

Regulation 30-12

Special Project Standards for Tidelands and Coastal Waters

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SC DEPARTMENT of
**ENVIRONMENTAL
SERVICES**

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Table of Contents

A. Docks and Piers	1
B. Boat ramps:	6
C. Bulkheads and Revetments	7
D. Cables, Pipelines, and Transmission Lines.....	7
E. Marinas, including commercial and community docks with more than 250 linear feet of effective docking space	8
F. Transportation.....	13
G. Dredging and Filling.....	14
H. Navigation Channels and Access Canals.....	15
I. Deposition of Dredged Material	16
J. Waste Treatment Systems	17
K. Marsh Impoundments for Recreational and Commercial Activities.....	17
L. Drainage Canals or Ditches	18
M. Nonwater-Dependent Structures	19

N. Access to Coastal Islands	19
O. Mariculture	24
P. Mooring Buoys	25
Q. Living Shorelines	26

A. Docks and Piers: A dock or pier is a structure built over and/or floating on water and is used to provide access to water and for the mooring of boats. Docks and piers are the most popular method of gaining access to deep water. Docks and piers sometimes pose navigational problems, restrict public use of the water and, under certain circumstances, possess potential for creating environmental problems. This section is divided in five parts providing standards for 1) all, 2) private and joint use, 3) master planned, 4) commercial and (5) community docks. Docks are defined in 30-1.D(16) Docks. Community docks have less environmental impact than multiple private or joint use docks. One or more community dock(s) in a development will be permitted when sufficient numbers of private or joint use docks are eliminated and other applicable Department regulations are met. This section does not include standards for marinas, which are addressed in 30-12.E. Marinas by definition include docks with more than 250 linear feet of effective docking space.

(1) The following standards are applicable for construction of all docks and piers:

(a) Docks and piers shall be limited to one structure per parcel or lot and in all instances, parcels or lots must be waterfront as defined by 30-1.D(53), shall not restrict the reasonable navigation or public use of State lands and waters;

(b) Docks and piers shall be constructed in a manner that does not restrict water flow;

(c) The size and extension of a dock or pier must be limited to that which is reasonable for the intended use;

(d) Docks and piers should use the least environmentally damaging alignment;

(e) All applications for docks and piers should accurately illustrate the alignment of property boundaries with adjacent owners and show the distance of the proposed dock from such extended property boundaries. For the purpose of this section, the extension of these boundaries will be an extension of the high ground property line. The Department may consider an alternative alignment if site specific characteristics warrant or in the case of dock master plans, when appropriate.

(f) Walkways leading to the dock or pier should be elevated at least three feet above mean high water.

(g) Dry storage in uplands will be encouraged in preference to moorage in crowded areas;

(h) Developers of subdivisions and multiple family dwellings are encouraged to develop plans which include joint-use docks and/or community docks at the time of required dock master plans. Dock corridors on the approved Dock Master Plan (DMP) must be shown with bearings or State Plane Coordinates on a recordable subdivision plat for the development, and recorded in the appropriate County Office of Deeds. Subsequent re-surveys or modifications to lots shall reference the dock corridors on the recorded subdivision plat and be submitted to the Department. Reference to this DMP must be given in all contracts for lot sales.

(i) Project proposals shall include facilities for the proper handling of litter, waste, refuse and petroleum products, where applicable;

(j) Where docks and piers are to be constructed over tidelands utilized for shellfish culture or other mariculture activity, the Department will consider rights of the lessee and the public prior to approval or denial.

(k) Docks cannot be enclosed by walls or screens.

(l) Docks longer than 1,000 feet over critical area are prohibited. This is inclusive of pierheads, floats, boatlifts, ramps, mooring pilings and other associated structures.

(m) Handrails, if proposed, shall be limited to a maximum height of 36" above the walkway or pierhead decking.

(n) Docks must extend to the first navigable creek, within extensions of upland property lines or corridor lines, that has a defined channel as evidenced by a significant change in grade with the surrounding marsh; or having an established history of navigational access or use. Such creeks may only be bridged/crossed when there are rare geographic circumstances, such as very close proximity of a significantly larger creek within extensions of property or corridor lines, may warrant dock extension to a creek other than the first navigable creek. A creek with an established history of navigational use may also be considered as navigable. In exceptional cases, the Department may allow an open water channel to be bridged if current access is prohibited by other man made or natural restrictions or if site-specific conditions warrant such a crossing.

(o) This section applies to lots subdivided or resubdivided after May 23, 1993.

(i) To be eligible for a private or commercial dock, a lot must have:

(a) 75 feet of frontage at the marsh edge, and

(b) 75 feet between its extended property lines at the location in the waterbody of the proposed dock.

(ii) Joint use docks will be considered for adjacent waterfront properties each of which must have:

(a) 50 feet of frontage at the marsh edge, and

(b) 50 feet between its extended property lines at the location in the waterbody of the proposed dock.

(iii) To be eligible for a community dock, a lot must have:

(a) 50 feet of frontage at the marsh edge, and

(b) 50 feet between its extended property lines at the location in the waterbody of the proposed dock.

(iv) Lots less than 50 feet wide at the marsh edge are not eligible for a dock.

