26.24.01.

.02 Definitions.

A. In this subtitle, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Administration" means the Water Management Administration, a unit of the Department of the Environment designated by the Secretary of the Environment to administer Environment Article, Title 16, Annotated Code of Maryland.

(2) "Administrative Procedure Act" means the provisions of State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland.

(3) "Aggrieved party" means an applicant, licensee, permittee, the Department, the county or municipal government where the proposed activity is located, or a person **[**whose rights, duties, statutory entitlements, privileges, or other substantial interests may be directly impacted by the regulated activity**]** *who has a specific right, duty, privilege, or interest which is or may be adversely impacted by the permit determination or license decision and which is different from that held by the general public*.

(4) "Aquaculture" means the commercial rearing of fish including shellfish and aquatic plants listed in COMAR 08.02.14.07, or otherwise permitted by that chapter.

(5) "Best management practices" means conservation practices or systems of practices and management measures that:

(a) Control soil loss and reduce water quality degradation caused by runoff, nutrients, animal waste, toxicants, and sediment if best management practices do not dredge or fill tidal wetlands; and

(b) Minimize adverse impacts to the surface water, ground water flow, circulation patterns, and to the chemical, physical, and biological characteristics of tidal wetlands.

(6) "Board" means the Board of Public Works.

(7) "Boathouse" means a structure with a roof or cover, or similar device placed over open water to protect a boat or other vessel.

(8) "Breakwater" means an offshore structure designed to protect any landform or water area behind them from direct assault of waves.

(9) "Buffer Management Plan" means, for each portion of the Critical Area Buffer that will be disturbed in connection with the performance of a shore erosion control activity, a detailed plan of the Critical Area Buffer that shows:

(a) All existing vegetation, including all vegetation that is proposed for removal;

(b) The limits of disturbance by location and by square footage, including grading, clearing of natural vegetation, means of access for construction, and any permanent impacts associated with the structure proposed for shore erosion control; and

(c) A planting plan and mitigation strategy to:

(i) Offset disturbance in the Critical Area Buffer associated with the shore erosion control activity; and

(ii) Restore the area with native vegetation, including the number, size, species, location, and spacing of the planting materials; and

(d) Any other element as required by the local critical area program.

(10) "Bulkhead" means a vertical structure composed of wood, stone, concrete, plastic, or other similar material designed to retain land or to protect land from wave damage.

[(8)**]** *(11)* "Containment structure" means a facility designed for the sole purpose of accepting and confining dredged material from tidal waters while allowing the release of effluent, and excludes those structures designed to contain, impound, or obstruct the waters of the State as defined by Environment Article, §5-501, Annotated Code of Maryland.

[(9)**]** *(12)* "Coastal **[**bays**]** *Bays*" means the estuaries situated between Maryland's Atlantic Ocean barrier islands and the opposing shoreline of the mainland which include Chincoteague Bay, Sinepuxent Bay, Isle of Wight, Newport Bay, Assawoman Bay, and the St. Martin River.

[(10)**]** *(13)* "Critical Area" means the Chesapeake **[**Bay**]** *and Atlantic Coastal Bays Critical Area*, including all waters and lands designated under Natural Resources Article, §8-1807, Annotated Code of Maryland, consisting of waters of and lands under the Chesapeake **[**Bay**]** *and Atlantic Coastal Bays*, and**[** its**]** *their* tributaries to the head of the tide as indicated on the State wetland boundary maps, and all State and private wetlands designated under Environment Article, Title 16, and all land and water areas within 1,000 feet beyond the landward boundaries of State or private wetlands, and the heads of tides designated under Environment Article, Title 16, and the area beyond 1,000 feet designated by local critical area programs to protect sensitive areas, except developed, urban areas excluded by a local jurisdiction under a State-approved local critical area program.

[(11)**]** *(14)* "Critical Area **[buffer]** *Buffer*" means **[**a naturally vegetated area or vegetated area established or managed to protect aquatic, wetland, shoreline, and terrestrial environments from manmade disturbances as defined in the State-approved local critical area program, COMAR 27.01.01 AND 27.02.01**]** *in accordance with Title 8, Subtitle 18 of the Natural Resources Article and Title 27 of the Code of Maryland Regulations, an existing, naturally vegetated area, or an area established in vegetation and managed to protect an aquatic, wetland, shoreline, and terrestrial environment from man-made disturbance*.

