

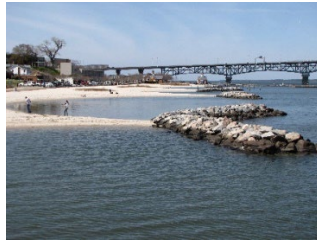


MapMyShore v. 1.0

Glossary of Shoreline Features

Coastal Erosion Protection Structures

Breakwater - Structures that sit offshore below mean low water, and generally occur in a parallel series along the shore. Typically, breakwater systems include sand nourishment to create or enhance an existing beach. Breakwaters are typically constructed of rock and distinguished from rock sills by the size of the structures, distance offshore, and presence of a sand beach instead of a tidal marsh landward from the structures.



Bulkhead - Vertical structures, generally built just seaward of the area to be protected and backfilled with fill material. They function like a retaining wall, as they are designed to retain upland soil, and prevent erosion of the bank from impinging waves. Bulkheads are traditionally built of treated wood, steel, vinyl or plastic.



Coir Log – Biodegradable structures consisting of interwoven coconut or other natural fibers bound together with netting.



Groin - Vertical structures situated perpendicular to the shore, generally placed from the uplands into the waterway. They may be constructed of rock, timber, vinyl, concrete, or other material. They are frequently set in a series known as a “groinfield”, which may extend along a stretch of shoreline for some distance.



Oyster Structure - A structure placed in the intertidal or subtidal zone designed to reduce coastal erosion and promote the settlement and growth of oysters. Typically constructed parallel to shore and may replicate a reef feature.

Oyster Structure Type Definitions

- **Bagged Oyster Shell** - A structure composed of oyster shells contained in a netting that bundles the shells together.
- **Oyster Catcher™ (SANDBAR)** – Composite reef substrates derived from cement infusion of plant- based cloths and molded into different shapes such as tables, pretzels and pillows that can be stacked and tiered to increase settlement surface area.
- **ExoForms™ (NatrX)** - A patented custom reef module using a 3-D printer and concrete mixes to create interlocking, naturalistic reef structures.
- **Loose Shell** - Mounds of uncontained shell placed near the intertidal zone.
- **Oyster Castles** - A precast concrete structure (essentially a modified concrete block) in the shape of a “castle” placed in the intertidal or subtidal zone designed to reduce coastal erosion and promote the settlement and growth of oysters. Oyster castles may be stacked on top of each other to form a sill and may also occur in a series or an array (pattern).
- **Pyramids (e.g., Ready Reef)**: A precast prism-shaped structure that may embed and incorporate oyster shells within the structure to encourage oyster set. Sometimes made of concrete or hollow metallic material and may occur in a series or array (pattern).
- **Quick Reef® (Native Shorelines)**- Structures comprised primarily of native coastal materials such as limestone marl and oyster shells that are cemented together. The units have protected interstitial spacing to encourage oyster recruitment.
- **Reef Ball** – A pre-cast, spherical, hollow, free-standing structure made from a mixture of sand, concrete, and pea gravel. The design includes numerous nooks and crannies, which encourage oyster larvae to attach to both the external and internal surfaces.

Revetment - A structure, usually made of rock, sloped against the upland bank to prevent erosion.



Rock Sill - A free-standing structure made of rock designed to support its own weight without relying on other structures for support. It is positioned parallel to and offshore from the feature it is meant to protect.

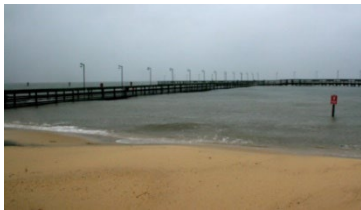


Cultural Features

Cultural Feature - A man-made or natural feature existing along a shoreline (e.g., historic house, cemetery, or unique geologic formation) culturally important to the community.

Natural Shoreline Buffers

Beach – A persistent sandy shore that is visible during high tides. These features can be wide or narrow.



Dune – An elevated mound or ridge of sand found landward of beaches and sometimes near vegetated marshes. They form through the accumulation of wind-blown sand and are often higher in elevation compared to the adjacent beach. Dunes can serve as important natural barriers, providing protection against coastal erosion and supporting various plant and animal habitats.



Tidal Marsh – A wetland area regularly inundated by tidal waters and influenced by the ebb and flow of the tides, covered by at least 20 square feet in area of herbaceous, emergent vegetation typically adapted to freshwater, saltwater or brackish conditions. Tidal marshes provide habitat for various species, contribute to water filtration, and help stabilize shorelines by reducing erosion.