(p) No docks, pierheads or other associated structures will be permitted closer than 20 feet from extended property lines with the exception of joint use docks shared by two adjoining property owners. However, the Department may allow construction closer than 20 feet or over extended property lines where there is no material harm to the policies of the Act.

(q) If a dock is destroyed, the dock may be rebuilt to its previous configuration so long as reconstruction is completed within five years of the date of the event unless there are extenuating circumstances justifying more time.

(r) In the event that a dock owner intends to change the use of a dock from the permitted use or non-permitted grandfathered use, a new permit must be obtained prior to the change in use. The change in use is based on the types of docks distinguished by these regulations.

(2) The following standards in addition to those in R.30-12(A)(1) are applicable for the construction of private and joint use docks:

(a) Storage on docks will be limited to a bench-like locker no larger than 3 feet high, by 3 feet deep, by eight feet long.

(b) Walkways leading to a dock or pier shall not exceed 4 feet in width. For handicapped access, the Department may utilize The Americans with Disabilities Act (ADA) recommendations for walkway width and other structural configurations. Reference 28 CFR Part 36.

(c) The Department sets forth the following standards for size and use of pierheads and floating docks based on creek widths. Total allowable dock square footage as used in this section includes the areas of any fixed pierheads, floating docks, the area of boat storage docks, additional areas covered by a roof, and areas bounded by an unroofed boatlift, davit or similar structure; and excludes walkways, catwalks, ramps, mooring buoys, and mooring piles. For purposes of determining creek width, if marsh vegetation does not exist, the Department will utilize other indicators of channel width such as changes in grade and the critical area boundary. Lots in subdivisions with approved DMPs as of May 24, 2002, are exempt from R.30-12.A(2)(c)(i) and (ii) as amended on May 24, 2002. R.30-12.A(2)(c)(i) and (ii) as amended on May 24, 2002, does not apply to lots of record that existed as of May 24, 2002, until the later of July 1, 2007, or the expiration of any permit issued prior to that date.

(i) Docks will not be permitted on creeks less than 10 feet wide as measured from marsh vegetation on each side.

(ii) Docks will not be permitted on creeks less than 20 feet wide as measured from marsh vegetation on each side unless one of the following two special geographic circumstances exists: a lot has greater than 500 feet of water frontage or no potential access via dockage from the opposite side of the creek. If special geographic circumstances exist, total allowable dock square footage will be restricted to 50 square feet. Boat lifts, davits, and boat storage docks will not be permitted on any dock allowed in creeks less than 20 feet wide.

(iii) On creeks between 20 and 50 feet, as measured from marsh vegetation on each side, total allowable dock square footage shall be restricted to 120 square feet unless special geographic circumstances and land uses warrant a larger structure.

(iv) On creeks between 51 and 150 feet, as measured from marsh vegetation on each side, total allowable dock square footage shall be restricted to 160 square feet unless special geographic circumstances and land uses warrant a larger structure.

(v) On creeks larger than 150 feet, as measured from marsh vegetation on each side, total allowable dock square footage shall be restricted to 600 square feet unless special geographic circumstances and land uses warrant a larger structure;

(vi) The Department will allow additional square footage for joint use docks above and beyond the size allowed for individual docks, not to exceed 2 times that allowed in subsections R.30-12.A(2)(c)(i) through (v); contingent upon the sharing of the walkway and pierhead.

(vii) Grandfathered or previously permitted fixed and floating docks which are larger than allowed in R.30-12(A)(2)(c)(ii-v) may not be enlarged.

(viii) Enclosed boathouses are prohibited.

(ix) Boats moored at docks cannot restrict the reasonable navigation or public use of State lands and waters. Under no circumstance are live-aboards allowed at private docks. Commercial activities are prohibited at private docks unless they are water-dependent and approved by the Department. Illegal use of a private dock is grounds for permit revocation.

(x) Boat storage structures will not count against the total dock square footage as outlined in 30-12.A(2)(c)(ii-vi) if the size of the structure is 8 feet by 20 feet or less. The area of any larger structure greater than 160 square feet will count against the total allowable dock square footage.

(d) Roofs on private docks will be permitted on a case-by-case basis, with consideration given to the individual merits of each application. Precedent in the vicinity for similar structures will be considered as well as the potential for impacting the view of others. Roofs that have the potential to seriously impact views will not be allowed, while those that have minimal impact may be allowed. The following standards will be used in evaluating applications for roofs.

(i) Roofs shall be clearly shown on the public notice application drawings, and described in the written description of the project. Attics or enclosed ceiling storage on roofed docks are prohibited.

(ii) Flat roofs are prohibited. Where a roof is otherwise permissible, maximum allowable roof height shall be 12' as measured from the floor decking of the dock to the highest point of the roof including any ornamental structures.

(iii) Rails on decks are not to be incorporated into roofs and no steps, ladders or other means of accessing the roof on a permanent basis are allowed.

(e) Boat storage structures are allowed, provided the entire docking system is limited to the minimum structure size needed to accomplish the intended use. The following standards will be used in evaluating applications for boat storage structures:

(i) Single family docking facilities will be limited to one boat storage structure per docking facility on creeks between 20 feet and 50 feet; and a maximum of two boat storage structures will be allowed on creeks wider than 50 feet.

(ii) Hull scraping, sandblasting, painting, paint removal, and major engine repair are prohibited on lifts and davits.

