Gaps in Current CRMC Regulations Related to Individual Boat Lifts in Marina Slips

Introduction:

There have been recent inquiries from Marina owners regarding the permitting procedure for installation of individual boat lifts in existing marina slips. Boat lifts in marinas are very common in other areas of the country such as Florida and are becoming more prevalent in New England as well. While we have clear regulations for installation of boat lifts at residential boating facilities, CRMC regulations are not clear on the requirements for boat lifts at recreational boating facilities i.e. marinas.

The following report highlights current CRMC regulations pertaining to marinas and residential boat lifts with staff comments and questions in red where there may be lack of regulations or unclear regulations pertaining to boat lifts in marinas. Additionally, a list of potential pros/cons, images of marinas with individual slip boat lifts for reference, and a few marinas in New England that have been confirmed to have slips with lifts.

Staff's goal of this meeting is to receive feedback and direction from the Subcommittee on the following:

- Should boat lifts be allowed in marinas?
- If so, does the Subcommittee feel that the CRMP needs to be revised to incorporate new regulations for this activity?
- If not, does the Subcommittee feel that the CRMP needs to be revised to expressly prohibit this activity?

Current Relevant CRMC Regulations:

- 1.1.2(A) – Definitions
  - 1.1.2(A)(17) – Boat and Float Lift Systems
    - "Boat and float lift systems" means accessory structures to residential boating facilities that raise either a boat or float out of the water. Generally, a cradle or strap supports the vessel or float while it is being lifted by a pulley type lift system. Overhead arms or crane-like systems may also be used to lift vessels out of the water.
      - As this definition reads, it is only applicable to residential boating facilities, not recreational boating facilities, i.e. marinas.
- 1.3.1(D) – Recreational Boating Facilities
  - 1.3.1(D)(2) – 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.
      - Installation of boat lifts at marinas is a potential conflict of this policy in that boat lifts may take up more acreage over tidal waters per vessel slip. That being said, there appears to be an increasing demand for boat lifts within marinas in the area.
  - 1.3.1(D)(5) – Marina Prerequisites
    - (c)(1) All designs that include water-based vessel storage are encouraged to explore both wet and dry storage alternatives.

- 1.3.1(D)(7) – Prohibitions
  - (d) 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 §1.3.1(P) of this Part (Boat Lift and Float Lift Systems).
- 1.3.1(D)(8) – Standards
  - (b) All new marinas, docks, piers, bulkheads or any other structure proposed in tidal waters shall be designated and stamped by a registered professional engineer licensed in the State of Rhode Island.
    - Should a boat lift in a marina be considered a new structure and require a PE stamped drawing.
- 1.3.1(D)(9) – Marina Standards
  - (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.
    - As previously mentioned, installing boat lifts at existing marina slips has the potential to reduce vessel density within the MPL because the boat lifts do take up a larger footprint than a standard floating dock or fixed pier alone. This would have to be assessed on a case-by-case basis depending on size of the boat lift and layout within the marina. Additionally, if allowed, marina owners may want to compensate for lost density by seeking larger MPL footprints, that is to remain consistent with their Assent requirements for such. Also, if an MPL is not conducive to being increased for any number of reasons, will the resulting decrease in density be acceptable, especially if density was a controlling factor in the initial MPL approval?
  - (q) 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 §1.3.1(N) of this Part;
      - Going back to 1.3.1(D)(8)(b), will boat lifts be considered new structures or would they fall under an alteration to the layout of in-water facilities within an MPL which do not increase the number of boat slips.

