

# **RHODE ISLAND COASTAL ZONE PROGRAM**

Rhode Island

Coastal Resources Management Council

(401) 222-2476

# The Rhode Island Coastal Zone Buffer Program

Adopted April 1994, RI CRMP

## Section 140 Setbacks

Amend Section 140. C to read as follows:

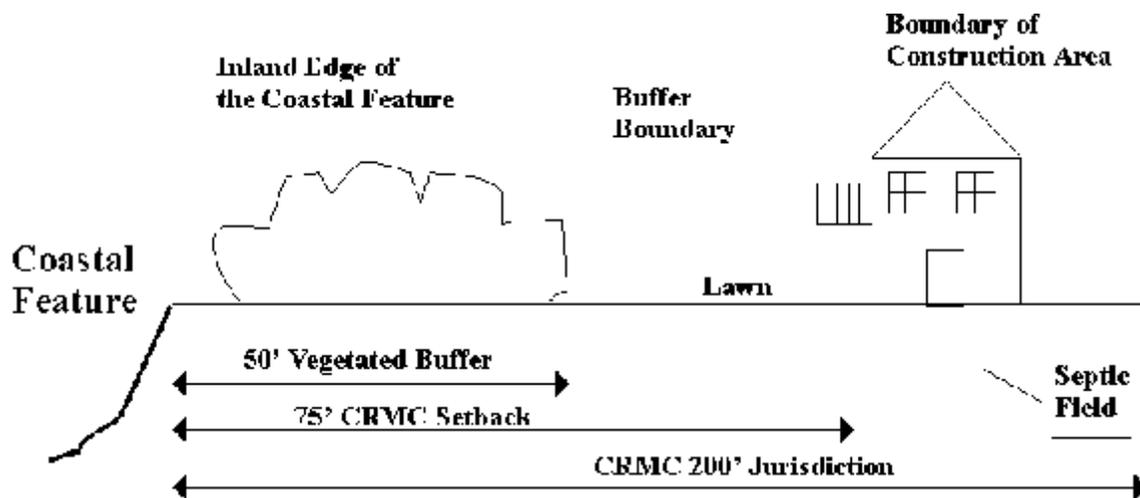
"C. Setbacks shall extend a minimum distance of either fifty (50) feet from the inland boundary of the coastal feature or twenty-five (25) feet inland of the edge of a Coastal Buffer Zone, whichever is further landward. In areas designated by the Council as Critical Erosion Areas-(Table 2), the minimum distance of the setback shall be not less than 30 times the calculated average annual erosion rate for less than four dwelling units and not less than 60 times the calculated average annual erosion rate for projects proposing more than 4 dwellings units.

## “SECTION 150 COASTAL BUFFER ZONES”

### A. Definition

1. A Coastal Buffer Zone is a land area adjacent to a Shoreline (Coastal) Feature that is, or will be, vegetated with native shoreline species and which acts as a natural transition zone between the coast and adjacent upland development. A Coastal Buffer Zone differs from a construction setback (Section 140) in that the setback establishes a minimum distance between a shoreline feature and construction activities, while a buffer zone establishes a natural area adjacent to a shoreline feature that must be retained in, or restored to, a natural vegetative condition (Figure 2). The Coastal Buffer Zone is generally contained within the established construction setback.

**Figure 2: Coastal Buffer Zone**



### B. Findings

1. The establishment of Coastal Buffer Zones is based upon the CRMC's legislative mandate to preserve, protect and, where possible, restore ecological systems.
2. Vegetated buffer zones have been applied as best management practices within the fields of forestry and agriculture since the 1950s to protect in-stream habitats from degradation by the input of sediment and nutrients

(Desbonnet et al 1993).

More recently, vegetated buffer zones have gained popularity as a best management practice for the control and abatement of nonpoint source pollutants (contaminated runoff) and are routinely applied in both engineered and natural settings (Desbonnet et al 1993; EPA 1993).

