

Section 300.4

Recreational Boating Facilities

A. Definitions

Recreational boating facilities include marinas, launching ramps, residential and limited recreational boating facilities, recreational wharves, piers and slips, floats or floating docks, and recreational mooring areas.

1. Marina: any dock, pier, wharf, float, floating business, or combination of such facilities that accommodate five or more recreational boats.
2. Launching Ramp: a manmade or natural facility used for the launching and retrieval of boats.
3. Residential Boating Facility: a dock, pier, wharf, or float, or combination of such facilities, contiguous to a private residence, condominium, cooperative or other home owners association properties that may accommodate up to four (4) boats.
 - (a) fixed terminal section: the seaward-most section of a residential boating facility which is configured as a T-section or L-section that provides access between a fixed dock and a vessel.
4. Limited recreational boating facilities: a pier, dock ramp or float, or combination of such facilities constructed in accordance with the standards for residential boating facilities herein, which provide low intensity boating activities associated with land uses zoned by the local municipality as institutional or open space (or an appropriate sub-district of institutional or open space zoning) and may accommodate up to four (4) boats.
5. Recreational Mooring Area: any designated area managed by a commercial enterprise, a club, city, or town where five (5) or more recreational craft are kept at moorings.
6. Terminal Float: refers to the floating dock or docks that are typically at the seaward terminus of a residential boating facility to which the berthed vessels are typically affixed and from which the vessels are boarded or berthed. Terminal floats are typically accessed from a ramp leading from a fixed pier. Four foot wide floats that are used to provide perpendicular access to the berthing area in lieu of the utilization of a fixed pier are defined as access floats, not terminal floats. Additional floats, not at the seaward end and not used primarily for access, shall be considered a terminal float.
7. Limited Marina: Any facility marina intended for use by recreational vessels with a boat count between five (5) and twenty five (25).
8. Destination Harbor: A destination harbor is one in which the primary use is by people arriving by vessel. The following are considered destination harbors: Newport Harbor and Old / New Harbor in Block Island.
9. Alteration: an alteration of a marina is any activity that results in changes to the existing or previously approved recreational boating facility design. Such activities include but are not limited to the removal, addition, or relocation of piles, floating docks or fixed piers and changes to the Marina Perimeter Limit.
10. Significant Expansion: any expansion greater than 25 % of existing or previously authorized boat capacity, or an expansion of fifty (50) or more vessels.
11. Property Line Extension (PLE): projections of property lines used to demarcate the sideways bounds of a tidal water area adjacent to property on which a marina or residential dock is proposed to be sited. The PLE's are used in the application process as a tool to assess dock siting and are not to be construed as conveying any rights or privileges to an applicant or property nor as a determination of riparian rights.
12. Public Trust Resources (PTR): are defined as the tangible physical, biological matter substance or systems, habitat or ecosystem contained on, in or beneath the tidal waters of the state, and also include

intangible rights to use, access, or traverse tidal waters for traditional and evolving uses including but not limited to recreation, commerce, navigation and fishing.

13. Environmental Site Conditions: all elements, environmental, engineering and geologic that affect a particular location. These items shall primarily include, fetch, wave conditions, wind conditions, bathymetry, currents, soil bearing capacity, ice impacts, tide range, flood elevation, velocity zone, littoral conditions, erosion/accretion characteristics, presence of wetlands, sub-aquatic vegetation, marine resources and associated habitats. Other site specific conditions may be required for review.

14. Transient Berthing: Berthing for less than thirty days (30) by a vessel that is typically kept at another location. Transient vessels and slips for transient vessels shall be considered part of the overall boat count allowed. Touch and Go facilities shall limit berthing to a maximum of forty eight (48) hours.

15. Outhaul: Defined as a non-single-point anchoring device, for the purpose of securing a boat in tidal waters and retrieving it from shore.

16. Boat / Vessel Count: Any space where a vessel may be docked or stored by wet slip, float, mooring or other device. Dry Stack vessels will receive a separate boat count. Dinghies, canoes, kayaks and other small tenders (12' or less) to vessels shall not be included in the boat count.

17. Swim Float: Any float that is 150 square feet or less, bottom anchored and approved by the CRMC and local harbormaster on a seasonal basis (May 15 – October 15) that does not have vessels attached.

18. Marina Perimeter Limit (MPL): a defined perimeter based on in-water facilities which defines and limits the area for structures to be located.

19. Functional Residential Boating Facility: A facility shall be considered functional if it has been in continuous uninterrupted use.

20. Marine railways: sometimes referred to as slipways, marine railways are mechanical means for: the lifting of a vessel out of the water to an elevation above the highest tides; or, for the launching of a vessel into the water. It is a system of cradles or carriages that are lowered into or raised from the water along an inclined track on a system of rollers or wheels.

B. Policies

1. This section of the Rhode Island Coastal Resource Management Plan is intended to help applicants understand the process and requirements necessary to prepare and file a complete application as well as providing a guide for the review of applications.

2. R.I.G.L. § 46-23-6 (9) states “recreational boating facilities including marinas, launching ramps, and recreational mooring areas, as defined by and properly permitted by the Council, are deemed to be one of the uses consistent with the public trust.”

3. The Council recognizes that the United States Coast Guard has primary authority over navigational aids and marine boating safety, and that these responsibilities are complemented by the Department of Environmental Management, local harbormasters, and public boating service organizations such as the Coast Guard Auxiliary.

4. The Council requires municipalities preparing to implement harbor management plans and/or programs relating to activities in tidal waters to apply for a determination of consistency with the Coastal Resources Management Program to assure conformance between such plans and/or programs and the Coastal Resources Management Program, the Guidelines for the Development of Municipal Harbor Management Plans and the General Laws of the State of Rhode Island (see Section 300.15 – Municipal Harbor Regulations).

