

## **Section 210.3 Coastal Wetlands**

### **A. Definitions**

1. Coastal wetlands include salt marshes and freshwater or brackish wetlands contiguous to salt marshes or geographical features. Areas of open water within coastal wetlands are considered a part of the wetland. In addition, coastal wetlands also include freshwater and/or brackish wetlands that are directly associated with non-tidal coastal ponds and freshwater or brackish wetlands that occur on a barrier beach or are separated from tidal waters by a barrier beach.
2. Salt marshes are areas regularly inundated by salt water through either natural or artificial water courses and where one or more of the following species predominate: smooth cordgrass (*Spartina alterniflora*), salt meadow grass (*Spartina patens*), spike grass (*Distichlis spicata*), black rush (*Juncus gerardi*), saltworts (*Salicornia* spp.), sea lavender (*Limonium carolinianum*), saltmarsh bulrush (*Scirpus* spp.), high tide bush (*Iva frutescens*).
3. Contiguous freshwater wetlands are those wetlands which border directly on salt marshes or brackish wetlands or geographical features and which, except for size limitations, meet the definition of bog, marsh, swamp, or pond under the Rhode Island Freshwater Wetlands Act (R.I.G.L. § 2-1-18 *et seq.*). All contiguous freshwater wetlands are protected under this Program, regardless of their size.
4. Contiguous brackish wetlands are those wetlands which border directly on salt marshes and where one or more of the following species predominate: tall reed (*Phragmites communis*), tall cordgrass (*Spartina pectinata*), broadleaf cattail (*Typha latifolia*), narrowleaf cattail (*Typha angustifolia*), spike rush (*Eleocharis rostellata*), chairmaker's rush (*Scirpus americana*), creeping bentgrass (*Agrostis palustris*) sweet grass (*Hierochloa odorata*), wild rye (*Elymus virginicus*).
5. High salt marsh is defined as that portion of the salt marsh that typically is flooded by spring, moon, or other flooding tides but otherwise is not flooded on a daily basis. The vegetative composition of high salt marsh typically consists of one or more of the following: salt meadow grass (*Spartina patens*); spike grass (*Distichlis spicata*); black rush (*Juncus gerardi*); tall reed (*Phragmites communis*); Sea Lavender (*Limonium carolinianum*); tall cordgrass (*Spartina pectinata*); saltmarsh bulrushes (*Scirpus* spp.); and high tide bush (*Iva frutescens*).
6. Low salt marsh is defined as that portion of the salt marsh that is flooded daily. The vegetative composition of the low salt marsh typically consists predominantly of smooth cordgrass (*Spartina alterniflora*).
7. Alterations to coastal wetlands are defined in Section 300.12.

### **B. Findings**

1. Coastal wetlands are important for a variety of reasons. They provide food and shelter for large populations of juvenile fish and are nurseries for several species of fish. The mud flats and creeks associated with many coastal wetlands are rich in shellfish, particularly soft-shelled clams. Coastal wetlands also provide important habitat for shore birds and waterfowl, and many are among the most scenic features of the Rhode Island shore. Coastal wetlands are effective in slowing erosion along protected shores.
2. Much of the original acreage of coastal wetlands in Rhode Island has been destroyed, and the pressures to fill coastal wetlands continue. Downtown Providence, much of Quonset, and many other low-lying coastal communities are built on what was once coastal wetland. We do not know how much coastal wetland has been destroyed by development, but some 10 percent of our coastal wetlands of 40 acres or more is reported to have been filled between 1955 and 1964. Since coastal wetlands are found in sheltered waters, they frequently coincide with attractive sites for marinas and waterfront homes. The pressures to fill or otherwise alter coastal wetlands therefore remain. According to a 1975 survey, there are some 3,700

acres of salt marsh in the state, of which some 10 percent were fringe marshes less than five yards wide. Approximately 90 percent of the state's salt marshes abut Type 1 and 2 waters.

3. Many of Rhode Island's wetlands are small and, when viewed in isolation, may appear to be of insignificant value. However, these wetlands serve important ecological functions. The Council has sponsored research to investigate the feasibility of rating the relative value of individual coastal wetlands and two years of research revealed that it is not possible to rate coastal wetlands if all ecological considerations are given equal weight. The study also showed that there is little if any correlation between the perceived scenic value of a coastal wetland and its ecological characteristics.

4. Land uses and activities abutting coastal wetlands may have a strong impact upon the wetland itself and wildlife that use the wetland. Nearby drainage patterns which affect sedimentation processes and the salinity of waters may easily be altered, with detrimental effects. The construction of new shoreline protection structures and the bulkheading and filling along the inland perimeter of a marsh prevents inland migration of wetland vegetation as sea level rises, and will very likely result in the eventual permanent loss of coastal wetlands in these circumstances.