3. Coastal Buffer Zones provide multiple uses and multiple benefits to those areas where they are applied (Desbonnet et al 1993). The multiple uses and benefits of Coastal Buffer Zones include:

(a) Protection of Water Quality: Buffer zones along the perimeter of coastal water bodies can be effective in trapping sediments, pollutants (including oil, detergents, pesticides, herbicides, insecticides, wood preservatives and other domestic chemicals), and absorbing nutrients (particularly nitrogen) from surface water runoff and groundwater flow. The effectiveness of vegetated buffers as a best management practice for the control of nonpoint source runoff is dependent upon their ability to reduce the velocity of runoff flow to allow for the deposition of sediments, and the filtration and biological removal of nutrients within the vegetated area. In general, the effectiveness of any vegetated buffer is related to its width, slope, soil type, and resident species of vegetation.

Effective buffers for nonpoint source pollution control, which remove at least 50%, and up to 99%, of sediments and nutrients entering them, range from 15 feet to 600 feet in width.

The removal of pollutants can be of particular importance in areas abutting poorly flushed estuaries that are threatened by an excess of nutrients or are contaminated by runoff water, such as the South Shore Salt Ponds and the Narrow River. Large, well flushed water bodies, such as Narragansett Bay, are also susceptible to nonpoint source pollutant inputs, and can be severely impacted by nonpoint source pollutants as has been documented in studies completed for the Narragansett Bay Project.

(b) Protection of Coastal Habitat: Coastal Buffer Zones provide habitat for native plants and animals. Vegetation within a buffer zone provides cover from predation and climate, and habitat for nesting and feeding by resident and migratory species. Some species which use coastal buffer zones are now relatively uncommon, while others are considered rare, threatened or endangered. These plants and animals are essential to the preservation of Rhode Island's valuable coastal ecosystem.

The effectiveness of vegetated buffers as wildlife habitat is dependent upon buffer width and vegetation type. In general, the wider the buffer the greater its value as wildlife habitat. Larger buffer widths are typically needed for species that are more sensitive to disturbances (e.g., noise). Furthermore, those buffers that possess vegetation native to the area provide more valuable habitat for sustaining resident species. A diversity of plant species and types (e.g., grasses, shrubs and trees) promotes biodiversity within the buffer area, and the region overall.

(c) Protection of Scenic and Aesthetic Quality: One of the primary goals of the Council is to preserve, protect, and where possible restore the scenic value of the coastal region in order to retain the visual diversity and unique visual character of the Rhode Island coast as seen by hundreds of thousands of residents and tourists each year from boats, bridges, and such vantage points as roadways, public parks, and public beaches (Section 330). Coastal Buffer Zones enhance and protect Rhode Island's scenic and visual aesthetic resources along the coast. Coastal buffers also preserve the natural character of the shoreline, while mitigating the visual impacts of coastal development. Visual diversity provides for both contrast and relief between the coastal and inland regions, leading to greater aesthetic value of the landscape.

(d) Erosion Control: Coastal Buffer Zones provide a natural transition zone between the open coast, shoreline features and upland development. Natural vegetation within a Coastal Buffer Zone helps to stabilize the soil, reduces the velocity of surface water runoff, reduces erosion of the soil by spreading runoff water over a

wide area, and promotes absorption and infiltration through the detrital (leaf) layer and underlying soils. The extensive root zones often associated with buffer zone vegetation also help prevent excessive shoreline erosion during coastal storm events by stabilizing underlying soils.

(e) Flood Control: Coastal Buffer Zones aid in flood control by reducing the velocity of runoff and by encouraging infiltration of precipitation and runoff into the ground rather than allowing runoff to flow overland and flood low lying areas. In addition, Coastal Buffer Zones often occupy the flood plain itself and thus add to coastal flood protection.

(f) Protection of Historic and Archaeological Resources: Coastal Buffer Zones protect areas of cultural and historic importance such as archaeological sites by helping prevent intrusion while protecting the sites' natural surroundings.

#### C. Prerequisites

(a) All applications for which this Section applies shall be initially reviewed by the Executive Director or his designee. The Executive Director may grant a variance for such applications in accordance with this section, or refer any application to the Council for a hearing if based upon the application a determination is made that the proposed activity warrants a Council hearing.