(iii) Boatlifts must be open sided with no enclosures. Catwalks are allowed to provide access on one side and shall be a maximum of 3 feet wide.

(3) The following procedures in addition to those in R.30-12(A)(1) will be followed for docks covered by Dock Master Plans (DMPs):

(a) A permit may be issued for docks covered by a DMP, as outlined in CH.III.VI.D of the Coastal Zone Management Plan. This permit for multiple docks must be placed on public notice and processed as a major application. If a DMP is approved by the Department, but no permit is applied for or issued, the

approved DMP will be used as a framework for future permitting decisions, subject to comments received during the public review process.

(b) Before individual structures covered by the permit are constructed, written notice must be given to and a construction placard received from the Department to insure the docks are built according to the plan.

(c) Major modifications of individual structures that would require a new public notice will not be permitted; however those modifications that are minor in nature will be considered as long as the request is in keeping with the spirit of the DMP.

(d) If the permit expires before all of the docks permitted have been constructed, subsequent permit applications for the remaining structures will be reviewed for consistency with the DMP unless the DMP no longer reflects Department policies and regulations.

(e) Extensions of permits for multiple docks will be issued upon a showing of significant activity under the permit.

(4) The following standards in addition to those in R.30-12(A)(1) apply to construction of commercial docks that are not marinas:

(a) The size and extension of the dock must be limited to that which is reasonable for the intended use and the geographic circumstances of the site. However, no docks will be permitted in creeks less than 20 feet wide as measured from marsh vegetation on each side.

(b) Each applicant for a commercial dock must submit an Operations and Maintenance Manual with the permit application.

(c) New commercial docks are not allowed in waters classified for shellfish harvesting if their proposed uses would result in the closure of additional waters for shellfish harvesting.

(d) Commercial docks should be located in areas that will have minimal adverse impact on wetlands, water quality, wildlife and marine resources, or other critical habitats.

(e) Where commercial dock construction would affect shellfish areas, the Department must consider the rights of the lessee, if applicable, and the public, as well as any possible detrimental impacts on shellfish resources.

(f) Project proposals shall include facilities for the proper handling of litter, waste and other refuse in accordance with DHEC regulations.

(g) Adequate parking for users of the commercial dock shall be demonstrated.

(h) The criteria for determining roof construction described in 30-12A(2)c apply to commercial docks.

(5) The following standards in addition to those in R.30-12(A)(1) apply to construction of community docks that are not marinas:

(a) The size and extension of the community dock must be limited to that which is reasonable for the intended use.

(b) No leasing or other transfer of space to individuals who do not reside in the community or other commercial uses are allowed at community docks.

(c) Community docks are strongly encouraged and will only be permitted in lieu of multiple single-family docks. Eliminating private docks on small creeks in exchange for permitting of community docks on larger waterbodies minimizes environmental impacts. If a sufficient number of private docks are eliminated, the Department will consider permitting more than one community dock for a subdivision provided no applicable Department regulations are contravened. The ratio for determining community dock size (or slip moorage) in exchange for single-family docks will be 2 to 1 or 40 feet of community dock length for each private dock that is eliminated. If a joint use dock is eliminated, the number of lots served by the dock will count as the number of docks eliminated.

(d) No section of any community dock (pierheads or other associated structures) will be permitted closer than 20 feet from extended property lines. However, the Department may allow construction closer than 20 feet or over extended property lines where there is no material harm to the policies of the Act.

(e) Community docks will be prohibited on creeks less than 20 feet in width, however on creeks larger than 20 feet the size of the structure will be determined by the language in 30-12.A(5)(a) as well as (c).

(f) Walkways leading to a dock or pier shall not exceed 6 feet in width. For handicapped access, the Department may utilize The Americans with Disabilities Act (ADA) recommendations for walkway width and other structural configurations. Reference 28 CFR Part 36.

B. Boat ramps:

(1) Boat ramps provide access to the water for those who do not have water access by means of docks, piers, or marinas. However, boat ramp construction may require filling or, in some cases, dredging of wetland areas.

(2) Specific standards which shall apply are as follows:

(a) Filling or excavating of vegetated wetlands for boat ramp construction is prohibited unless no feasible alternatives exist in non-vegetated wetland areas. In addition, the area to be filled or excavated must be limited to that which is reasonable for the intended use;

(b) Boat ramps must consist of environmentally acceptable materials, demonstrate sound design and construction so that they could reasonably be expected to be safe and effective, and minimize adverse effects.

(c) Justification for boat ramp construction in environmentally sensitive areas shall be considered using the following priorities:

(i) Public use - open to all citizens;

(ii) restricted use - open to citizens of a particular area or organization only;

(iii) private use - use for one citizen or family;

(d) In cases where private use is necessary, siting of ramps must, wherever feasible, be located in areas where the least environmental impact will accrue to the area and be limited to 12 feet in width;

(e) Boat ramp location requiring dredging or filling of wetlands to provide deep water access to the ramp, parking areas for the ramp, or other associated facilities are prohibited unless no feasible alternatives exist and environmental impacts can be minimized;

(f) The siting of "public use" boat ramps is encouraged in easily accessible areas such as bridges and existing, abandoned causeways, provided that these sites comply with other applicable regulations.