Dominant Tidal Marsh Plants

Saltmarsh Cordgrass (*Spartina alterniflora*) - Marsh dominated by (>50% cover) saltmarsh cordgrass (*Spartina alterniflora*). Ranges from mean sea level to approximately mean high water.



Saltgrass (*Distichlis spicata*) - Marsh dominated by (>50% cover) saltgrass (*Distichlis spicata*). Found at about mean high tide to the limit of spring tides in wetter, more saline parts of the high marsh and along margins of depressions in the high marsh.



Saltmeadow Hay (*Spartina patens*) - Marsh dominated by (>50% cover) saltmeadow hay (*Spartina patens*). Found at about mean high tide to the limit of spring tides; saltmeadow hay predominates at the higher end of the range.



Black Needlerush (*Juncus roemerianus*) - Marsh dominated by (>50% cover) black needlerush (*Juncus roemerianus*). Found at about mean high water to somewhat below springtide limit. Seems to prefer sandy substratum.



Marsh Elder (*Iva frutescens*) - Marsh dominated by (>50% cover) marsh elder (*Iva frutescens*). Lower limit is approximately the upper limit of marsh (marsh-upland ecotone).



Big Cordgrass (*Spartina cynosuroides*) - Marsh dominated by (>50% cover) big cordgrass (*Spartina cynosuroides*). Found at or slightly above mean high water and extending to the upland margin. Most common in brackish or low salinity marshes.



Narrowleaf cattail (*Typhus angustifolia*) - Marsh dominated by (>50% cover) narrow-leaved cattails (*Typha angustifolia*). Located at brackish and tidal fresh marshes also nontidal wetlands, sometimes in standing water, often at the margin of marsh and uplands. Does well in seepage areas resulting from upland runoff and groundwater flow.



Broad-leaved cattail (*Typhus latifolia*) - Marsh dominated by (>50% cover) cattails (*Typha latifolia*). Located at very wet sites, sometimes in standing water, often at the margin of marsh and uplands. Does well in seepage areas resulting from upland runoff and groundwater flow. This species hybridizes with *T. angustifolia*.



Arrow Arum (*Peltandra virginica*) - Marsh dominated by (>50% cover) arrow arum (*Peltandra virginica*). Found on tidal mud flats from mean sea level to about mean high tide in low salinity or freshwater marshes.



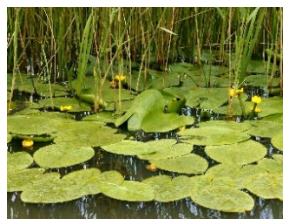
Pickerelweed (*Pontederia cordata*) - Marsh dominated by (>50% cover) pickerelweed (*Pontederia cordata*). Found on tidal mud flats from mean sea level to about mean high tide in low salinity or freshwater marshes.



Common Reed (*Phragmites australis*) - Marsh dominated by (>50% cover) reed grass (*Phragmites australis*). Usually located above mean high tide in brackish and low salinity wetlands, drier areas on disturbed sites.



Yellow Pond Lily (*Nuphar luteum*) - Marsh dominated by (50% cover) yellow pond lily (*Nuphar luteum*). Primarily submerged except for floating leaves at high tide. Found in freshwater areas.



Saltwort (*Salicornia spp.*) - Marsh dominated by (>50% cover) saltwort (*Salicornia spp.*). Located above means high tide in pannes or sparsely vegetated areas.



Freshwater Mix - No dominant species - Marsh predominantly freshwater species, with no single species dominant (>50% cover). Located from submerged to the upper limits of the wetlands.

Brackish Mix - No dominant species - Marsh predominantly brackish or saltwater species, with no single species dominant (>50% cover). Location extends from about mean sea level to the upland margin.

Phragmites

Phragmites australis –*Phragmites australis* is an invasive wetland plant known to thrive in areas that have experienced disturbance. Common names include common reed and reed grass.



Recreational/Navigational Features

Boathouse – A covered structure alongside a dock or pier built to cover a boat. They include structures with a roof and siding, as well as awnings that offer only overhead protection.



Boat Ramp - A relatively shallow sloped feature situated perpendicular to the shoreline and extending from the upland to below water used to launch vessels of all types. They are typically constructed of concrete, but wood and gravel ramps are also found. This inventory attempts to distinguish, when possible, private versus public ramps.