5. All persons proposing condominium, dockominium, or other forms of ownership or operation of recreational boating facilities involving multiple, cooperative, condominium or fee simple interests in ownership or operation shall submit a prospectus of such proposals to the CRMC for review of

consistency with the state of Rhode Island's public trust responsibilities, R.I.G.L. Chapter 46-23, and the Rhode Island Coastal Resources Management Program.

6. Repair or reconstruction of all residential structures that are physically destroyed 50% or more by wind, storm surge, waves or other coastal processes shall require a new Council Assent. Such activities requiring a new Council Assent shall be reviewed according to the most current applicable programmatic requirements of the Coastal Resources Management Program, its Special Area Management Plans, and/or any other appropriate CRMC-approved management plan. All replacement structures shall be designed and constructed to meet current structural and environmental design conditions shown in Table 3 – Minimum Design Criteria. For marinas see Section 300.14 - Maintenance of Structures.

TABLE 1

Existing Residential and Limited Recreational Boating Facility
Modification Request for Permitted Structures

Dock Condition	Application Type
1) Functional Dock to be replaced in its entirety	Maintenance
2) Functional Dock to replaced in its entirety in Type 1 Waters	Maintenance
a) Functional Dock destroyed (>50%) by storm or natural Hazard in Type 1 Waters	Cannot be Replaced or Special Exception
3) Existing Dock field assessed by CRMC Staff as >50% destroyed in Type 1 Waters	Cannot be Replaced or Special Exception
4) Functional Dock, destroyed (>50%) in a storm/natural hazard	New
5) Dock, not functional, field assessed as >50% destroyed	New
6) Functional Dock, to be replaced in its entirety	Refer to Section 300.14
a) dock, not in compliance at time of permit	Refer to Section 300.14
7) Adding to existing Dock	
a) Existing dock does not need to be brought into compliance, proposed addition must meet current regulations	Modification
b) Addition is over 50% of length or width of dock	New

In the Event of Catastrophic Storms, Section 180 Emergency Assents of the RICRMP may apply to the above table at the discretion of the Executive Director.

7. Outhauls are subject to the regulatory jurisdiction of the Council. The Council may authorize a municipality to administer an annual permit for such provided said municipality has a Council approved and active harbor management plan and ordinance which contains the following:

- a. municipal documentation that demonstrates that
 - i. except as provided below, an outhaul(s) is/are to be permitted to the contiguous waterfront property owner; and,
 - ii. up to two (2) outhauls may be allowed per waterfront property; and,
 - iii. outhauls are not permitted on properties which contain a recreational boating facility; and,
 - iv. procedures have been adopted to ensure that permits are issued only consistent with the RICRMP, including the provisions of 300.18; and,
 - v. their procedures acknowledge that the CRMC retains the authority to revoke any permits issued by the municipality if it finds that such permit conflicts with the RICRMP; and,
 - vi. from November 15 to April 15, when a boat is not being secured by the device on an annual basis, the outhaul cabling system shall be removed; and,
 - vii. outhauls may be "grandfathered" in their current location upon annual harbormaster documentation that such outhauls have been in continuous use at such location since 2004,

and, the contiguous property owner(s) agree in writing to such, however, such “grandfathering” is extinguished whenever a recreational boating facility is approved at the location.

B.1 Marina Policies

(a) The Council encourages marinas to utilize techniques that make the most efficient use of space and increased demands for moorage, dockage, and storage space by primarily utilizing dry stack storage in addition to innovative slip and mooring configurations, etc.

(b) All new and significantly expanded marinas shall first submit a Preliminary Determination (PD) application to the CRMC for a conceptual evaluation of the proposed project. The Preliminary Determination shall include an alternatives analysis to evaluate that the use of the Public Trust Resources proposed are the most efficient and protective of the environment. In assessing a proposed marina facility, the Council shall require a Preliminary Determination / Alternatives Analysis that details the following:

- (1) the appropriateness of the facility given the activities potential to impact Rhode Island's coastal resources;
- (2) the appropriateness of the structure given environmental site conditions;
- (3) the potential impacts of the structure and use of the facility on public trust resources (e.g., fin fish, shellfish, submerged aquatic vegetation, benthic habitat, commerce, navigation, recreation, natural resources, and other uses of the submerged lands, etc.);
- (4) the potential navigation impacts of the structure and associated use of the structure;
- (5) the potential aesthetic and scenic impacts associated with the structure;
- (6) the cumulative impacts associated with the increased density of existing recreational boating facilities in the vicinity of the proposed project. In considering these factors, the Council shall weigh the benefits of the proposed activity against its potential impacts while ensuring that it does not cause an adverse impact on other existing uses of Rhode Island's public trust resources;
- (7) the potential impacts to other recreational or commercial uses of the affected resource;
- (8) the extent to which any disruption of the public use of such lands is temporary or permanent;
- (9) the extent to which the public at large would benefit from the activity or project and the extent to which it would suffer detriment; and
- (10) the extent to which structures that extend over submerged lands are dependent upon water access for their primary purpose.

The primary objective of the PD shall be to document all efforts to avoid adverse impacts and to minimize and offset unavoidable adverse impacts to aquatic and terrestrial resources. Such documentation shall be in the form of an objective analysis of alternatives that satisfies the above review criteria and provides an evaluation of practicable alternate sites and/or designs. The applicant shall be required to attend a meeting with the CRMC staff to review the results of the Preliminary Determination.

(c) It is the policy of the Council that the applicant demonstrates through measurable standards referred to herein that the marina expansion cannot be accomplished within the existing Marina Perimeter Limit through utilization of more efficient configurations.