[(12)**]** *(15)* "Department" means the Department of the Environment.

[(13)**]** *(16)* "Direct discharge" means the concentrated release of storm water to tidal waters or vegetated tidal wetlands from new development or redevelopment projects in the Critical Area.

[(14)**]** *(17)* "Director" means the Director of the Water Management Administration.

[(15)**]** *(18)* "Dredging" means the removal or displacement by any means of soil, sand, gravel, shells, or other material, whether or not of intrinsic value, from any State or private tidal wetlands.

[(16)**]** *(19)* "Emergency condition" means a sudden, unforeseen occurrence caused by act of God, natural disaster, or other similar natural event or catastrophe when the health, safety, or welfare of the citizens of the State would be jeopardized by a delay in issuance of a license or permit.

[(17)**]** *(20)* "Endangered species" means species of fish, wildlife, or plants designated by regulation by the Secretary *of Natural Resources*. Endangered species includes an endangered species designated under federal law.

(21) "Fetch" means the linear distance of open water where waves are generated by the prevailing winds of a certain direction, speed, and duration.

[(18)**]** *(22)* Filling.

(a) "Filling" means the:

(i) Displacement of tidal water by the depositing into State or private wetlands of soil, sand, gravel, shells, or other materials, including pilings, piers, boathouses, deadweights, or riprap;

(ii) Artificial alteration of tidal water levels by any physical structure, drainage ditch, or otherwise; or

(iii) Storm drainage projects which flow directly into tidal waters of the State.

(b) "Filling" does not include:

(i) Drainage of agricultural land;

(ii) In-place replacement or repair of functional shore erosion control structures using substantially similar materials and construction design;

(iii) Planting of wetlands vegetation when no grading or fill in State or private wetlands is necessary; or

(iv) Marking channels and harbors and establishing aids to navigation if approval has been granted by the United States Coast Guard.

[(19)**]** *(23)* "Fish" means finfish, crustaceans, mollusks, amphibians, and reptiles which spend the majority of their life cycles in water and any part, egg, offspring, or dead body of any of these species.

[(20)**]** *(24)* "Functional" means performing at least 85 percent of the action that a structure was originally designed to perform.

[(21)**]** *(25)* "General wetland license" means written authorization from the Department for certain activities described in this subtitle and previously approved by the Board of Public Works.

[(22)**]** *(26)* "General wetland permit" means written authorization from the Department for certain activities described in this subtitle.

(27) "Groin" means a shore protection structure built perpendicular to the shore to trap sand and retard shoreline erosion.

[(23)**]** *(28)* "Historic property" means a district, site, building, structure, monument, or object significant in the prehistory, history, upland and underwater archeology, architecture, engineering, and culture of the State, including artifacts, records, and remains related to a district, site, building, structure, or object.

[(24)**]** *(29)* "In kind" means having characteristics closely approximating original characteristics, including those of a vegetated tidal wetland before that wetland was adversely impacted, or replacement of a structure with a structure of similar materials and dimensions.

[(25)**]** *(30)* "In the dry" means activities performed above or landward of the mean high water line and all tidal wetland vegetation.

[(26)**]** *(31)* "Landward boundary of tidal wetlands" means the common boundary between upland or nontidal wetlands, and State or private wetlands, as defined in this subtitle.

[(27)**]** *(32)* "License" means written authorization by the Board of Public Works under Environment Article, §16-202, Annotated Code of Maryland, to dredge, fill, construct structures, or conduct certain other activities involving State tidal wetlands which conveys a limited property interest.

(*33) "Living shorelines" or "Living shoreline" means a suite of stabilization and erosion control measures that preserve the natural shoreline and are designed to minimize shoreline erosion, maintain coastal processes, and provide aquatic habitat. Measures must include marsh plantings and may include the use of sills, sand containment structures, breakwaters or other natural components.*

[(28)**]** *(34)* "Maintenance dredging" means the removal or displacement by any means of soil, sand, gravel, shells, or other material, whether or not of intrinsic value, from any

State or private tidal wetlands, that restores a navigation channel, marina, or mooring basin to depths confirmed after 1972.

[(29)**]** *(35)* "Marina" means a facility for the mooring, docking, or storing of more than ten vessels on tidal navigable waters, including a commercial, noncommercial, or community facility.

[(30)**]** *(36)* "Mean higher high water" means the average of the higher high water height of each tidal day observed over the national tidal datum epoch, including a spring tide.