- 1.3.1(D)(11) – Residential and Limited Recreational Docks, Piers, and Floats Standards
  - (t) All applicants for residential and limited recreational docks shall submit the CRMC designer's dock as-built form and an as-built survey within thirty (30) days following construction. The as-built survey shall show the following:
    - (1) Location of the dock in relation to the property lines;
    - (2) The most seaward end of the dock marked in state plane coordinates; and
    - (3) The as-built length and width including all terminal floats and boat lifts
      - As these regulations read, they are only applicable to residential and limited recreational boating facilities, not recreational boating facilities, i.e. marinas.
- 1.3.1(D)(12) – Residential and Limited Recreational Docks with Excessive Fetch Standards
  - (b) Boat lifts, suitably designed and installed, are encouraged for docks with excessive fetch.
  - (d) - All structural elements, including the boat lift, shall be designed to withstand the one hundred (100) year storm frequency, including breaking wave conditions in accordance with ASCE 7 (Minimum Design Loads For Buildings and Other Structures, 2016) and FEMA Manual 55 (Coastal Construction Manual, 2011) incorporated by reference, not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with these regulations.
  - As these regulations read, they are only applicable to residential and limited recreational boating facilities, not recreational boating facilities, i.e. marinas.

- 1.3.1(P) – Boat Lift and Float Lift Systems
  - 1.3.1(P)(1) – Policies
    - (a) Boat and/or float lifts may be allowed in Type 3, 5, and 6 waters. Boat and/or float lifts may be allowed in Type 2 Waters in accordance with this Section. For Council purposes, the raising of floats and ramps by manual methods (manual pulleys, come-alongs, etc.) for temporary elevated off-season storage shall not be considered a float lift in accordance with this Section. This exception shall only apply to methods that do not require the installation of permanent winches, pulley systems or other permanent mechanical structures, pilings, or equipment. The offseason shall be considered November 1 to May 1.
      - With the exception of a handful of previously grandfathered facilities, marinas are typically always located in Type 3, 5, and 6 waters. Additionally, any boatlifts proposed at a marina would be contained within the marina perimeter limit (MPL). It is unlikely that a marina would propose manual lifting methods for a boat lift.
    - (b) It is the Council's policy to assess all boat and/or float lifts for their appropriateness given site conditions, including impacts on public trust and coastal resources, aesthetic and scenic resources, and cumulative impacts. Boat and/or float lifts in Type 2 waters shall be allowed only for the minimum amount necessary to accommodate a residential dock.
      - As is written, the Council would need to assess each boat lift based on the above referenced impacts.

- 1.3.1(P)(2) – Prerequisites
  - Boat and float lift applications for Type 2 waters shall be considered Category B applications (see § 1.3.1(A) of this Part).
    - Marinas in Type 2 waters are uncommon and mostly grandfathered marinas. Need to determine if marinas in Type 1 or 2 waters proposing boat lifts would be required to complete a CAT B application.
  - (b) All applications for boat lifts or float lifts in Type 2 waters, whether as part of a residential boating facility application or separate, shall be referred to the Council for a hearing. If a residential boating facility application includes a boat and/or float lift and is proposed in Type 2 waters, then the entire application shall be heard by the Council. All other boat and float lift applications shall be reviewed in accordance with the Council's established policies as found in §1.3.1(D) of this Part.
    - As the regulations currently read, any boat lift project must be heard before the Council.
  - (c) Boat and float lifts (defined in § 1.1.2(A)(18) of this Part) are considered by the Council to be accessory structures to residential boating facilities, and as the Council only approves or denies a recreational boating facility on the merits of the structure given existing site conditions, boat and/or float lift requests shall not be deliberated by the Council unless the Council has separately or previously approved an application for a residential boating facility. Such an application for a residential boating facility may include a request for a boat and/or float lift; however the Council shall not weigh the benefits or disadvantages of a boat or float lift as an argument for a residential boating facility approval or denial in its deliberations of a residential boating facility application.
    - Note the citation in the regs is incorrect. Boat lifts are defined in § 1.1.2(A)(**17**).
    - Note the sentence reading "the Council only approves or denies a **recreational** boating facility on the merits of the structure given existing site conditions," it appears the word recreational should be residential.
    - As boat lifts are defined in CRMC regulations, they are accessory structures to **residential boating facilities**, not recreational boating facilities i.e. marinas.
  - (d) An application for a Council Assent for a boat and/or float lift will include a plan prepared and stamped by a professional engineer.
    - If boat lifts are permissible in marinas, should this section apply to marinas as well, or be exclusive to residential boating facilities.
- 1.3.1(P)(3) – Prohibitions
  - 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.
    - Marine railways are not the same as boat lifts.
  - (b) Boat and float lifts are prohibited in Type 1 waters and in association with existing previously-permitted residential boating facilities in Type 1 waters.
    - Should this apply to grandfathered marinas in Type 1 waters as well, or just to residential boating facilities.

