occupation fee: \$2/square yard/year of license - License Renewal fee: \$30 Application fees refunded if DEP fails to respond within required time frames.

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Table 7: Permit Specifications III (continued)

State	Planning Requirements	Maintenance and Reconstruction	Fees
TOWN OF FALMOUTH	For community and common docks, applicants must demonstrate that the dock will remain as such for the life of the structure.	Normal maintenance and repair is allowed without notification, but any change to the original structure plan requires a modification to the permit. Destroyed docks can be reconstructed if owner can provide evidence to Conservation Commission that dock was previously there.	Application fee: \$225 Advertising fee (for public notice): \$16.00 Conservation Commission also has right to charge Consultant Fee during deliberations.
NH	Applicants must notify all abutting property owners in writing prior to submitting application.	Repairs to above-water components that do not change size, configuration, or location of structure require no permit. Repairs to components below the waterline that do not change size, configuration, or location of structure require Permit by Notification.	SDF Permit application fee: \$100 plus: \$1/sq. ft. of permanent dock area \$.50/sq. ft. of ramp and float area \$.10/sq. ft. of jurisdictional lands impacted (excluding structure area) Permit by Notification: \$100.00
RI	All state waters are zoned into 1 of 6 types based on adjacent land use, upland zoning, habitat types, and ecosystem analysis. Docks and piers are not allowed in Type 1 waters, which are designated as conservation areas.	Minor repairs require maintenance permit. Alterations to approved design of structure, expansion of facility, and work requiring heavy machinery require Certification of Maintenance. Repairs to 50% or more of structure require new Assent. Owners must remove structures or portions of structures that are destroyed in any natural or man-induced manner in Type 1 waters. CRMC also requires global positioning system coordinates for maintenance and new structures.	CRMC Assent: \$500 CRMC Certification of Maintenance: \$250 CRMC Maintenance Permit: \$50

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In addition to numerous interviews and correspondences with state, local, and federal managers, the resources below were used in developing this document. All provided links were active at the time of publication, but site content at the links may change, or the links may become inactive at any time.

Table 8: Resources

State	Reference
CT	CT DEP. 2002. <i>Connecticut's Coastal Permit Program: Residential Dock Guidelines</i> . Hartford, CT. September.
ME	Natural Resources Protection Act (M.R.S.A. Section 480). Available on-line at http://janus.state.me.us/legis/statutes/38/title38ch3sec0.html
MA	Commonwealth of Massachusetts Regulations (CMR), Sections 9.00, Waterways, and 10.00, Wetlands Protection. Partially available on-line at www.lawlib.state.ma.us/300-399cmr.html
	MA DEP, Bureau of Resource Protection, Wetlands/Waterways Program. 2003. <i>Small Docks and Piers: A Guide to Permitting Small, Pile-Supported Docks and Piers</i> . Boston, MA. November. Available on-line at www.mass.gov/dep/water/resources/smaldock.pdf
TOWN OF FALMOUTH	Falmouth Wetland Regulations (FWR) 10.00, Wetlands Protection. Available on-line at www.buzzardsbay.org/falmregs.htm
	Falmouth Wetland Bylaw (FWB), Code of Falmouth Chapter 235. Available on-line at http://www.town.falmouth.ma.us/depart.php?depkey=ConCom
NH	NH DES, Wetlands Bureau. Undated. Environmental Fact Sheet WD-WB-4: Identifying Department of Environmental Services' Wetlands Jurisdictional Areas. Concord, NH. Available on-line at www.des.state.nh.us/factsheets/wetlands/wb-4.htm
	NH DES, Wetlands Bureau. 2003. Environmental Fact Sheet WD-WB-15: Permitting of Tidal Docks. Concord, NH. Available on-line at www.des.state.nh.us/factsheets/wetlands/wb-15.htm
	New Hampshire Code of Administrative Rules, Chapters 100-800. Available on-line at www.des.state.nh.us/rules/wt100-800.pdf
RI	Coastal Resources Management Program, Sections 100-300. Available on-line at www.crmc.ri.gov/regulations/index.html
	RI CRMC. 2004. State of Rhode Island Coastal Resources Management Council Management Procedures. Wakefield, RI. February. Available on-line at www.crmc.ri.gov/regulations/programs/manageproc.pdf

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About the NOAA Coastal Services Center

Guiding the conservation and management of the nation's coastal resources is a primary function of the federal government's National Oceanic and Atmospheric Administration (NOAA). This goal is accomplished through a variety of mechanisms, including collaboration with state coastal management programs.

The Coastal Services Center is a division of NOAA located in Charleston, South Carolina. The Center supports coastal resource managers by facilitating access to and utilization of the most up-to-date technology, information, and management strategies available in the field of coastal resource management.

NOAA Coastal Services Center
2234 South Hobson Avenue
Charleston, SC 29405-2413
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Zac Hart, Coastal Management Specialist
(843) 740-1175
Zac.Hart@noaa.gov