(d) The Council shall require persons proposing to construct new marina facilities or proposing to expand existing marina facilities to undertake measures that mitigate the adverse impacts to water quality associated with the proposed activity. Applicants shall apply for a Water Quality Certificate from the RI

Department of Environmental Management and Army Corps of Engineers Permit, concurrent with their application to CRMC.

(e) The construction of marinas, docks, piers, floats and other recreational boating facilities located on tidal lands or waters constitutes a use of Rhode Island's public trust resources. Due to the CRMC's legislative mandate to manage Rhode Island's public trust resources for this and subsequent generations, the Council must assess all proposed uses of public trust lands or waters on a case-by-case basis, examine reasonable alternatives to the proposed activity, and ensure that the public's interests in the public trust resources are protected.

(f) It is the Council's policy that new or significant marina expansions must demonstrate: 1) there is no alternative within the current in-water perimeter that would accommodate the expansion; 2) the area requested is the minimum necessary; and 3) the request avoids or minimizes impact to the aquatic environment and traditional uses in the area.

(g) The Council encourages all recreational boating facilities to provide an opportunity for a variety of boat sizes and types so as to provide access for the widest segment of the public to the Public Trust Resources.

(h) It is the Council's policy to require a public access plan or an enhancement to existing access, in accordance with Section 335 – Protection & Enhancement of Public Access to the Shore, as part of any application for a new marina, or for a significant expansion to any existing marina. In accordance with Section 120, a variance from this policy may be granted if an applicant can demonstrate that no significant adverse public access impacts will occur as a result of the project. The public access plan must detail the vehicle parking that will be provided to support the proposed public access. All boating facilities shall be designed and constructed in a manner which does not impede or detract from and whenever practicable promote public access along and to the shore.

B.2 Residential and Limited Recreational Boating Facility Policies

(a) All residential and limited recreational boating facilities are required to be registered by and with the Council and have posted on them a registration plate and number issued by the Council. Applicants for residential boating facilities are referred to the Council's Pre-existing Residential Boating Facilities Program for additional detailed standards of this policy and program.

(b) In order to limit the cumulative impacts of multiple individual residential and limited recreational boating facilities, the Council encourages the construction of facilities that service a number of users. It is the policy of the Council to manage the siting and construction of recreational and limited recreational boating facilities within the public tidal waters of the state to prevent congestion, and with due regard for the capability of coastal areas to support boating and the degree of compatibility with other existing uses of the state's waters and ecological considerations.

(c) All recreational and limited recreational boating facilities shall be designed and constructed to adequately withstand appropriate environmental conditions present at the site and to minimize impacts to existing resources.

(d) All residential boating facilities (reference Section 300.4.A.3) shall be contiguous to a private residence, condominium, cooperative or other home owner's association property and shall not accommodate more than four (4) boats.

(e) All limited recreational boating facilities (reference Section 300.4.A.4) must be contiguous to property zoned by the local municipality as institutional or open space (or an appropriate sub-district of institutional or open space zoning) and shall not accommodate more than four (4) boats.

(f) It is the Council's policy to authorize only one (1) residential or limited recreational boating facility (reference Sections 300.4.A.3 and 300.4.A.4, respectively) per lot of record as of (effective date of rule) to minimize user conflicts and cumulative impacts in tidal waters.

(g) Assents for limited recreational boating facilities (reference Section 300.4.A.4) remain valid provided the local parcel zoning remains unchanged from the time of the Assent. Modification of the local zoning designation to a category other than open space or institutional or their appropriate sub-district categories automatically nullifies the CRMC Assent.

C. Prerequisites

1. All new or significantly expanded recreational and limited recreational boating facilities shall be within the property line extensions of the proposed facility or have a signed agreement with the adjacent land owner(s) whose property line extension area is impacted. All structures shall be a minimum of twenty five (25) feet from the property line extension. Otherwise the applicant shall have a letter of no objection from the adjacent property owner stating that the reduced setback is acceptable. This letter and variance request shall be provided with the application.

C.1 Marina Prerequisites

(a) Persons proposing to establish a new marina or significantly expand a marina shall prepare and submit a Preliminary Determination application prior to submitting a Category B application.

(1) If in the opinion of the Council or Executive Director the proposed marina or significant expansion is not utilizing the public trust in accordance with this Section the applicant may be required to prepare alternative layouts that meet the standards of Section 300.4.

(2) The Preliminary Determination for new or significant expansions of marinas must assess the impacts of all the Environmental Site Conditions and the Planning / Design Requirements below:

(i) All designs that include water-based vessel storage are encouraged to explore both wet and dry storage alternatives

(ii) Persons proposing to establish a new marina or significantly expand an existing marina will be required to concurrently obtain a permit from the Army Corps of Engineers as well as a Water Quality Certificate from the RI DEM.

(iii) Persons proposing to establish a recreational mooring area are required to concurrently obtain a permit from the Army Corps of Engineers.

(iv) An application for a Council Assent for a marina and/or mooring area will shall include a map prepared and stamped by a professional land surveyor that designates the area of tidal water that will be incorporated within the marina by State Plane Coordinates (NAD83) and described by metes and bounds. All structural elements and components shall be designed and stamped by a professional engineer.

C.2 Residential and Limited Recreational Boating Facility Prerequisites

(a) All applications for residential and limited recreational boating facilities shall be initially reviewed by the Executive Director or the Deputy Director. The Executive Director or the Deputy Director may refer any such application to the Council for a hearing if based upon the application on its face a determination is made that the proposed activity warrants a Council hearing.

(b) The Executive Director or the Deputy Director shall, based upon the application and staff reports, make a determination that the application meets all the criteria as set out in Section 300.4.E.3 Standards for Residential and Limited Recreational Docks, Piers and Floats and any other applicable Council policy or procedures. If a determination is made that all the above criteria are met, the application shall be processed as a Category A application.