C. Bulkheads and Revetments (Rip-rap) (Other than ocean front, as covered under R.30-13(N)):

(1) In an attempt to mitigate certain environmental losses that can be caused by these structures, the following standards are adopted:

(a) Structures must be designed to conform to the critical area line (upland boundary), to the maximum extent feasible, and constructed so that reflective wave energy does not destroy stable marine bottoms or constitute a safety hazard;

(b) Structures may be constructed up to 18 inches from the existing escarpment. In situations where this is not feasible, Department staff will determine the location of the bulkhead or revetment on a site by site basis;

(c) Bulkheads and revetments will be prohibited where marshlands are adequately serving as an erosion buffer, where adjacent property could be detrimentally affected by erosion or sedimentation, or where public access is adversely affected unless upland is being lost due to tidally induced erosion.

(d) Bulkheads and revetments will be prohibited where public access is adversely affected unless no feasible alternative exists.

D. Cables, Pipelines, and Transmission Lines:

(1) Installation of cables, pipelines, and transmission lines is preferred in non-wetland areas. Excavating activities in critical areas are sometimes required with the preferred alternative being directional boring. Excavation and filling also are sometimes required to construct foundation structures attendant to the installation of overhead transmission line crossings. These installations shall be designed to minimize adverse environmental impacts.

(2) In addition to standards for dredging and filling, the following standards are applicable:

(a) To the maximum extent feasible, alignments must avoid crossing the critical areas;

(b) Creation of permanent open water canals to install pipelines is prohibited since such projects usually interfere with drainage patterns and may adversely affect water quality through accelerated bank erosion;

(c) Dimensions of temporarily excavated canals for cables and pipelines should be minimal. Silt curtains are required for all excavations;

(d) Wherever feasible, all excavations in wetland areas must be backfilled with the excavated material after installation of the appropriate structure, while being careful to maintain the original marsh elevation. In addition, excavated material must be stockpiled on highground whenever feasible;

(e) Appropriate erosion control measures shall be employed during the crossing of wetland areas. Where appropriate, revegetation with suitable wetland species will be required;

(f) Alignments of new projects should be designed to utilize existing rights-of-way and topographic features, wherever feasible;

(g) The extension of public services, such as sewer and water facilities, involving the expenditure of public funds or issuance of government revenue bonds to previously undeveloped barrier islands will not be approved unless an overriding public interest can be demonstrated.

E. Marinas, including commercial and community docks with more than 250 linear feet of effective docking space.

(1) In addition to standards applicable for bulkheads and seawalls, dredging and filling, and navigation channels and access canals, the following standards apply to all structures defined as marinas in 30-1(D):

(a) Each applicant for a marina must submit an Operations and Maintenance Manual with the permit application. This Operations and Maintenance Manual must be in accordance with 30-12(E)(3), and approved in writing by the Department staff. The requirements for the Operations and Maintenance Manual may be modified if deemed necessary by the Department.

(b) All marinas affect aquatic habitats to some degree, but adverse effects can be minimized by utilizing proper location and design features. Applications for marinas shall include a comprehensive site plan showing location and number of all water-dependent and upland facilities such as parking and storage facilities.

(c) New marinas, which includes all structures defined as marinas in 30-1(D), are not allowed in waters classified for shellfish harvesting, except for any locked harbor, dry stack or expanded existing marina that does not close any additional waters for shellfish harvesting.

(i) An applicant for any marina in waters classified for shellfish harvesting, can request that the S.C. Department of Natural Resources (DNR) comment in writing on whether the area around the proposed marina is suitable or not suitable for the natural growth and propagation of shellfish. The permit shall not be issued unless the Department, after giving great weight to the comments of the DNR, determines that natural physical conditions in the area surrounding the proposed marina preclude the natural propagation of shellfish.

(ii) The DNR's comments shall be based on criteria including:

(1) intertidal bottom types (including shell matrix depth and composition - shell, clay, silt);

(2) density of naturally occurring oyster beds (oyster strata types, bottom coverage, acreage);

(3) presence or absence of significant subtidal oyster populations;

(4) water depth;

(5) oyster population elevations;

(6) salinity regimes (including a review of historic data and recognition of possible future changes that could affect hydrography);

- (7) presence or absence of significant clam populations;
- (8) potential for expansion of existing natural oyster beds through cultivation;
- (9) potential for shellfish production with non-traditional methods;
- (10) the current shellfish management and water quality classifications;

(11) and any other factors relating to the natural physical conditions in the area deemed appropriate by the DNR including whether the area is likely to support the natural growth and propagation of shellfish in the reasonably foreseeable future.

(iii) This determination in no way affects or limits the ability of DNR to comment on the entire permit application before the Department.

(d) Marinas should be located in areas that will have minimal adverse impact on wetlands, water quality, wildlife and marine resources, or other critical habitats;

(e) Marinas must extend to the first navigable creek, within extensions of upland property lines or corridor lines, that has a defined channel as evidenced by a significant change in grade with the surrounding marsh; or having an established history of navigational access or use. Rare geographic circumstances, such as very close proximity of a significantly larger creek within extensions of property or corridor lines, may warrant marina extension to a creek other than the first navigable creek. A creek with an established history of navigational use may also be considered as navigable. Such creeks cannot be bridged in order to obtain access to deeper water. However, pierheads must be located over open water and floating docks which rest upon the bottom at mean low tide will not normally be permitted. In exceptional cases, the Department may allow an open water channel to be bridged if other man made or natural restrictions prohibit current access or if site-specific conditions warrant such a crossing.