#### D. Policies

1. The establishment of a Coastal Buffer Zone is based upon the CRMC's legislative mandate to preserve, protect and, where possible, restore ecological systems. The determination of the inland boundary of the Coastal Buffer Zone must balance this mandate with the property owner's rights to develop and use the property.
2. The Council shall require Coastal Buffer Zones in accordance with the requirements of this section for the following: a) new residential development; b) commercial and industrial development; c) activities subject to Section 300.8 and Section 300.13; and d) inland activities identified in Section 320. For existing residential structures, the Council shall require a Coastal Buffer Zone for category "A" and "B" activities when the footprint of the structure is expanded 50 percent or more.
3. The vegetation within a buffer zone must be either retained in a natural, undisturbed condition, or properly managed in accordance with the standards contained in this section. In cases where native flora (vegetation) does not exist within a buffer zone, the Council may require restoration efforts which include, but are not limited to, replanting the Coastal Buffer Zone with native plant species.
4. Coastal Buffer Zones shall remain covered with native flora and in an undisturbed state in order to promote the Council's goal of pre-serving, protecting, and restoring ecological systems. However, the Council may permit minor alterations to Coastal Buffer Zones that facilitate the continued enjoyment of Rhode Island's coastal resources. All alterations to Coastal Buffer Zones or alterations to the natural vegetation (ie: areas not presently maintained in a landscaped condition) within the Council's jurisdiction shall be conducted in accordance with the standards contained in this section as well as all other applicable policies and standards of the Council. In order to ensure compliance with these requirements, the Council may require applicants to submit a Buffer Zone Management Plan.

#### **Table 2a. Coastal Buffer Zone designations for residential development.**

Residential Lot Size (sq. ft.)	Water Use <u>Category</u>	
	Type 3, 4, 5, & 6	Type 1 & 2
----- Required Buffer (ft)		
<10,000	15.	25
10,000 - 20,000	25	50
20,001 - 40,000	50	75
40,001 - 60,000	75	100
60,001 - 80,000	100	125
80,001 - 200,000	125	150
>200,000	150	200

5. In order to enhance conservation, protect water quality, and maintain the low intensity use characteristic of Type 1 and 2 waters, greater buffer widths shall be applied along the coastline abutting these water types.

6. In critical areas and when the property owner owns adjoining lots, these lots shall be considered as one lot for the purposes of applying the values contained in Table 2a and ensuring that the appropriate buffer zone is established.

E. Standards

1. All Coastal Buffer Zones shall be measured from the inland edge of the most inland Shoreline (Coastal) Feature. In instances when the coastal feature accounts for 50 percent or more of the lot, the Council may grant a variance to the required buffer width.

2. Coastal Buffer Zone Requirements for New Residential Development: The minimum Coastal Buffer Zone requirements for new residential development bordering Rhode Island's shoreline are contained in Table 2a. The Coastal Buffer Zone requirements are based upon the size of the lot and the CRMC's designated Water Types (Type 1 - Type 6). Where the buffer zone requirements noted above cannot be met, the applicant may request a variance in accordance with Section 120. A variance to 50% of the required buffer width may be granted administratively by the Executive Director if the applicant has satisfied the burdens of proof for the granting of a variance. Where it is determined that the applicant has not satisfied the burdens of proof, or the requested variance is in excess of 50% of the required width, the application shall be reviewed by the full Council.

Instances where a lot is equal to or less than 20,000 square feet and not located within the watershed of a poorly-flushed estuary, a variance to the required buffer width may be granted by the Executive Director.

3. Coastal Buffer Zone Requirements for Alterations to Existing Residential Structures.

(a) Where alterations to an existing residential structure result in the expansion of the structure's footprint (square footage of the ground floor area encompassed by the structural foundation of an existing building) of less than 50 percent, no new coastal buffer zone shall be required.

(b) Where alterations to an existing residential structure result in the expansion of the structure's footprint (square footage of the ground floor area encompassed by the structural foundation of an existing building) 50 percent or more, the Coastal Buffer Zone requirement shall be established with a width equal to the percentage increase in a structure's footprint as of August 8, 1995, multiplied by the value contained in Table 2a

([square foot increase of footprint/square footage as of August 8, 1995] X value contained in Table 2a=Coastal Zone Buffer Requirement).