(c) If a determination is made that all of the above criteria are not met for a residential or limited recreational boating facility then the matter shall be referred to Council as a Category B application.

(d) The Executive Director or the Deputy Director shall have the authority to consider and act upon variance requests to certain standards of this section pertaining to residential and limited recreational boating facilities and shall utilize the criteria and requirements of Section 120 of this program in its evaluation of variance requests.

(e) Variance requests to other standards of this section or to other appropriate and relevant sections of the CRMP must be made to the full Council. Variances shall not be considered by the Executive Director or the Deputy Director if there is a substantive objection, in accordance with Section 110, to the application.

(f) Variances may be granted to all of the standards contained in Section 300.4.E.3 Standards for Residential and Limited Recreational Docks, Piers and Floats and Section 200.2.C.3 (Type 2 – Low Intensity Use) provided engineering, biological and other appropriate concerns have been addressed except for the following:

- (1) the Executive Director or the Deputy Director may not grant a variance to Section 300.4.E.3.k;
- (2) the Executive Director or the Deputy Director may only grant a variance to within eighteen (18) inches of the marsh grade standard (Section 300.4.E.3.g) provided engineering, biological, and other appropriate concerns are met; and
- (3) the Executive Director or the Deputy Director may only grant a variance for the extension of a recreational or limited recreational boating facility out to 75 feet beyond MLW or up to a 50% increase beyond the fifty (50) foot standard (Section 300.4.E.3.l) provided engineering, biological, and other appropriate concerns are met.

D. Prohibitions

1. The building of new marinas in Type 1 and 2 waters is prohibited.

2. The building of residential and limited recreational boating facilities in Type 1 waters is prohibited. This prohibition shall not apply to functional structures previously assented by the Rhode Island Department of Harbors and Rivers, the Army Corps of Engineers, or the CRMC. Additionally, in those instances where an applicant cannot produce a previous assent but can demonstrate by clear and convincing evidence that a residential dock in Type 1 Waters pre-existed and has been continuously functional prior to the formation of the Council, the Council may grant a permit issued in accordance with the CRMC's Pre-existing Residential Boating Facilities Program. Any assent granted pursuant to this section shall be recorded in the land evidence records and is transferable to a subsequent owner or purchaser of the subject property, provided however, that all assent conditions are adhered to and the dock is removed at the termination of assent.

3. The unloading of catches by commercial fishing vessels at residential and limited recreational boating facilities is prohibited.

4. The building of structures in addition to the piles/ pile cap / stringer / deck / handrail on a residential or limited recreational boating facility, including but not limited to gazebos, launching ramps, wave fences, boat houses, and storage sheds, is prohibited. However, the construction of boat lifts may be allowed in Type 3, 5, and 6 waters, and in Type 2 waters in accordance with the provisions of Section 300.16 - Boat Lift and Float Lift Systems.

5. Rhode Island is an EPA designated a No Discharge State; all vessel discharges within State Waters are prohibited.

6. In Type 2 waters, the building of private launching ramps that propose to alter a coastal feature are prohibited, except along manmade shorelines. Where a coastal wetland fronts a manmade shoreline, the

building of private launching ramps shall be prohibited. This prohibition does not apply to marinas with Council-approved marina perimeters (MPL).

7. New residential or limited recreational boating facilities are prohibited from having both a fixed T section or L-section, and a float.
8. Terminal Floats at residential and limited recreational docks in excess of 200 square feet are prohibited.
9. Marine railway systems are prohibited except in association with: a marina; or, a commercial or industrial water dependent activity in type 3, 5 and 6 waters.
10. The installation or use of more than one (1) residential or limited recreational boating facility (reference Sections 300.4.A.3 and 300.4.A.4, respectively) per lot of record as of (effective date of rule) is prohibited.

E. Standards

1. All new or significantly expanded recreational boating facilities shall be located on site plans that clearly show the Mean Low Water (MLW) and Mean High Water Elevation (MHW) contours. The MLW shall be determined utilizing the “Short Term Tide Measurement” method. The Executive Director shall have the discretion to require a more accurate method of MLW determination when utilizing the Short Term Tide Measurement method will not provide accurate results. Guidance for the Short Term Tide Measurement is available from the CRMC.

At the discretion of the Executive Director, a previously established tidal determination may be utilized if the areas have similar tidal characteristics.

2. All new marinas, docks, piers, bulkheads or any other structure proposed in tidal waters shall be designed and certified (stamped) by a Registered Professional Engineer licensed in the State of Rhode Island.
3. All structural elements shall be designed in accordance with Minimum Design Criteria or the Minimum Design Loads for Buildings and Other Structures, current Edition published by the American Society of Civil Engineers (ASCE) or the RI State Building Code as applicable.
4. All new or significantly expanded recreational boating facility shall comply with the policies and prohibitions of Section 300.18 – Submerged Aquatic Vegetation and Aquatic Habitats of Particular Concern.

E.1 Marina Standards

(a) All new or significantly expanded marina designs shall be in accordance with Table 3- Minimum Design Criteria, but in no case shall any structural member be designed to withstand less than 100 year storm frequency, including breaking wave conditions in accordance with ASCE 7 (current edition) and FEMA Manual 55. All design elements including the bathymetry shall be stamped by a Rhode Island registered Rhode Island Professional Engineer. Any reconstruction of an existing marina destroyed by a catastrophic event shall have the piles and float restraint systems designed to meet the 100 year storm frequency, while other elements shall meet the requirements for a 50 year storm at a minimum.

(b) New Marinas or any significant expansion of an existing marina shall first submit a Preliminary Determination Request. The Executive Director may waive this requirement for Limited Marinas when there is minimal expected impact to the resources and no known use conflicts.