[(31)**]** *(37)* "Mean high water" means the average of all the high water levels observed over the national tidal datum epoch.

[(32)**]** *(38)* "Mean high water line" means the line where the land meets the water surface at the elevation of mean high water.

[(33)**]** *(39)* "Mean low water" means the average of all the low water levels observed over the national tidal datum epoch.

[(34)**]** *(40)* "Mitigation" means the creation, restoration, or enhancement of tidal wetlands lost or damaged due to dredging or filling.

[(35)**]** *(41)* "National tidal datum epoch" means the specific 19-year period adopted by the National Ocean Service as the official time segment over which tidal observations are taken and reduced to obtain mean values for tidal datums.

(42) "Non-structural shoreline stabilization project" means a suite of stabilization and erosion control measures that preserve the natural shoreline and are designed to minimize shoreline erosion, maintain coastal processes, and provide aquatic habitat. Measures must include marsh plantings and may include the use of sills, sand containment structures, breakwaters or other natural components.

[(36)**]** *(43)* "Nontidal wetland" means an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation, and is determined according to the Corps of Engineers Wetlands Delineation Manual, 1987.

[(37)**]** *(44)* "Non-water-dependent structure or activity" means a temporary or permanent structure or activity, which by reason of its intrinsic nature or operation does not require location in or over State or private tidal wetlands.

[(38)**]** *(45)* "Out of kind" means having characteristics not closely approximating those of a tidal wetland before that wetland was adversely impacted, or replacement of a structure with a structure of dissimilar materials or dimensions.

[(39)**]** *(46)* "Permit" means written authorization by the Department to dredge, fill, construct structures, or to conduct certain other activities involving private tidal wetlands.

[(40)**]** *(47)* "Person" means any natural person, partnership, joint stock company, unincorporated association or society, *the federal government*, the State, any unit of the State, a political subdivision, or other corporation of any type.

[(41)**]** *(48)* Pier.

(a) "Pier" means any fixed or floating pier, wharf, dock, walkway, or other similar water-dependent structure constructed on or over State or private tidal wetlands for the purpose of gaining access to the navigable waters of the State.

(b) "Pier" does not include a structure on pilings or stilts that was constructed before December 2, 1985, landward of the tidal wetland boundaries.

[(42)**]** *(49)* "Private tidal wetlands" means:

(a) Land not considered State wetland bordering on or lying beneath tidal waters, which is subject to regular or periodic tidal action and supports aquatic growth;

(b) Tidal wetlands transferred by the State by a valid lease, patent, or grant confirmed by Article 5 of the Maryland Declaration of Rights, to the extent of the interest transferred; and

(c) Tidal waters created by the excavation of upland unless conveyed to the State.

[(43)**]** *(50)* "Public informational hearing" means a meeting, open to the public, at which the applicant or the Department presents information concerning a permit or license and the Department receives oral and written comments concerning a decision to issue or deny a permit or a license. A public informational hearing is not a contested case hearing under State Government Article, §10-202(d), Annotated Code of Maryland.

[(44)**]** *(51)* "Regular or periodic tidal action" means the rise and fall of the sea produced by the attraction of the sun and the moon uninfluenced by wind or any other circumstances.

[(45)**]** *(52)* Repair.

(a) "Repair" means an activity that restores the scope, size, and design of a functional structure to its previously authorized, undamaged condition.

(b) "Repair" does not include activities that change the size or scope of a project beyond the original design and dredge or fill tidal wetlands that were not previously impacted by the project.

[(46)**]** *(53)* "Restoration" means reestablishment of tidal wetlands on former tidal wetland sites.

[(47)**]** *(54)* "Revetment" means an assemblage of stones or concrete, commonly known as riprap, placed to prevent shore erosion, fortify a bulkhead, or stabilize an embankment.

[(48)**]** *(55)* "Riparian landowner" means a property owner whose land borders on tidal wetlands or waters of the State.

[(49)**]** *(56)* "Riparian rights" means the rights of an owner of land bordering on tidal wetlands or waters of the State as recognized by Environment Article, Title 16, Annotated Code of Maryland.

(57) "Sand Containment Structure" means a low profile structure built perpendicular to the shoreline to contain sand emplaced to establish a living shoreline project.

[(50)**] (***58)* "Shallow water habitat" means aquatic habitat less than 3 feet in depth at mean low water.