(c) Coastal Buffer Zones shall not be required when a structure is demolished and rebuilt on the existing footprint. Where a structure is demolished and rebuilt and will result in an expansion of 50% or more of the existing footprint of the structure, a Coastal Buffer Zone shall be established with a width equal to the percentage increase in a structure's footprint, multiplied by the value contained in Table 2a ([square foot increase of footprint/square footage]) X value contained in Table 2a=Coastal Zone Buffer Requirement.

(d) Any structure that is demolished must meet applicable setback requirements.

In addition, the Executive Director shall have the authority to grant a variance to this requirement for category "A" assents in accordance with the burdens of proof contained in Section 120.

4. Coastal Buffer Zone Requirements for all Commercial and Industrial development and activities subject to the requirements of Section 300.8, Section 300.13, or Section 320: Coastal Buffer Zones shall be determined on a case-by-case basis by the Council. Table 2a may be used as appropriate guidance. However, depending on the activity proposed and its potential impacts on coastal resources, the Council may require a Coastal Buffer Zone with a width greater than that found in the Table 2a.

5. All property abutting critical habitat areas, as defined by the Rhode Island National Heritage Program or the Council, shall possess a minimum vegetated buffer zone of 200 feet between the identified habitat and any development area. The Executive Director shall have the authority to grant a variance to these requirements in accordance with the burdens of proof contained in Section 120.

6. All property abutting Coastal Natural Areas (Section 210.4) shall have a minimum vegetated Coastal Buffer Zone of 25 feet from the inland edge of the coastal feature. The Executive Director shall have the authority to grant a variance to these requirements in accordance with the burdens of proof contained in Section 120.

7. All property located within the boundaries of a Special Area Management (SAM) Plan approved by the Council shall meet additional buffer zone requirements contained within these SAM plans. When a SAM plan's buffer zone requirements apply, the buffer width values contained in this section will be compared to those required by the SAM plan, and the larger of the buffer widths applied.

8. The setback (Section 140) for all new and existing residential, commercial, and industrial structures shall exceed the Coastal Buffer Zone requirement by a minimum of 25 feet for fire, safety, and maintenance purposes. Where the 25 foot separation distance between the inland edge of the buffer and construction setback cannot be obtained, the applicant may request a variance in accordance with Section 120. The Executive Director shall have the authority to grant variances to this requirement. However, a vegetated Coastal Buffer Zone shall not directly contact any dwelling's footprint.

#### F. Buffer Management and Maintenance Requirements

1. All alterations within established Coastal Buffer Zones or alterations to natural vegetation (i.e., areas not presently maintained in a landscaped condition) within the Council's jurisdiction may be required to submit a Buffer Zone Management Plan for the Council's approval that is consistent with the requirements of this section and the Council's most recent edition of Buffer Zone Management Guidance. Buffer Zone Management Plans shall include a description of all proposed alterations and methods of avoiding problem areas such as the proper placement and maintenance of pathways. Applicants should consult the Council's most recent edition of Buffer Zone Management Guidance when preparing a buffer management plan.

2. In order to promote the Council's goal to preserve, protect and, where possible, restore ecological systems, Coastal Buffer Zones shall be vegetated with native flora and retained in a natural, undisturbed condition, or shall be

properly managed in accordance with Council's most recent edition of Buffer Zone Management Guidance. Such management activities compatible with this goal include, but are not limited to:

(a) **Shoreline Access Paths:** Pathways which provide access to the shoreline are normally considered permissible provided they are less than or equal to 6 feet wide and follow a path that minimizes erosion and gulying within the buffer zone (e.g., a winding, but direct path). Pathways should avoid, or may be prohibited in, sensitive habitat areas, including, but not limited to, coastal wetlands. Pathways may be vegetated with grasses and mowed or may be surfaced with crushed stone or mulch.