- (1) In order to minimize the impact of the significant expansion within tidal waters, the preferred mode of expansion shall be Dry-Stack marina, on the applicant’s property or in areas controlled by the applicant, when consistent with local ordinances.

(2) As part of the requirements under Section 300.1 – Category B Requirements, the applicant shall state the basis for the number of wet slips requested.

(c) In evaluating the facility proposal, the applicant must demonstrate that:

(1) potential impacts have been or can be avoided to the maximum extent practicable when considering existing technology, infrastructure, logistics, and costs in light of approved project purposes; and

(2) impacts have been or can be minimized to an extent practicable and appropriate to the scope and degree of those environmental impacts; and

(3) any unavoidable impacts to aquatic and terrestrial resources have been or will be mitigated to an extent that is practicable and appropriate.

(d) The density of in-water vessels shall be greater than thirty (30) vessels per acre (except in destination harbors) within the MPL. If vessel density is less than the limit, reduction of the MPL will be required.

(e) Dockage for dry stack vessel loading and temporary storage shall be excluded from the marina density calculations, provided only dry stack vessels and vessels awaiting pump out utilize the area. There shall be no permanent or transient use of the docks used for dry stack vessels or pumpouts.

(f) Marina layout and geometry shall utilize existing bathymetry to the greatest extent possible. The layout shall provide for similar size vessels located such that fairway widths can be minimized in areas of smaller vessels. Fairways shall be a minimum of 1.5-times the length of the average vessel length utilizing the fairway.

(g) The maximum length of any contiguous dock, both fixed and floating shall be one thousand (1,000) feet for all new or expanded marinas.

(h) Sufficient sanitary facilities shall be provided to service the patrons of the marina, in accordance with Table 2 - Minimum Required Sanitary Facilities. The maximum distance from sanitary facilities for any slip shall be within a one thousand (1,000) foot radius from the facilities. This may require more than one sanitary facility location. Portable toilets may be considered sufficient for limited marinas.

Marinas with more than two hundred (200) vessels with an average length in excess of thirty eight (38) feet may be eligible for a reduction in the minimum number of facilities at the discretion of the Executive Director with an acceptable pump out plan.

Table 2

Minimum Required Sanitary Facilities

Number of Vessels	Toilets	Urinals	Pump Out locations
5 - 25	2	1	1
26-100	3	1	1
101-200	4	2	2
201-250	5	2	3
251-300	6	2	3

(i) Marina Owners shall submit documentation of compliance with the State of Rhode Island's requirements of National Fire Protection Association (NFPA) 303 Standard for Marinas and Boatyards from the local or State Fire Official, where appropriate.

(j) All electrical installations shall be designed and installed in accordance with the requirements of the NFPA, State Building and Electrical code. The Operations & Maintenance plan shall certify that all applicable codes have been met.

(k) Sufficient parking shall be provided for the patrons of the marina. A standard of three hundred (300) square feet is required for each parking space; the minimum requirements for the total number of parking spaces provided is one (1) space for each one and one half (1.5) vessel. If parking for dry stack vessels is in the rack space, no additional parking is required. On grade Parking for dry stack shall be at one space for five (5) vessels. Parking for new or expanded marinas in destination harbors shall be one (1) space for every twenty five (25) vessels of new or expanded slips.

(l) A Council Assent for a marina permits the marina operator to undertake minor repairs and alterations of approved facilities without further review, where such repairs or activities will not alter the assented design, capacity, purpose or use of the marina. For the purposes of this section, the assented design, capacity, purpose or use of the marina shall be those characteristics associated with the physical configuration or construction, numbers and sizes of vessels accommodated at in-water facilities, and nature of operation as defined in the original Council Assent, respectively. Minor repairs and alterations to in-water facilities shall include repair or replacement of dock decking or planks, replacing pilings, extensions of slips and/or finger piers within the perimeter and capacity of the marina as defined within the original Assent, or as established in paragraph (n) of this section, and other activities of a similar and non-substantial nature. Minor repairs and alterations to upland facilities may take place upon Council approval of an operations and maintenance plan as identified below at (p) and shall include grading of parking and launch ramp areas, grouting of seawalls, plumbing and electrical work, maintenance of sidewalks, fences and walkways, flagpole installations, landscaping, signage and other activities of a similar and non-substantial nature. Minor repairs and alterations shall not be construed to include maintenance dredging, alterations, repairs or expansion of shoreline protection facilities, bulkheads, or breakwaters or other activities subject to review under other relevant sections of this program. All minor repairs and alterations shall take place within the assented design of the marina, or marina perimeter as defined in the original Council Assent or as established in accordance with paragraph (n) of this section. Any repair or replacement of floats for existing marinas shall meet current float design standards.

(m) In those instances where the minor repair or alteration would require the use of heavy machinery (such as a pile driver or grader), the Council shall be notified in writing at least ten (10) working days prior to undertaking the work. Notice of repair activities requiring the use of heavy machinery shall include the following:

- (1) A statement that the notice is given pursuant to Section 300.4.E.1.m;
- (2) A description of the proposed repair or alteration to be performed including a statement as to the size and type of materials to be used;
- (3) A copy of the original Council Assent or Division of Harbors and Rivers permit under which the proposed repair or alteration is to be performed;
- (4) A copy of the site plan from the original Council Assent showing the location of the proposed repair or alteration;
- (5) The name of the person on-site responsible for supervising the proposed repair or alteration; and
- (6) The anticipated dates on which the proposed repair or alteration shall commence and be completed.