- (c) Since the Council has determined that boat and float lifts detract from the high scenic value and important visual characteristics of Type 2 waters, and, since these structures may be considered an unacceptable intensification of use within certain public waters designated for low intensity use, boat and float lifts are prohibited from all Type 2 waters within the following waterbodies:
    - Pawcatuck River
    - Quonochontaug Pond
    - Greenhill Pond
    - Pt. Judith Pond
    - Bissel Cove
    - Barrington River
    - Kickemuit River
    - Bristol Harbor
    - Winnapaug Pond
    - Ninigret Pond
    - Potter Pond
    - Narrow River
    - Wickford Harbor
    - Palmer River
    - Potter Cove
    - Blue Bill Cove
        - If boat lifts are permissible in marinas, should this section include marinas as well, or be exclusive to residential boating facilities.
- (d) Lift superstructures such as but not limited to beams and joist-like structures that sit or are fixed atop pilings are prohibited.
- (e) Float lifts shall be limited to one (1) per residential boating facility. More than one (1) float lift at a residential boating facility shall be prohibited.
    - If boat lifts are permissible in marinas, should a maximum number of slips per marina or an allowable ratio of boat lifts per assented vessel count be established.

- 1.3.1(P)(4) – Standards
    - Boat lift and float lift structures may only be authorized as an accessory structure connected to a fixed pier or shoreline bulkhead. When raised, the gunwale of the vessel or the deck of the float shall not be any higher than the deck of the fixed pier or shoreline bulkhead to which it is attached, or the bottom of the vessel or float shall not be greater than five (5) feet above the high tide level, whichever is lesser. When a lift system can allow a vessel or float to be raised higher than this standard, then mechanical stops limiting the height allowance must be employed.
        - As this standard reads, boat lifts are only authorized when connected to a fixed pier or shoreline bulkhead. The majority of marinas have floating dock arrangements for their existing slips and are likely to propose boat lifts within these existing slips by driving four (4) new piles for each lift directly adjacent to the floating dock.

- (b) The height of the lift system shall not be higher than the height of the pilings used to construct the dock, or shall not be higher than five feet (5') above the deck of the pier to which it is constructed, whichever is lower. However, the winch of the lift system may sit affixed to the top of a piling.
    - This standard will not be possible for boatlifts proposed adjacent to existing floating docks as the deck of the floating dock would be equivalent to the deck of the pier in this instance and that would always be the lowest point.
- (c) Boat and/or float lifts shall not intrude into the area within twenty-five (25) feet of an extension of abutting property lines unless:
    - It is to be associated with a residential boating facility which is a common structure for two (2) or more adjoining owners concurrently applying, or
    - A letter or letters of no objecitons from the affected owner or owners are forwarded to the CRMC with the application.
        - If boat lifts are permissible in marinas, should these letters of no objection be required for boat lifts proposed within an MPL when within twenty-five (25) of a property line extension.
- (d) Boat lifts shall be limited to two (2) per residential boating facility.
    - If boat lifts are permissible in marinas, should a maximum number of slips per marina or an allowable ratio of boat lifts per assented vessel count be established.