(f) To be eligible for a marina, a lot must have a minimum of 150 feet of frontage at the marsh edge, and 150 feet between its extended property lines at the location in the waterbody of the proposed structure.

(g) No marinas or other associated structures will be permitted closer than 20 feet from extended property lines with the exception of common marinas shared by two adjoining property owners. However, the Department may allow construction closer than 20 feet or over extended property lines where there is no material harm to the policies of the Act.

(h) Existing permitted and grandfathered marinas as of the effective date of these regulations may be maintained and rebuilt to their pre-existing size and configuration if damaged or destroyed. However, these marinas cannot expand beyond their current footprint if such expansion violates the requirements of 30-12.E(1)(f) and (g). Marinas that do not meet the frontage and offset requirements of 30-12.E(1)(f) and (g) may expand channelward provided all other applicable Department standards are met. Additionally, at such time as these marinas expand, even when remaining within their existing footprint, a permit will be required and applicable Department standards, including 30-12.E(2) and (3) relating to operation and maintenance, must be met.

(i) Marinas proposed for the exclusive use of occupants of the adjoining development will only be permitted in lieu of multiple private docks. Eliminating private docks on small creeks in exchange for permitting a marina with private slips on a larger waterbody is the preferred alternative of the Department. To determine the number of slips allowed within this type of marina, a ratio of 2.5 to 1 or 50 feet of slip

length for every private dock (or lot served by a joint use dock) eliminated will be utilized. No leasing, or other transfer of space to individuals who do not reside in the community or other commercial uses are allowed at these marinas.

(j) Marinas shall not restrict the reasonable navigation or public use of State lands and waters.

(k) Marinas shall be constructed in a manner that does not restrict water flow and must avoid or minimize the disruption of currents. Dead-end or deep canals without adequate circulation or tidal flushing will not be permitted.

(l) The size and extension of the marina must be limited to that which is reasonable for the intended use.

(m) Marinas should use the least environmentally damaging alignment.

(n) Where marina construction would affect shellfish areas, the Department must consider the rights of the lessee, if applicable, and the public, and any possible detrimental impacts on shellfish resources.

(o) Marinas should be located in areas where the least initial and maintenance dredging will be required. New marinas that require initial and maintenance dredging must provide a permanent, dedicated spoil area capable of holding both the initial dredge volume and all anticipated maintenance needs. This spoil area must be reserved using deed restrictions or other legal instruments.

(p) Marinas must avoid or minimize the disruption of currents. Dead-end or deep canals without adequate circulation or tidal flushing will not be permitted.

(q) Marina design must minimize the need for the excavation and filling of shoreline areas;

(r) Open dockage extending to deep water is preferable to excavation for boat basins, and it must be considered as an alternative to dredging and bulkheading for marinas;

(s) Turning basins and navigation channels shall be designed to prevent long-term degradation of water quality. In areas where there is poor water circulation, the depth of boat basins and access canals should not exceed that of the receiving body of water to protect water quality.

(t) Project proposals shall include facilities for the proper handling of petroleum products, sewage, litter, waste, and other refuse in accordance with Department regulations.

(u) Dry storage type marinas are preferred whenever feasible, and an applicant for a marina permit will be required to show why a dry storage facility is infeasible, in whole or in part. Infeasibility may be shown where the applicant seeks a facility for large boats that cannot be accommodated in a dry storage facility or where there is inadequate upland space for the facility.

(v) Applications for marinas must include maintenance dredging schedules and dredged material disposal sites when applicable.

(w) Adequate parking for users of the marina shall be demonstrated as either one parking space for every three wet and/or dry slips or the spaces required by the applicable local government parking regulation, whichever is greater.

(x) Mooring fields associated with marinas are encouraged in place of pierheads and floating docks where the size of the waterbody and other site specific conditions are suitable. These mooring fields must be in compliance with R.30-12(P).

(2) The following standard conditions, along with any special conditions that may be appropriate, will be included in all permits for marinas unless the Department determines that such standard conditions are inappropriate

(a) The operations of the marina shall be reviewed by the Department as deemed appropriate, but at least every five years. Based on this review, the Department may require, among other things, changes or additions to the Operations and Maintenance Manual to address any water quality or other environmental problems, and a reduction in the size of, or a change in the configuration of, the marina. Such action may be taken at any time the Department determines that significant state water quality compliance problems exist, at the time the Department enlarges the closure area, or at the time of a review.

(b) A water quality sampling program must be instituted and results submitted to the Department. This sampling program must be performed prior to construction and as specified in 30-12(E)(3)(c) below. This sampling must be performed by a Department certified laboratory at the expense of the permittee. If water quality monitoring indicates a decline in water quality, remedial action will be required.

(c) Dredging must be performed in accordance with 30-12(E)(3)(d) and 30-12(G).

(d) A stormwater plan for the marina and associated parking areas, including runoff from the permanent spoil disposal area and adjacent highland development, must be submitted to and approved in writing by the Department staff before any work is performed under the Department permit.