(n) All marinas and/or mooring areas shall have a defined perimeter for in-water facilities, which shall describe and limit that area in which the repair or alteration activities described in paragraphs (l), (m) and (o) may take place. Operators of marinas may apply to the Council for definition and establishment of this perimeter at any time. Perimeters shall be defined on the basis of in-water facilities in place as of September 30, 1971, or subsequently assented structures. All new or modified Marina Perimeter Limit lines shall be a maximum of ten (10) feet outside of the marina structures. The MPL shall be designated on all plans with the corners designated by their State Plane Coordinates.

(o) It is permissible to have vessels berthed at a facility outside of the Marina Perimeter Limit if, in the opinion of the Executive Director, there are no conflicts with other users, or impacts to resources, or conflicts with the DEM Shellfish Program. All vessels shall be berthed parallel to piers and docks if outside of the MPL. Mediterranean style mooring (vessel perpendicular to the dock at the stern beyond the MPL) may be permissible in destination harbors if the Executive Director determines that there are no adverse impacts to existing navigation, fishing, commerce or recreational uses.

(p) Proposals for the alteration or reconfiguration of in-water facilities such as piers and/or mooring areas shall be reviewed in the following manner:

- (1) Alterations to the layout or configuration of in-water facilities within a previously approved MPL which do not increase the number of boats accommodated shall obtain a Certification of Maintenance in accordance with the requirements of Section 300.14;
- (2) Alterations which propose to increase the number of boats that may be accommodated at the in-water facilities of the marina within 25% of the capacity of the marina as defined in the original Council Assent, and do not propose to extend the facility beyond the defined perimeters (established pursuant to the original Council Assent or paragraph (n)) shall be reviewed as Category A applications. The Council's review shall establish that the alterations and/or expansion meet the 25% standard, and that the Council's standards for parking and sanitary facilities are met. If the 25% increase changes the marina type, the expansion shall be treated as a Category B application and all standards for the new marina designation shall apply; and
- (3) Alterations which propose to increase the numbers of vessels accommodated at the in-water facilities beyond 25% of the capacity as defined in the original Council Assent, and/or extend the facility beyond the defined perimeters, or alter the purpose of the facility shall be reviewed as a Category B application. The Executive Director may allow a one time expansion of the MPL for Limited Marinas in Type 2 waters up to 25% of the assented/original boat capacity.
- (4) Alterations to marina's in Type 2 waters shall have all in-water vessels and dry stack vessels count towards the 25% increase in vessel/boat capacity.

(q) New marinas and significantly expanded existing marinas must submit a draft Operations & Maintenance plan with their marina permit application. Existing marinas must submit the plan within one (1) year of the effective date of this regulation. Whenever the marina ownership or leasehold changes, the O&M plan must be revised and resubmitted for approval. Plan approvals are valid for three (3) years without any change in ownership, expansion or major infrastructure work.

(r) All O&M plans shall include the information outlined in the guidance document "Marina Operations and Maintenance Plans" by the CRMC.

(s) Any Marina that has a "Clean Marina" certification issued by the CRMC will only be required to submit the facility layout plan (plan requirements in guidance Document "Marina Operations and Maintenance Plans" by the CRMC) and Clean Marina certification approval letter in lieu of an O&M plan.

(t) Any alterations to mooring areas shall be consistent with any CRMC approved municipal harbor management rules, regulations or programs, as defined in Section 300.15 of this program.

(u) All new marina facilities shall be required to install a marine pumpout facility. Any significant expansion or alteration of an existing marina facility that results in greater than or equal to fifty (50) new slips or where adequate pumpout service is not currently available shall be required to install a marine pumpout facility. Any expansion or alteration of an existing marina facility which proposes to increase the number of vessels accommodated at the in-water facilities beyond 25% of the capacity as defined in the original Council Assent shall be required to undertake mitigative measures. If 25% of the capacity as defined in the original Council Assent is greater than or equal to fifty (50) slips, then a marine pumpout facility shall be required. If 25% of the capacity as defined in the original Council Assent is less than fifty

(50) slips, then the Council shall require either the installation of a marine pumpout facility or other suitable mitigation measures. In no case shall the number of pump outs be less than those in the Minimum Required Sanitary Facilities, shown in Table 2 – Minimum Required Sanitary Facilities.

(v) If the applicant can demonstrate that there are already enough marine pumpout facilities to serve all of the recreational boating facilities found in the region, then the Council may waive the requirement for a marine pumpout facility and require alternative mitigative measures.

(w) All marine pumpout facilities or pumpout stations shall be designed in a manner that serves the boating public. Pumpout facilities shall be located in an accessible location. The dock utilized for the pumpout shall not be available for dockage of any kind beyond the reasonable time for vessel pumpout. In addition, all marine pumpout facilities shall be open for the general public's use. However, marina operators may charge a fair and nondiscriminatory fee to cover the cost of constructing and operating these facilities. Portable pumpouts (including vessel mounted pumpouts) shall only be allowed after a facility has one (1) fixed pumpouts in place that meets all requirements. Portable pumpouts are not considered to satisfy the requirements for a pumpout except in the case of a Limited Marina.

(x) All new marina facilities shall meet the setback policies and standards contained in municipal harbor management plans and/or harbor ordinances approved by the Council. However, in all cases marina facilities shall be setback at least fifty (50) feet from approved mooring fields and three times the authorized project depth from federal navigation projects (e.g. navigation channels and anchorage areas).

(y) All new or replacement floats shall utilize floatation that was specifically fabricated for marine use and warranted by its manufacturer for such use. Foam billets or foam bead shall not be utilized unless it is completely encapsulated within impact resistant plastic. All existing installations of non-encapsulated floatation shall be replaced at a rate of 10% per year (minimum) during normal maintenance. This shall be detailed in the O&M plan. The start of mandatory replacement shall begin five (5) years after adoption of this modification (October 2006).