Summary of Current CRMC Regulation Questions/Comments:

- Should the definition of Boat and Float Lift Systems be revised to include Recreational boating facilities?
- Boat lifts may take up more space over tidal waters than a traditional fixed pier or floating dock arrangement. As such, there is a potential policy conflict regarding vessel density in marinas not being able to meet the 30 vessel per acre requirement. This can potentially be avoided with a marina reconfiguration project and depends on existing/proposed layouts.
- If allowed in marinas, should a boat lift be considered a new structure within the MPL (relevant to 1.3.1(D)(8)(b)), or would it be considered an alteration of in-water facilities within a previously approved MPL which do not increase the number of boats (relevant to 1.3.1(N)).
    - If a new structure, would it require PE stamped drawings for each boat lift arrangement similarly to residential boat lifts?
- If allowed in marinas, should the requirement of a post construction as-built drawing be required for each boat lift similarly to the current regulation for residential boat lifts?
- If allowed in marinas, should the Excessive Fetch Standards be required similarly to residential docks?
- According to 1.3.1(P)(1)(a) boat lifts are allowed in Type 3, 5, and 6 waters, however, per the Boat and Float Lift Systems definition, this allowance would only apply to residential boating facilities, not marinas.
- Per 1.3.1(P)(1)(b) it is the Council's policy to assess all boat lifts for their appropriateness given site conditions, including impacts on public trust and coastal resources, aesthetic and scenic resources, and cumulative impacts. If allowed in marinas, should all proposed boat lift projects be considered a CAT B and heard before the Council to assess said impacts?

- Per 1.3.1(P)(3)(c) boat lifts are prohibited in certain bodies of water. As the regulations currently read, this applies to residential boat lifts only. Should this prohibition apply to boat lifts in marinas as well?
- The current regulation for permissible height of the lift system, 1.3.1(P)(4)(b) only makes sense for boat lifts adjacent to fixed piers. The majority of marinas have floating docks and have proposed adding boat lifts adjacent to their existing floating dock slips.
- Per 1.3.1(P)(4)(d) Boat lifts shall be limited to two (2) per residential boating facility. If allowed in marinas, should a maximum number of slips per marina or an allowable ratio of boat lifts per assented vessel count be established?

Pros/Cons:

- Pros:
    - Boats will be suspended out of the water when not in use so similarly to dry stack stored vessels, will not require bottom paint. This eliminates the risk of bottom paint chipping off while in use or sitting at the dock and also results in no end of season power washing the hull to clean off algae growth and old bottom paint, so the result is an overall improvement to water quality and cheaper maintenance for vessel owners.
    - Potential for increase in revenue for marina owners. This is likely on a case by case basis and depends if the marina has clients willing to spend extra for this type of slip. As previously mentioned, this may also take up more space within a marina MPL so may reduce the overall slip count available and be a net zero gain. This would need further investigation and would be a different situation for each marina.
    - By being elevated out of the water, vessels will be further protected from galvanic corrosion.
- Cons:
    - Each individual boat lift slip may cover a larger area of submerged lands and thus less efficient use of state waters.
    - Potential implications to current regs on vessel density requirements of 30 vessels per acre. This is a case by case basis depending on existing marina layouts and proposed layouts with the lifts.
    - Boat lift heights will need to be installed with consideration into king tides and severe storm events/surges. Most marinas have a majority of floating docks rather than fixed piers. With average tidal swings in Narragansett Bay between 3.5’ and 4’ without a storm surge or king tide, there is potential for boats on lifts to be significantly higher out of the water at low tide than their neighboring boat tied up to the floating dock. This is a potential aesthetic/scenic impact if lifts are sporadically added into marinas.

Example Photos:

- New England Marinas with boat lift slips:
  - Charlestown Marina, Boston MA
  - Freedom Boat Club, Boston MA
  - Tern Harbor Marina, Weymouth, MA
- Through Staff preliminary research on this topic, it has been found that marinas with boat lifts are far more prevalent in the southern states than in New England. A common theme even in the southern states appears to be an option for existing slip holders to either pay for installation of the lift, or to have the marina install it and the slip holder pays for an increased yearly slip fee. In New England, only a handful of marinas have been identified with boat lift slips and each of these marinas only contains a handful of these type slips. In most of these cases individual owners have likely been approaching marinas with the desire for a lift and marinas install them on a case by case basis which is similar to the request recently voiced to CRMC staff.