(b) **View Corridors:** Selective tree removal and pruning and thinning of natural vegetation may be allowed within a defined corridor in order to promote a view of the shoreline. Only the minimal alteration of vegetation necessary to obtain a view shall be acceptable to the Council. Shoreline access paths shall be located within view corridors to the maximum extent practicable in order to minimize disturbance of Coastal Buffer Zones. View corridors shall be prohibited in sensitive or critical habitat areas.

(c) **Habitat Management:** Management of natural vegetation within a buffer zone to enhance wildlife habitat and control nuisance and non-native species of vegetation may be allowed. Homeowner control of pest species of vegetation such as European bittersweet and nuisance species such as poison ivy is normally considered acceptable. However, the indiscriminate use of herbicides or the clear-cutting of vegetation shall be prohibited. The use of fertilizers is generally prohibited within the Coastal Buffer Zone except when used to enhance the replanting of native vegetation (e.g., hydro-seeding) approved by the Council. However, the clearing or outright elimination of natural vegetation for such purposes as controlling ticks or pollen shall not be permitted.

(d) **Safety and Welfare:** Selective tree removal, pruning and thinning of natural vegetation within a Coastal Buffer Zone may be allowed by the Council on a case-by-case basis for proven safety and welfare concerns (e.g., removal of a damaged tree in close proximity to a dwelling). In order to promote child safety and manage pets in areas harboring ticks, fences along the inland edge of a Coastal Buffer Zone and along shoreline access pathways may be permitted.

(e) **Shoreline Recreation:** The CRMC recognizes that shoreline recreation is one of the predominant attractions for living on, or visiting the Rhode Island Coast. In order to allow for such uses, minor alterations of buffer zones may be permitted along the shoreline if they are determined to be consistent with Council's requirements. These alterations may include maintaining a small clearing along the shore for picnic tables, benches, and recreational craft (dinghies, canoes, day sailboats, etc.). Additionally, the CRMC may allow small, non-habitable structures including storage sheds, boat houses and gazebos within Coastal Buffer Zones, where appropriate. However, these structures may be prohibited in sensitive or critical habitat areas. Due to the potential for these structures to impact values provided by Coastal Buffer Zones, the Council shall exercise significant discretion in this area.

# Rhode Island Coastal Buffer Zone Management Guidance

Revised January 7, 1994

## CRMC Coastal Buffer Zone Management Guidance

### A. Guidelines for preparing an application for Coastal Buffer Zone Management:

1. All proposals for buffer zone management must be designed with respect to the one or more of the "Management Options" identified in Section "B" of these guidelines and must utilize appropriate techniques for managing vegetation as defined in Section "C".
2. Photographs and site plans must be submitted for all applications in order to minimize the need for on-site inspections. Actual field inspections will only be performed when deemed necessary by CRMC staff. All applications should be complete, clear and concise. Applications which are unclear or imprecise will be returned.
3. Applications which propose acceptable alterations within Coastal Buffer Zones (as determined by CRMC staff) will be processed as a "Category "A" and will receive administrative approval. In cases where CRMC staff determines the application to be unacceptable, an effort will be made to negotiate a resolution with the applicant. If a favorable resolution cannot be reached, CRMC staff will make a recommendation to the Executive Director that the application be processed as a Category "B" review requiring final decision by the full Coastal Council.
4. All proposals for Coastal Buffer Zone management should involve minor alterations which do not depreciate the values and functions of Coastal Buffer Zones as defined by Section 150 of the RICRMP. At a minimum, **at least sixty percent (60%)** of a buffer zone shall remain completely unaltered. Typically, Coastal Buffer Zone Management Plans which affect **25% or less** of a buffer zone are more likely to be approved. Areas to remain unaltered should be clearly identified on the proposed plans. An exception to the requirement is allowed for "**Suburban Coastal Buffer Zones**" - see Section B.6 of this Guidance material.
5. Where appropriate, Coastal Buffer Zone management may be applied to Coastal Banks. However, the CRMC may impose greater restrictions on alterations affecting coastal banks.
6. Tree damage and removal - in cases where a small number of dead, diseased, or storm damaged trees need to be removed from a buffer zone, the applicant may request an expedited review. In such cases, a description of work and a photograph of the area may be sufficient for CRMC review.