(z) All new marinas (including expansions) and water dependent facilities shall be designed in accordance with the latest Accessible Boating Facilities Guidelines by the United States Access Board. The number of fully accessible slips shall be in accordance with the latest version of the guidelines but in no case shall be less than 2% of the facility. Limited Marinas are not required to meet the accessibility guidelines, but are encouraged to do so.

(aa) The Executive Director, in his discretion, shall have the authority to determine which of the above standards shall be applied to Limited Marinas.

E. 2. Launching Ramp Standards

(a) All public launching ramps shall be designed to allow emergency vehicle turning at the top of the ramp. The ramp shall be designed with two (2) areas to allow vessel prep and tie down in close proximity of the haul/launch area. All parking for boat trailers shall be angled only, with a strong preference for pull through parking. All ramps shall have clearly marked parking for car top vessel parking.

(b) Ramps shall be constructed at an angle no greater than 15 % from the horizontal. Where upland modification is necessary, the slope will be created, where possible, by cutting back into the upland, rather than by placing fill on a shoreline feature. Ramps shall be approximately even with beach grade.

(c) All new or reconstructed public ramps shall extend a sufficient distance inland to prevent washout at the inland edge and shall extend a minimum of four (4) feet beyond extreme low water. Single-lane ramp width shall not be less than fifteen (15) feet.

(d) Side slopes of the ramp (above water line) shall be constructed of sloped riprap or, if the slope permits, vegetated.

(e) See Section 300.2, "Filling, Removing, or Grading of Shoreline Features," and Section 300.7, "Construction of Shoreline Protection Facilities."

E.3. Residential and Limited Recreational Docks, Piers, and Floats standards

(a) All residential and limited recreational dock designs shall be in accordance with Table 3 - Minimum Design Criteria, but in no case shall any structural member be designed to withstand less than 50 year storm frequency, including breaking wave conditions in accordance with ASCE 7 (current edition) and FEMA Manual 55. All design elements including the bathymetry shall be stamped by a Rhode Island registered Rhode Island Professional Engineer.

(b) Applications for all residential and limited recreational boating facilities shall indicate all work associated with these structures including at a minimum: a bottom survey showing water-depth contour lines and sediment types along the length of the proposed structure the seaward and landward extent of any SAV or coastal wetland vegetation present at the site, the permitted/authorized dimensions of any CRMC buffer zone and/or access way, as well as all associated work involved in accessing the proposed facility. All pathways, boardwalks, and cutting or filling of coastal features shall be specified. All such work shall be in accordance with applicable standards for "Filling, Removing, or Grading" (Section 300.2) and "Residential, Commercial, Industrial, and Public Recreational Structures" (Section 300.3). All of the above work shall be certified by a Professional Engineer licensed in the State of Rhode Island.

(c) Fixed structures which are for pedestrian access only shall be capable of supporting forty (40) pounds per square foot live load as well as their own dead weight; floating structures shall be capable of supporting a uniform twenty (20) pounds per square foot live load, or a concentrated load of four hundred (400) pounds. A written certification by the designer that the structure is designed to support the above design loads shall be included with the application.

(d) No creosote shall be applied to any portion of the structure.

(e) A residential or limited recreational boating facility shall be a maximum of four (4) feet wide, whether accessed by a fixed pier or float. The terminal float size shall not exceed one hundred fifty (150) square feet to be reviewed as a Category A application. A variance may be granted up to 200 square feet in excessive fetch areas, however this shall be reviewed as a Category B application at the full Council. In the absence of a terminal float, a residential boating facility may include a fixed terminal T or L section, no greater than four (4) by twenty (20) feet in size.

(f) All new or replacement floats shall utilize floatation that was specifically fabricated for marine use and warranted by its manufacturer for such use. Foam billets or foam bead shall not be utilized unless they are completely encapsulated within impact resistant plastic.

(g) Where possible, residential boating facilities shall avoid crossing coastal wetlands. In accordance with Section 300.17, those structures that propose to extend beyond the limit of emergent vegetative wetlands are considered residential boating facilities. Facilities shall be located along the shoreline so as to span the minimal amount of wetland possible. Facilities spanning wetlands shall be elevated a minimum of four (4) feet above the marsh substrate to the bottom of the stringers, or constructed at a 1:1 height to width ratio. Construction in a coastal wetland shall be accomplished by working out from completed sections. When pilings are placed within coastal wetlands, only the immediate area of piling penetration may be disturbed. Pilings should be spaced so as to minimize the amount of wetland disturbance. No construction equipment shall traverse the wetland while the facility is being built.

(h) Owners are required to maintain their facilities in good working condition. Facilities may not be abandoned. The owner shall remove from tidal waters and coastal features any structure or portions of structures which are destroyed in any natural or man-induced manner.

(i) Float ramps and other marine appurtenances or equipment shall not be stored on a coastal feature or any area designated as a CRMC buffer zone.