(3) The Operations and Maintenance Manual shall be submitted with the application and placed on public notice. This requirement may be waived at the discretion of the Department upon a determination that the uses of the facility warrant such a waiver. Depending on the type of facility, it shall contain the following information:

(a) Marina Operations

(i) An experienced operator shall be in charge of the marina. The permittee and its agents are responsible for compliance with the issued Operations and Maintenance Manual and with all conditions of the permit.

(ii) The marina permittee must include in the lease agreement with boat owners a provision requiring that boat owners comply with all applicable State and federal regulations. The marina permittee shall ensure that violations are reported promptly to the proper authorities.

(iii) A complete copy of the marina permit, including any required marina report, the Operations and Maintenance Manual, all conditions or requirements placed on the permit and copies of all water quality monitoring reports required pursuant to the permit, shall be readily available at the marina.

(iv) The marina permittee shall prominently display and distribute material pertaining to the maintenance of water quality standards at the marina and report violations of such standards to the proper authorities.

(b) Water Quality Management:

(i) Adequate working wastewater pump-out facilities shall be provided at each marina (unless specific exceptions are allowed in writing by the Department). These facilities must be adequate to handle all wastewater generated at the marina. The marina operator may charge a reasonable fee for the use of the pump-out facilities.

(ii) Adequate bathroom facilities must be provided in order to discourage any overboard discharge of sewage from boats. The number of toilets required for any given marina shall be determined by the nature and size of the marina and by its specific site location. However, two toilets and one lavatory for women and one toilet, one urinal, and one lavatory for men shall be required for all marinas with one hundred or fewer slips, and unless there are mitigating circumstances, the Department shall require one toilet and one lavatory for women and one toilet, one urinal, and one lavatory for men for every additional 100 boat slips or fraction thereof. Toilet facilities shall be constructed in a location to encourage their use. Additional facilities may be required where restaurants, motels, laundries, and other nonwater-dependent structures are located in close proximity to the marina. All pump-out and sewage facilities must be included in the public notice and certified in writing by the Department.

(iii) Plans for potable water supplied to the marina docks must be approved in writing by the Department.

(iv) Marina boat fueling systems must be equipped with emergency cutoffs at the harbor master's office, at the tank, at the pump and at the dock's edge.

(v) Depending on the size and type of boats using the marina, adequate booms must be available to isolate any oil spill around the fuel dock, a leaking boat, or a sunken boat.

(vi) Absorbent pads must be available at the marina for boat use and for removing incidental spills during fueling operations.

(vii) The discharge of sewage from boats is prohibited unless it is treated by a Marine Sanitation Device and complies with all applicable federal laws and regulations. The discharge of any other kind of waste into state waters, including, without limitation, garbage, refuse, trash or debris, is prohibited.

(viii) Adequate separate refuse containers for garbage shall be available at the marina and maintained daily. Containers for toxic substances shall not be placed over or near the water.

(ix) Boat repairs, paint scraping, boat painting, and other activities that may result in a discharge of waste or pollutants into State waters are prohibited;

(x) One reasonably sized dock master's office may be constructed within a permitted marina. This office will be limited to water dependent uses only such as fuel sales. Restroom facilities may be placed in this office, however, food and beverage services, clothing sales and other non-water dependent uses are prohibited.

(c) Water Quality Monitoring Requirements The specific program shall be determined by the Department. Any changes in requirements must be approved in writing by the Department. Sampling results must be supplied to the Department. The program may be discontinued or waived by the Department upon a showing that such information is not necessary to insure adequate protection of coastal resources.

(i) Monitoring requirements shall be tailored to the marina based on factors such as flushing, existing water quality, presence of shellfish, number of slips, and presence of fueling facilities.

(ii) A minimum standard monitoring program will consist of an annual sediment analysis. These samples shall be taken once a year between June and August with a minimum of one composite sample taken within the confines of the marina and one sample taken outside the marina. All sampling sites must be approved in writing by the Department staff and the DNR. Samples will be analyzed for polyaromatic hydrocarbons, copper, zinc, lead, cadmium, chromium, and any other parameters required by the Department

(iii) Marinas in poorly flushed areas may be required to sample other parameters such as dissolved oxygen and/or fecal coliform bacteria. These monitoring requirements will be determined on a site-specific basis using the factors presented in (i) above.

(iv) Sampling requirements will be periodically reviewed and may be increased or reduced as conditions warrant.

(d) Dredging:

(i) Unless otherwise allowed by permit, all initial and maintenance dredging shall take place between December 1 and March 1, and all dredging shall be performed by hydraulic dredge.

(ii) Agitation dredging is prohibited.

F. Transportation:

(1) There is often a strong public need for transportation projects. Unfortunately, such projects can pose a significant risk of environmental degradation. However, careful consideration of environmental factors can guide development toward more favorable results. To the maximum extent possible, environmental considerations shall be harmonious with public safety considerations.