- **Private Boat Ramp** – Ramps located in privately owned, commercial marinas and residential communities.
- **Public Boat Ramp** – Ramps open for public use, generally located in public parks or at the end of public roads.



Community Dock/Pier – A dock for communal use by the public, residents or multiple owners for boating or other recreational uses. These facilities may have multiple boat slips. They are defined by exclusion- not a single pier on a residential property and not commercial or industrial use. They are associated with condominiums or waterfront neighborhoods, parks, or municipal facilities.



Dock/Pier - A structure extending perpendicular or parallel to the shore, typically built with pilings driven into the substrate and topped with pressure-treated wood or plastic decking. It provides a walking surface over the marsh or water and can serve as a place to moor vessels.



Jetty – A structure situated perpendicular to the shoreline and generally located near channels and other places associated with navigation, such as the entrance of tidal creeks and tributaries, boat ramps, or marina boat basins.



Marina – An area designed for the docking and storage of boats, such as yachts and other recreational vessels. It typically provides various services, including mooring, fueling, and maintenance for these boats.



Wharf –A shore-parallel structure where large ships or vessels are moored parallel for loading and unloading of cargo or passengers. Wharves are generally associated with large industrial, public or commercial facilities. They are also common on military or government facilities where large ships or vessels are tied. If there are piers, they are typically solid-filled concrete.



Land Use/Cover Adjacent to Shoreline

Agricultural – Land used for farming activities like animal husbandry and crop cultivation.



Industrial/Commercial - Industrial and commercial land uses have been combined. Industrial operations are larger commercial businesses and can include areas where power plants, pulp mills, refineries, etc. Commercial is a land use classification denoting small commercial operations such as shops, restaurants, marinas, golf courses, schools, cemeteries, and campgrounds.



Land Use – The predominant condition of land within an area extending 100 feet inland from the shoreline.

Paved – A land cover comprised of roads or other areas with concrete or tarmac surfaces to provide for vehicle travel or parking. Maybe adjacent to the shore or associated with commercial and boat-use areas.



Residential – Land use indicated by the presence of single and multi-family dwellings.



Shoreline Bank Condition

Bank Height –Bank height is the elevation difference between the bottom and top of a bank. The bottom of the bank is essentially the water line and is approximately at the level of high tide. Heights are classified into four categories: 0-5 ft, 5-15 ft, 15-30 ft, and >30 ft.



0-5 ft



5-15 ft

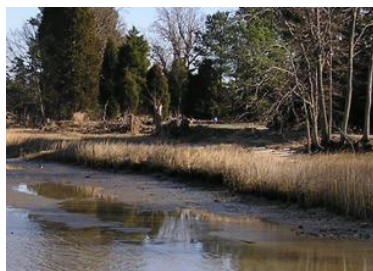


15-30 ft



>30ft

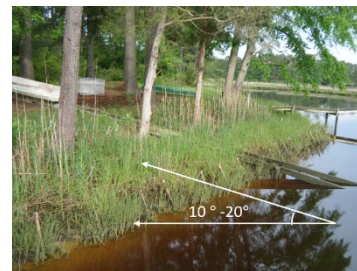
Bank Slope - Bank slope refers to the inclined surface along the edge of a waterway within the 100-ft buffer of the shoreline. It is the area that slopes down from the higher ground to the water level, forming the edge of the waterbody. The slope can vary in steepness and stability and these characteristics can influence erosion, sediment deposition, vegetation establishment, and habitat quality for aquatic and terrestrial organisms. Bank Slope has been characterized into four categories: Flat (<5% / <2.9 degrees slope), Low Slope (5-17.6% / 2.9 - 10-degree slope), Moderate Slope (17.6% - 36% / 10 - 20-degree slope), Steep Slope (36-100% / 20 - 45-degree slope) and Very Steep Slope (>45 degrees).



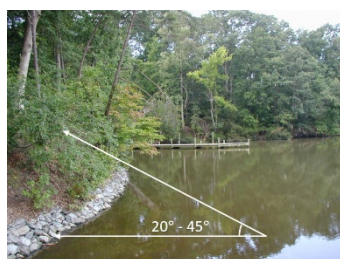
Flat



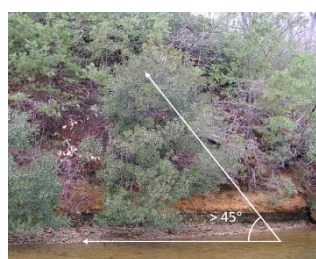
Low Slope



Moderate Slope



Steep Slope



Very Steep Slope