- (j) The use of cribs for structural support shall be avoided. The use of cribs as support in tidal waters may be permitted given certain environmental design considerations. However, in these instances the size and square footage shall be minimized and the structure cannot pose a hazard to navigation. When cribs are permitted for structural support, they must be removed when the useful life of the structure has ceased (e.g. the structure is no longer used as a means of accessing tidal waters).
- (k) Residential and limited recreational boating facilities shall not intrude into the area within twenty five (25) feet of an extension of abutting property lines unless (1) it is to be common structure for two or more adjoining owners, concurrently applying or (2) a letter or letters of no objection from the affected owner or owners are forwarded to the CRMC with the application. In the event that the applicant must seek a variance to this standard, the variance request must include a plan prepared by a RI registered Land Surveyor which depicts the relationship of the proposed facility to the effected property line(s) and their extensions.
- (l) Residential and limited recreational boating facilities shall not extend beyond that point which is (1) 25% of the distance to the opposite shore (measured from mean low water), or (2) fifty (50) feet seaward of mean low water, whichever is the lesser.
- (m) All residential and limited recreational docks, piers, and floats shall meet the setback policies and standards contained in municipal harbor management plans and/or harbor ordinances approved by the Council. However, in all cases, residential docks, piers, and floats shall be setback at least fifty (50) feet from approved mooring fields and three-times the U.S. Army Corps or Engineers authorized project depth from federal navigation projects (e.g., navigation channels and anchorage areas).
- (n) No sewage, refuse, or waste of any kind may be discharged from the facility or from any vessel utilizing it.
- (o) A Council Assent for a residential or limited recreational boating facility permits the owner to undertake minor repairs of approved facilities without further review, where such repairs will not alter the assented and/or permitted design, capacity, purpose or use of the facility. For the purposes of this section, minor repairs shall include the repair or replacement of dock decking or planks, hand railings and support, and other activities of a similar and non-substantial nature. Minor repairs do not include alterations to the approved design of the facility, expansion of the facility, or work requiring the use of heavy machinery (such as a pile driver); these activities require that a Certification of Maintenance be obtained from the Council in accordance with Section 300.14. Residential boating facilities shall be in continuous and uninterrupted use to meet this standard, in accordance with permit conditions.
- (p) Materials used for the construction of residential and limited recreational boating facilities shall not include steel or concrete piles.
- (q) The surface of the dock, pier and float shall be designed in a manner which provides safe traction and allows for the appropriate drainage of water.
- (r) Geologic site conditions shall exist which are appropriate for driven pile structural support.
- (s) As part of a residential or limited recreational boating facility, the terminal float may be designed such that it facilitates the access of small vessels such as kayaks, dinghies, personal water craft, etc., onto the float, provided that all other programmatic requirements are met. Mechanical apparatus to accomplish this shall not exceed twenty four (24) inches in height from the top of the float.
- (t) All residential and limited recreational docks shall have the centerline of the structure between its most seaward and most landward portion designated on the plans with State Plane Coordinates (NAD83). A WAAS enabled GPS system with an accuracy of +/- 3 meters shall be considered acceptable. The Executive Director shall have the discretion to require greater accuracy.
- (u) Recreational boating facilities other than marinas and those facilities associated with residential development, where applicable, shall follow the design standards contained within this Section, including those described in Table 3.

(v) Lateral Access shall be provided under, around or over as appropriate for the site conditions at all new residential docks.

(w) In order to minimize impacts to existing areas of Submerged Aquatic Vegetation (SAV) habitat, new residential boating facilities or modifications to existing residential boating facilities shall be designed in accordance with the guidelines and standards contained within Section 300.18, as most recently revised. Facilities shall be located along the shoreline so as to impact the minimal amount of habitat possible.

(x) The long-term docking of vessels at a recreational boating facility shall be prohibited over SAV. Such facilities shall be used for touch and go only.

(y) All residential and limited recreational docks shall be certified by the Design Engineer that it was constructed according to the approved plans within typical marine construction standards. The Executive Director shall have the discretion to require AS-BUILT survey plans of residential and limited recreational docks that includes property lines.

E.3.1 Residential and Limited Recreational Docks with Excessive Fetch Standards

- (a) A location shall be considered to have excessive fetch if there is a 20° sector over four miles in any direction in which wind can blow over the water to generate waves.
- (a) Boat lifts, suitably designed and installed, are encouraged for docks with excessive fetch.
- (b) Residential and limited recreational docks with excessive fetch shall provide uplift calculations as part of the required calculation package.
- (c) All structural elements, including the boat lift, shall be designed to withstand the 100 year storm frequency, including breaking wave conditions in accordance with ASCE 7 (current edition) and FEMA Manual 55.
- (d) All residential and limited recreational docks with excessive fetch shall have an As-built plan on file with the CRMC within thirty (30) days of construction that certifies conformance with the approved plans.
- (e) All residential and limited recreational docks with excessive fetch shall be inspected and certified by a Registered Professional Engineer licensed in Rhode Island that all elements of the dock and lift system meet the requirements of ASCE 7 (current edition) or FEMA Manual 55 every five (5) years.

TABLE 3 - MINIMUM DESIGN CRITERIA			
Min. Pile Tip diameter	10"	Min / Max Float freeboard	8" / 30"
Min. Pile But diameter	12"	Maximum Fetch for residential docks	4 miles
Marina Minimum Pile embedment	15 feet	Minimum Stringer/Joist	3"x10"
Residential Minimum Pile embedment	10 feet	Minimum through bolt Hardware Diameter – hot dipped galvanized	¾"
Minimum Marina Deck and Float load	60 psf LL 500 lb concentrated	Minimum Cross bracing	3"x10"
Residential Deck load	40 PSF LL 400 LB concentrated	Minimum lag bolt diameter	½"
Min Float Freeboard *including LL and DL	12"	Minimum Water depth at the terminus of recreational boating facilities	18" MLW
Design Wind Loads	wind gust based on 50 year return and natural period of 60	Required Datum	MLW

	seconds		
Wave Conditions (min)	All fixed and floating structure shall be designed for a 3' minimum		
Min Pile Cut Off	V zone elevation + float freeboard + 1'		
Steel or cast steel	490 pcf		
Cast iron	450 pcf		
Aluminum alloys	175 pcf		
Timber (untreated)	40 - 50 pcf		
Timber (treated)	45 – 60 pcf		
Concrete, reinforced (normal weight)	145 – 155 pcf		
Concrete, reinforced (lightweight)	90-120 pcf		
Asphalt paving	150 pcf		
Granite Block	165 pcf		