### B. Management options within coastal buffer zones:

1. Shoreline Access Paths - Pathways which provide access to the shoreline are normally considered appropriate. Pathways may be 6' wide or less and follow a winding, but direct path that does not promote erosion within the buffer zone. Shoreline access paths must be designed to minimize disturbance and may be prohibited in sensitive habitat areas, including but not limited to, coastal wetlands. Pathways may be vegetated with grasses and mowed or may be surfaced with crushed stone or mulch. Fertilizers may only be allowed for the initial establishment of grassed pathways. Proper site plans must be submitted which show the location of the proposed path through the buffer zone. Applicants may also be required to delineate the path on site for CRMC staff

inspection.

2. View Corridors - Selective tree removal and pruning and thinning of natural vegetation may be allowed within a defined corridor in order to promote a view of the shoreline. Only the minimal alteration of vegetation necessary to obtain a view shall be considered acceptable (clear cutting is not allowed). Shoreline access paths (if proposed) should be located within a view corridor to minimize disturbance within the buffer. Applicants proposing a view corridor must prepare a plan showing the view corridor's location within the Coastal Buffer Zone with respect to view points from a dwelling or other viewing area. View corridors are typically trapezoidal in shape, being narrow at the inland edge and expanding toward the shore. On residential lots of 2 acres or less, only **one view corridor** is typically considered acceptable. View Corridors may not affect more than **25% of the length** of the Coastal Buffer Zone as measured along the shoreline feature. View Corridors may be prohibited in sensitive or critical habitat areas.
3. Habitat Management - The management of natural vegetation within a Coastal Buffer Zone to wither enhance wildlife habitat or control nuisance and/or non-native species of vegetation may be allowed where it is demonstrated that the existing environmental conditions will be improved for native plantlife and wildlife. Additionally, homeowner control of nuisance species of vegetation such as European Bittersweet and poison ivy are considered acceptable **within managed portions** of Coastal Buffer Zones. However, the indiscriminate use of herbicides is prohibited and fertilizers may only be used to enhance the replanting of native vegetation. In addition, maintaining a buffer zone in a "landscaped condition", or establishing lawn are not considered appropriate habitat management activities and are prohibited. In Coastal Buffer Zones encompassing **one acre** or more, clearing may be allowed to establish field conditions which contain **native** grasses and herbaceous plants. In such cases, clearing for field establishment shall not affect more than **25%** of the Coastal Buffer Zone. All Buffer Zone Management plans involving habitat management within a Coastal Buffer Zone of one acre or more, or in sensitive or critical habitat areas (as determined by CRMC staff) shall submit a buffer zone management plan prepared by a qualified environmental professional or biologist.
4. Safety and Welfare - Selective tree removal and pruning and thinning of natural vegetation within a Coastal Buffer Zone may be allowed on a case-by-case basis for proven safety and welfare concerns (e.g., removal of a damaged or diseased tree in close proximity to a dwelling). In order to promote child safety and manage pets in areas harboring ticks, fences along the inland edge of a Coastal Buffer Zone and along shoreline access paths or shoreline recreation areas may be permitted (fences must be of an "open" type construction to permit the passage of wildlife, e.g. split rail or similar). Coastal Buffer Zone management plans shall include methods of avoiding problem areas such as the proper placement and maintenance of paths.
5. Shoreline Recreation - The CRMC recognizes that shoreline recreation is one of the predominant attractions for living on, or visiting the Rhode Island coast. In order to allow for such uses, minor alterations of Coastal Buffer Zones may be permitted along the shoreline if they are determined to be consistent with CRMC's goals and policies as noted in the Rhode Island Coastal Resources Management Program (RICRMP). Appropriate alterations typically include maintaining a small clearing along the shore for picnic tables, benches, and recreation craft (dinghies, canoes, day sailboats, etc.). Additionally, where appropriate, the CRMC may allow small (**200 sq. ft. total floor space, or less**), non-habitable structures including storage sheds, boat houses, and gazebos within Coastal Buffer Zones. Due to the potential for these structures to impact natural values provided by Coastal Buffer Zones, the Council shall exercise significant discretion in this area.
6. Suburban Coastal Buffer Zones - Where the Coastal Buffer Zone requirement is **25' or less (as per**

**RICRMP Section 150, Table 2a**), the CRMC shall consider such buffer zones “Suburban Coastal Buffer Zones”. Suburban Coastal Buffer Zones may be managed in their entirety (100%) by selective tree removal, selective pruning, selective thinning and restorative planting. However, the CRMC may require that several trees be maintained or planted to protect scenic quality.