5. A study by Hancock (2009<sup>1</sup>) using the Sea Level Affecting Marsh Model estimated that a combined 43.6%, or approximately 3300 acres, of existing salt marsh in Winnapaug, Quonochontaug and Ninigret Ponds would be lost in a 1 meter sea level rise scenario by 2100.

6. To ensure the long-term viability and ecological functions of salt marshes and other coastal wetlands, it is important to provide unobstructed pathways for these coastal wetlands to migrate landward as sea levels rise. Coastal Buffer Zones (Section 150) abutting coastal wetlands provide protected vegetated upland areas where coastal wetlands may migrate landward over time as sea levels rise.

7. In light of continuing pressures to alter coastal wetlands, and in accordance with the Council's policy of "no net loss", avoidance and minimization of impacts and mitigation for unavoidable losses are necessary tools for retaining and restoring Rhode Island's coastal wetlands.

### **C. Policies**

1. The Council's goal is to preserve and, where possible, restore all coastal wetlands.

2. To offset past losses in coastal wetlands and unavoidable alterations to surviving coastal wetlands: (a) disturbed wetlands should be restored as directed by the Council or enhanced when possible; and (b) in areas selected on the basis of competent ecological study, the Council will encourage the building of new wetlands.

3. The Council's policy is that all alterations to salt marshes and contiguous freshwater or brackish wetlands abutting Type 1 waters are prohibited except for minimal alterations required by the repair of an approved structural shoreline protection facility (see Section 300.7), or when associated with a Council-approved restoration activity. In Type 1 waters, structural shoreline protection may be permitted only when used for Council-approved coastal habitat restoration projects.

4. It is the Council's policy that alterations to salt marshes and contiguous freshwater or brackish wetlands abutting Type 2 waters are prohibited except for minor disturbances associated with (a) residential docks and wetland walkover structures approved pursuant to the standards set forth in Sections 300.4 and 300.17, respectively; (b) approved repair of structural shoreline protection facilities pursuant to Section 300.14; or, (c) Council-approved restoration activities.

5. Coastal wetlands designated for preservation adjacent to Type 3, 4, 5, and 6 waters are identified on maps available for inspection at the Council's offices and at the town halls of coastal cities and towns. In these designated wetlands only the alterations described in #4 above may be permitted. Dredging and filling in these designated coastal wetlands are prohibited. The maps of designated coastal wetlands serve to identify individual wetlands; in all cases precise boundaries shall be determined through a field inspection

when proposals that could impact these features are being considered. In support of this goal, the Council supports a policy of "no net loss" of coastal wetland acreage and functions as a result of coastal development.

6. Salt marshes adjacent to Type 3, 4, 5, and 6 waters that are not designated for preservation may be altered if: (a) the alteration is made to accommodate a designated priority use for that water area; (b) the applicant has examined all reasonable alternatives and the Council has determined that the selected alternative is the most reasonable; and (c) only the minimum alteration necessary to support the priority use is made.

7. Any alteration of coastal wetlands shall be consistent with Section 300.12.

8. It is the Council's goal to provide for maximum Coastal Buffer Zone widths for projects abutting coastal wetlands that are adjacent to Type 1 and 2 waters and for coastal wetlands designated for preservation adjacent to Type 3, 4, 5, and 6 waters. In those cases where the Council may grant a variance on small lots the minimum Coastal Buffer Zone width should be no less than 25 feet.

9. It is the Council's goal to provide maximum Coastal Buffer Zone widths for projects abutting coastal wetlands that are likely, based on site conditions and best available information, to migrate landward with sea level rise. These coastal wetlands do not abut seawalls, bulkheads or other structural shoreline protection facilities or elevated landforms such as bluffs, cliffs, or rocky shorelines, among others. These unobstructed coastal wetlands will migrate landward as sea level rises and Coastal Buffer Zones provide protected upland areas that may transition to coastal wetlands in the future.

#### **D. Prohibitions**

1. Alterations to salt marshes and contiguous freshwater or brackish wetlands abutting Type 1 waters are prohibited except for minimal alterations required by the repair of an approved structural shoreline protection facility, or when associated with a Council-approved restoration activity. In Type 1 waters, structural shoreline protection may be permitted only when used for Council-approved coastal habitat restoration projects.

2. Alterations to salt marshes and contiguous freshwater or brackish wetlands abutting Type 2 waters are prohibited except as may be permitted in C.4 above.

3. Alterations to coastal wetlands designated for preservation adjacent to Type 3, 4, 5, and 6 are prohibited except for the activities as may be permitted in C.4 above. Dredging and filling in these designated coastal wetlands are prohibited.

<sup>1</sup> Hancock, Robert. 2009. Using GIS and simulation modeling to assess the impact of sea level rise on coastal marshes. [http://nrs.uri.edu/docs/nrs600/2009/AbstractsPDF/Hancock\\_Abstract\\_2009.pdf](http://nrs.uri.edu/docs/nrs600/2009/AbstractsPDF/Hancock_Abstract_2009.pdf)