(59) "Sill" means a low profile offshore structure designed to retain sand and marsh on its landward side and generally constructed parallel to the shoreline and with a crest at or slightly above the elevation of mean high water.

[(51)**]** *(60)* "Species in need of conservation" means species of fish, wildlife, or plants designated by regulation by the Secretary *of Natural Resources*.

[(52)**]** *(61)* "State tidal wetlands" means any land under the navigable waters of the State below the mean high tide, affected by the regular rise and fall of the tide. Tidal wetlands of this category which have been transferred by the State by a valid lease, patent, or grant confirmed by Article 5 of the Maryland Declaration of Rights are considered private tidal wetlands to the extent of the interest transferred.

[(53)**]** *(62)* "State water quality certification" means the certification issued by the Department of the Environment under COMAR 26.08.02.

[(54)**]** *(63)* "Structures" means building or construction materials, or a combination of the materials, assembled or joined together. "Structures" includes:

(a) Temporary or permanent fixed or floating piers, pilings, decks, walkways, dwellings, buildings, boathouses, platforms, gazebos, or shelters for marine access, navigation, working, eating, sleeping, or recreating; and

(b) Bulkheads, gabions, revetments, groins, breakwaters, jetties, beach beams, or other devices for erosion control or protection of vessels.

[(55)**]** *(64)* Submerged Aquatic Vegetation.

(a) "Submerged aquatic vegetation (SAV)" means a vascular hydrophyte, which is rooted or unrooted, that lies entirely beneath the surface of the water except for the flowering parts of some species. Examples include Zannichellia palustris, Ruppia sp., and Potamogeton sp.

(b) "Submerged aquatic vegetation" does not include algae.

[(56)**]** *(65)* "Threatened species" means species of fish, wildlife, or plants designated by regulation by the Secretary *of Natural Resources*.

[(57)**]** *(66)* "Tidal wetlands" means all State and private tidal wetlands, marshes, submerged aquatic vegetation, lands, and open water affected by the daily and periodic rise and fall of the tide within the Chesapeake Bay and its tributaries, the coastal bays adjacent to Maryland's coastal barrier islands, and the Atlantic Ocean to a distance of 3 miles offshore of the low water mark.

[(58)**]** *(67)* "Tidal wetland boundary map" means a map or aerial photograph on a scale of 1 inch to 200 feet that delineates the landward boundary of tidal wetlands and is adopted by the Department.

[(59)**]** *(68)* "Unified soil classification system" means a classification system used to classify sedimentary materials by grain size into gravel, silt, and clays. It is the principal classification system used by engineers, and its boundaries correspond to U. S. standard sieve sizes.

[(60)**]** *(69)* "Upland" means any area that does not qualify as a tidal or nontidal wetland.

[(61)**]** *(70)* "Utility line" means an underground or overhead transmission line, conduit pipe, cable, or wire for the conveyance of public or private water, sewage, natural gas, or petroleum, or the transmission of electricity or telecommunications.

[(62)**]** *(71)* "Water dependent" means a temporary or permanent structure or activity, which by reason of its intrinsic nature or operation, requires location in or over State or private wetlands.

26.24.04.

.01 Shore Erosion Control.

A. In addition to the requirements of COMAR 26.24.02.02, an applicant for a shore erosion control project shall submit the following information at the time of application:

(1) An alternatives analysis demonstrating that the relocation of any threatened structures will not eliminate the need for the shore erosion control project.

(2) An 8-1/2-inch by 11-inch plan of the proposed project showing:
- (a) Location,
- (b) Land ownership,
- (c) Existing and proposed contours,
- (d) Existing and proposed structures,
- (e) Buildings,
- (f) Roads,

(g) Drainage features,
(h) Adjacent shoreline features,
(i) Equipment storage areas;
(j) Methods to control upland runoff and erosion, if applicable, **[**and**]**
(k) Type of materials to be used in construction;
(l) Near-shore bathymetry; and
(m) An approved waiver form if the project qualifies for structural shoreline stabilization.