(2) The specific standards are as follows:

(a) In the planning of major transportation routes and airports, these projects should be sited for location inland from the critical areas;

(b) The location and design of public and private transportation projects must avoid the critical areas to the maximum extent feasible. Where coastal waters and tidelands cannot be avoided, bridging rather than filling of these areas will be required to the maximum extent feasible;

(c) Where wetlands will be destroyed, their value as wetlands will be assessed by the Department and weighed against public need for their destruction;

(d) To the maximum extent feasible, transportation structures must be designed so as not to alter the natural water flow and circulation regimes or create excessive shoaling or erosion. Where applicable, adequate clearance for commercial and pleasure craft must be provided;

(e) Where feasible, maximum care shall be taken to prevent the direct drainage of runoff water from transportation routes and associated facilities from entering adjacent water bodies;

(f) Where appropriate, bridges and approaches should be designed to provide for the enhancement of public access by the utilization of fishermen, catwalks, boat launching ramps, bike lanes and other structural features;

(g) During the planning of a multi-lane widening or improvement project, it is preferable to follow the existing alignment in wetland areas. Existing causeway and fill areas must be utilized wherever possible. The degree to which any existing causeway through wetlands can be widened must be reasonably proportionate to the expected traffic load of the causeway in the near future and the size and use of the area being provided access. The width of medians of divided highways must be reduced as much as possible wherever they cross wetland areas;

(h) Roadway embankments and fill areas shall be stabilized by utilizing appropriate erosion devices and/or techniques in order to minimize erosion and water quality degradation problems. Culverts shall be required, where appropriate, in order to maintain normal tidal influence and minimize disruption of drainage patterns;

(i) The Department will require applicants for transportation project permits to consider the accommodation of other public utilities in facility design, thus avoiding unnecessary future alteration such as that caused by the laying of cables or transmission lines in wetlands adjacent to an existing roadway;

(j) New road or bridge projects involving the expenditure of public funds to provide access to previously undeveloped barrier islands will not be approved unless an overriding public interest can be demonstrated.

G. Dredging and Filling:

(1) Development of wetland areas often has been considered synonymous with dredging and filling activities. Dredging and filling in wetlands can always be expected to have adverse environmental consequences; therefore, the Department discourages dredging and filling. There are cases, however, where such unavoidable environmental effects are justified if legitimate public needs are to be met.

(2) The specific standards are as follows:

(a) The creation of commercial and residential lots strictly for private gain is not a legitimate justification for the filling of wetlands. Permit applications for the filling of wetlands and submerged lands for these purposes shall be denied, except for erosion control, see R.30-12(C), or boat ramps, see R.30-12(B). All other dredge and fill activities not in the public interest will be discouraged;

(b) Dredging and filling in wetland areas should be undertaken only if that activity is water-dependent and there are no feasible alternatives;

(c) To the maximum extent feasible, dredging and filling activities should be restricted in nursery areas and shellfish grounds and during periods of migration, spawning, and early development of important sport and commercial species;

(d) Dredging and excavation shall not create stagnant water conditions, lethal fish entrapments, or deposit sumps or otherwise contribute to water quality degradation;

(e) Designs for dredging and excavation projects shall, where feasible, include protective measures such as silt curtains, diapers, and weirs to protect water quality in adjacent areas during construction by preventing the dispersal of silt materials;

(f) Dredged materials shall be deposited and contained in such a manner so as to prevent dispersal into adjacent wetland areas and, in all cases, new facilities must have permanent upland disposal sites. Existing facilities must have either permanent upland disposal sites or EPA approved ocean disposal sites;

(g) Applications for dredging in submerged and wetland areas for purposes other than access, navigation, mining, or drainage shall be denied, unless an overriding public interest can be demonstrated. Dredging permits for mining will be issued only as specified in (2)(h) below. Drainage permits must be consistent with the provisions in R.30-12(L);

(h) Applications for dredging for mining activities within the critical areas will be denied unless a significant portion of the resource is located in the critical area, extraction of the resource is clearly necessary, and benefits derived from extraction would outweigh resultant detrimental impacts on coastal ecosystems. For any permit issued to allow dredging for mining operations in the critical areas, a complete site reclamation plan shall be required;

(i) Wetlands shall not be utilized as depositories for waste materials except as discussed in R.30-12(I and J);

(j) In all cases, dredging activities shall not be approved until satisfactory disposal sites have been acquired.

(k) Only hydraulic dredging is permitted unless the material is being placed in a hopper barge for offshore disposal or unless the applicant can show that hydraulic dredging is infeasible in a site-specific application.

(l) Marinas will usually not be allowed in areas that require maintenance dredging more often than once every four years.

H. Navigation Channels and Access Canals:

(1) Certain dredging activities involve the creation and maintenance of navigation channels and access canals. These activities have a potential for severe environmental impacts and should meet a demonstrated public need.

(2) Where the Department determines that such activities are justified, the following standards will be applied:

(a) Dredging for establishment of new canals which involves permanent alteration of wetland habitats will be prohibited unless no feasible alternative exists. Establishment of canals for purposes of creating waterfront lots from inland property will be prohibited unless it can be demonstrated that there will be no significant environmental impacts on critical areas;

(b) To the extent feasible, project plans must utilize piers or catwalks, rather than channels or canals, to reach deeper water areas;

(c) Access canals shall be designed to insure adequate flushing and shall not create dead-end or stagnant water pockets. Open-ended, U-shaped, or semicircular canals are generally preferred over dead-end canals, since they usually provide better water circulation;