**C. Appropriate techniques for managing vegetation within a coastal buffer zone:**

1. Selective Tree Removal - In cases where the applicant wishes to remove a few select trees, trees proposed to be cut must be specifically identified for CRMC staff review. In most cases, photographs of the buffer area may be sufficient provided the affected trees are clearly shown in relation to the surrounding buffer and shoreline. Trees may also be marked on-site to allow inspection by CRMC staff. In order to minimize disturbance and allow monitoring by CRMC staff, tree stumps of fallen trees shall not be removed. CRMC staff may make a follow-up inspection to verify that only marked trees were cut based upon stump counts. Should the applicant wish to remove a fallen tree from the buffer zone, this must be performed in a manner which does not disturb remaining vegetation. Selective tree removal is often a preferred technique for the establishment of a view corridor.
2. Selective Pruning - Pruning as defined for CRMC purposes involves cutting branches from trees, tree saplings and shrubs. For certain Coastal Buffer Zone Management options, pruning the tops of shrubs and forest undergrowth (topping) may be appropriate to discourage growth in height. On level ground, shrubs and forest undergrowth should be pruned to a height of **not less than 4'-5'**. In areas where the ground surface descend toward the shoreline, topping should only be performed to a height that allows a view of the water. Applicants proposing pruning must describe in detail the work proposed, provide photographs and a site plan, and/or mark those portions of the Coastal Buffer Zone where vegetation to be pruned should be identified since some species of vegetation cannot tolerate excessive pruning or topping. Selective pruning is often a preferred technique for the establishment of a view corridor.
3. Selective Thinning - Thinning as defined for CRMC purposes involves the selective removal of tree saplings, shrubs and vines occurring in brush areas and in the undergrowth of forested buffer zones. Applicants proposing thinning must describe in detail the work proposed, provide photographs and a site plan, and/or mark areas to be thinned on-site. The species of vegetation to be removed from a Coastal Buffer Zone management area must be differentiated from those species which are to be retained and encouraged. Selective thinning is often a preferred technique in areas where habitat management will be performed.
4. Restorative Planting - For purposes of Coastal Buffer Zone Management, restorative planting shall be strictly defined as the planting or replanting of **natural vegetation native to the Rhode Island shoreline**. However, naturalized species such as Rugosa Rose may be allowed, as determined by CRMC staff. The planting of non-native, landscape and exotic species, in most cases, shall not be considered appropriate in Coastal Buffer Zones.
5. Mowing - In most cases, mowing of vegetation within a Coastal Buffer Zone shall be prohibited unless associated with the establishment and maintenance of shoreline access path or approved shoreline recreation area. However, for certain habitat management options, annual or biannual mowing may be allowed to maintain field vegetation where such vegetation is considered valuable to wildlife and other natural values. In such cases, mowing shall be confined to **25%** of the Coastal Buffer Zone area, or less.
6. Clearing - Clearing or clear-cutting of vegetation within a Coastal Buffer Zone shall only be

allowed for the establishment of shoreline access paths, shoreline recreation areas and in certain cases, habitat management options which are designed to maintain a field of native grasses and herbaceous plants. Clearing shall not affect more than **25%** of the Coastal Buffer Zone area. Clearing for habitat management shall not be allowed in Coastal Buffer Zones of less than one acre.

7. Filling and grading - Minor filling (10 cubic yards or less) and grading shall only be allowed in Coastal Buffer Zone areas for the establishment of shoreline access paths and shoreline recreation areas. Certain minor cutting and filling activities may also be allowed on a case-by-case basis to promote these uses. Filling and grading shall not be allowed for habitat management options.

**Figure 10. Example of an adequate buffer zone management plan drawn by owner.**