(2) Photographs of the project site and the adjoining shoreline; **[**and**]**
(3) Alternatives analysis, including the no action alternative and the justification for rejecting environmentally preferable alternatives under §**[**C(5)**]** D of this regulation*; and*
(4) (a) A proposed Buffer Management Plan for the Critical Area Buffer from tidal waters, tidal wetlands, or tributary streams including all appropriate written descriptions, specifications, protective agreements, and bonding instruments or other financial sureties necessary to ensure proper implementation of the Plan and appropriate long-term protection and maintenance of all vegetation; and
(b) Evidence of delivery of the proposed Buffer Management Plan and the associated shoreline erosion control plans, including all supporting documentation, to the State Critical Area Commission and to the local Critical Area program.

B. Based on project size and scope, environmental sensitivity of the project site, and potential adverse impacts to tidal wetlands, the Department may, with notice to the applicant by telephone, letter, or meeting, require information in addition to §A of this regulation. The Department recommends that an applicant consult with the Department before developing and submitting the following information:
(1) A design report that includes:
(a) A foundation investigation,
(b) A structural analysis,
(c) Structural properties of materials,
(d) Design life expectancy of the project and estimated benefits derived;

(2) A description of the method and sequence of construction that includes:
(a) Construction dates and time required, including estimated beginning and completion dates,
(b) Equipment to be used,
(c) Proposed access to site,
(d) Foundation excavations,
(e) Construction steps,
(f) Means for diverting water away from the project during construction, and
(g) Means for controlling the dewatering discharges.

(3) Specific references used by the designer; and

(4) Predicted impact of the project on adjacent properties.

C. Design Guidelines.

(1) Specifications shall be written to ensure that design criteria, with regard to the quality of the materials and methods of construction, will be met or exceeded.

(2) A shore erosion control project that includes the reclamation of lost upland shall meet the requirements of COMAR 26.24.03.06C- F.

(3) The design shall include measures to avoid and minimize impacts to *wildlife*, fish, and plant habitat. Projects may not be authorized when:

(a) The Department has no evidence of erosion and the applicant is unable to document a claim of erosion;

(b) Existing tidal wetlands are adequately serving as a buffer against erosion;

(c) Adjacent properties may be adversely affected by the proposed method of erosion control;

(d) Navigation may be adversely affected by the project and the applicant has not made provisions to offset these impacts;

(e) Threatened or endangered species, species in need of conservation, or significant historic or archaeological resources may be adversely affected by the project; **[**or**]**

(f) Natural oyster bars or private oyster leases may be adversely affected by the project*; or*

(g) ***For shore erosion control projects,*** *the Department has not received a copy of the Buffer Management Plan approved by the local Critical Area program.*

(4) Upon receipt of the locally approved Buffer Management Plan, the applicant shall provide a copy of the Plan to the State Critical Area Commission.

(5) (a) Mitigation planting required by an approved Buffer Management Plan shall occur immediately after the approved shore erosion control project has been completed or, if project completion occurs during a time of year that is unseasonable for planting, during the next planting season.

(b) If project completion occurs during a time of year that is unseasonable for planting, the Buffer Management Plan shall include plans for stabilization of the Critical Area Buffer until mitigation planting is complete.

[(4)**]** *(6)* Encroachment into State tidal wetlands is limited to that which is structurally necessary. Bulkheads that encroach into tidal wetlands in excess of 3 feet beyond the mean high water line are prohibited, unless a design report verifies the necessity for the encroachment, and that other structural and nonstructural alternatives have been considered and determined to be impractical. The design report shall distinguish between shore erosion and bank stabilization requirements.

[(5) Erosion control measures requiring a tidal wetlands permit or license shall be considered in the following order of preference:

(a) No action and relocation of structure;

(b) Nonstructural shoreline stabilization, including beach nourishment, marsh creation, and other measures that encourage the preservation of the natural environment;

(c) Shoreline revetments, breakwaters, groins, and similar structures designed to ensure the establishment and long-term viability of nonstructural shoreline stabilization projects;

(d) Shoreline revetments;

(e) Breakwaters;

(f) Groins; and

(g) Bulkheads.

[(6) Structural shore erosion control projects that employ jetties, groins, breakwaters, or other offshore structures shall be designed to allow natural littoral movement of sand along the shoreline. Projects that induce erosion or undesirable shoaling in adjacent areas are prohibited.

(7) Structural control measures may be allowed if they are determined to be appropriate for the specific site. The Department shall consider the following factors:

(a) High energy shoreline -- severely eroding shorelines where nonstructural methods are impractical;

(b) Inaccessible shoreline -- landform characteristics such as very steep, high banks, and nearshore shallow water that prohibits both land or barge access necessary for the transportation of construction materials to the site; and

(c) Commercial vessel berthing -- commercial water-dependent facilities when loading and unloading operations require a bulkheaded shoreline.

(8) Structural erosion control measures shall be designed to use materials such as stone or broken concrete, wood, metal, plastic, or other similar materials that are:

(a) Of adequate size, weight, and strength to function as intended;

(b) Free of protruding objects; and

(c) Selected because they minimize impacts to water quality and plant, fish, and wildlife habitat.

(9) Backfill material shall be free of materials such as junk, metal, tree stumps, logs, or other unsuitable materials.

(10) Structural shore erosion control projects shall be designed to prevent damage due to scour.**]**

D. Nonstructural Shoreline Stabilization Measures.

(1) Nonstructural shoreline stabilization measures, including beach nourishment, marsh creation, and other measures that encourage the preservation of the natural environment, shall be used to control erosion, except in the following areas:

(a) Areas identified by the Department, in coordination with the Maryland Geological Survey, and shown on maps approved by the Department as appropriate for structural shoreline stabilization measures; and

(b) Areas where the applicant has obtained a waiver from the Department by demonstrating, to the Department's satisfaction, that nonstructural shoreline stabilization measures are not feasible for the site.

E. Structural Shoreline Stabilization Maps.

(1) Maps of areas designated by Department as being appropriate for structural shoreline stabilization measures shall be developed and maintained by the Department and available for public review.

(2) The Department shall consider the following criteria to develop the structural shoreline stabilization maps:

(a) Lack of immediately adjacent natural shoreline;

(b) Proximity to navigation channels;

(c) High energy shorelines, where nonstructural methods are impractical due to severely eroding shorelines; and

(d) Commercial vessel berthing, where water-dependent facilities require a bulkheaded shoreline for loading and unloading operations

F. Nonstructural Shoreline Stabilization Waiver Process

(1) An applicant may obtain a waiver from the requirement to use nonstructural shoreline stabilization measures by demonstrating, to the Department's satisfaction, that nonstructural shoreline stabilization measures are not feasible for the applicant's property.

(2) An applicant shall apply for a waiver using a form provided by the Department;

(3) An applicant must complete the nonstructural shoreline stabilization waiver process prior to submitting an application to obtain a Tidal Wetlands License or Tidal Wetlands Permit

(4) In evaluating an applicant's request for a waiver, the Department shall consider the following criteria:

(a) Presence of a waterway width inadequate to support a nonstructural shoreline stabilization measure;

(b) Lack of suitable bottom elevation and slope at mean low water for sustaining a nonstructural shoreline stabilization measure;

(c) Lack of suitable bottom substrate to support a nonstructural stabilization measure;

(d) Expansive Fetch;

(e) Bank elevation and orientation that would prevent grading and successful establishment of vegetation;

(f) Areas of excessive erosion;

(g) Areas subject to heavy tides;

(h) Other physical constraints that would impede or prevent successful establishment of a nonstructural shoreline stabilization measure; or

(i) Other environmental factors including plant, fish and wildlife habitat or riparian Buffers that would be adversely affected by the proposed nonstructural shoreline stabilization practice and would be protected by a structural practice.

G Order of Preference for Structural Erosion Control Measures.

(1) After an applicant has demonstrated to the Department's satisfaction that a nonstructural shoreline stabilization measure is not feasible, structural shoreline stabilization measures shall be considered in the following order of preference:

(a) Shoreline revetments;
(b) Breakwaters;
(c) Groins or jetties; and
(d) Similar structures acceptable to the Department.

F. Design of Structural Erosion Control Measures.

(1) Structural shore erosion control projects that employ jetties, groins, breakwaters, or other offshore structures shall be designed to:

(a) Allow natural littoral movement of sand along the shoreline. Projects that induce erosion or undesirable shoaling in adjacent areas shall be prohibited
(b) Use materials such as stone or broken concrete, wood, metal, plastic, or other similar materials that are:

(i) Of adequate size, weight, and strength to function as intended;
(ii) Free of protruding objects, debris, and contaminants;
(iii) Selected because they minimize impacts to water quality and plant, fish, and wildlife habitat;

(c) Use backfill material free of materials such as litter, refuse, junk, metal, tree stumps, logs, or other unsuitable materials;
(d) Prevent damage due to scour; and
(e) Minimize grading and other impacts on adjacent riparian habitat.