(d) Highland waterway construction that is slated to be tied into wetland areas shall be constructed in the dry, if feasible, so that sloping and stabilization of the banks can be completed before the plug is removed for the connection to open waters. Where dry construction is not possible, temporary plugs or silt curtains at the end of canals connected to waterways should be maintained until all sediment settles out;

(e) The sides of navigation channels and access canals should be gently sloping rather than vertical to facilitate biological as well as physical stabilization of the canal banks;

(f) When several landowners are to be served by a project, dredging for navigation channels and access canals should be well planned to prevent unnecessary excavation. Tributary canals in the highlands leading to a central navigation channel should be utilized rather than separate channels for each waterfront landowner;

(g) The berm of access canals should be raised so that there is a gradual slope away from the canal edge. This will help prevent introduction of contaminants into adjacent wetland areas;

(h) Alignment of channels and canals should make maximum use of natural or existing channels. Alignment of channels and canals should avoid shellfish beds, nursery areas, and spawning areas in wetlands.

I. Deposition of Dredged Material:

(1) The deposition of dredged materials resulting from numerous dredging activities along the coast has serious environmental effects separate from the original dredging activity. Thousands of acres of productive wetland habitat have been destroyed by such deposition. Recognizing that additional disposal sites will be required, it is important that site acquisition proposals include plans for mitigating any adverse impacts upon the environment.

(2) The following standards are to be utilized:

(a) Upland disposal of dredged material shall always be sought in preference to disposal in wetlands. Vegetated wetlands and mudflats shall not be utilized for disposal of dredged materials unless there are no feasible alternatives. Any other wetlands should not be utilized for disposal of dredged materials when other alternatives exist;

(b) Open water and deep water disposal should be considered as an alternative if highland alternatives are not feasible. However, open and deep water disposal sites should be seriously considered only after careful consultation with the Department and other relevant State and Federal agencies;

(c) Dredged materials containing hazardous levels of toxic material must be disposed of with extraordinary caution. These materials shall never be disposed of in wetland areas and only in highland areas which are lined and diked with impervious materials. These materials will only be disposed in open water ocean dumping sites when maximum safety has been demonstrated after thorough review by the Department and other appropriate state and federal agencies;

(d) Dikes surrounding disposal areas should be shaped and vegetated immediately to minimize erosion, with outfalls positioned to empty into non-wetland areas;

(e) Future disposal sites shall be reviewed on a case-by-case basis;

(f) Wherever feasible, existing disposal areas shall be utilized to the fullest extent possible; this would include raising the height of the embankments to increase the holding capacity of the disposal area;

(g) Consideration must be given to the temporal aspects of spoil deposition - for example, impacts on spawning, fish migrations, shellfish harvesting, waterfowl nesting and wintering areas, and mosquito

control. Attention must be given to possible adverse impacts of various alternative sites on the public health and welfare as well as on critical fish and wildlife areas;

(h) In all cases, dredging activities shall not be approved until satisfactory disposal sites have been acquired.

J. Waste Treatment Systems:

(1) The Department regulates the installation and operation of waste water treatment facilities, septic tanks, and landfills. Normal maintenance and repair of sewer facilities are exempted from the Department permit requirements by Section 48-39-130(D). The discharge of treated effluent is also exempted; provided, however, that the Department shall review and comment on these discharges. The Department is concerned primarily with wetland degradation problems which could involve commercially important shellfish, recreational fisheries, and critical wildlife habitats.

(2) Standards applicable to these installations are as follows:

(a) Applications for the construction of lagoons or impoundments for waste treatment facilities, solid waste disposal sites and similar activities in the critical areas shall be denied unless there are no feasible alternatives and it can be demonstrated that there will be no significant environmental impacts;

(b) Wherever feasible, construction and design of waste treatment facilities shall be accomplished in such a manner that no effluent will be discharged into areas where shellfish and other marine resources would be adversely affected. Where waste treatment facilities would affect open, productive shellfish harvesting areas, the Department must consider the rights of the lessee, if applicable, or the public in the case of public oyster grounds, as well as impacts on shellfish resources;

(c) The siting of sewage treatment systems should avoid the critical areas. The location of structures other than actual pipelines, such as pump or lift stations, in critical areas will be prohibited unless no feasible alternatives exist;

(d) The construction of sewage treatment facilities and associated discharge pipes should be located and designed so as not to have adverse impacts upon areas of significant public use.

K. Marsh Impoundments for Recreational and Commercial Activities:

(1) Marsh impoundments totaling nearly 69,000 acres comprise a significant portion (approximately 16 percent) of our coastal wetlands. An additional acreage, perhaps equaling this figure, has been impounded in the past but consists today of tidally influenced areas where embankments are no longer maintained. Once important rice growing areas, the majority of these impoundments are managed primarily for recreational waterfowl hunting, wildlife sanctuaries, and other commercial, agricultural, and preservation uses.

(2) Proposals will be reviewed on a case-by-case basis according to the following standards:

(a) Permit applications to impound previously unimpounded wetlands or areas inundated by Outstanding Resource Waters shall be denied unless an overriding public interest is clearly demonstrated.

(b) The following factors will be considered in the review of permit applications for the impoundment of wetlands:

(i) Condition of existing dikes. Projects should require a minimum of new bank construction in wetlands.

(ii) Amount of wetlands proposed to be impounded.

(iii) The extent to which the project would block waters presently used for recreation or navigation by the public.

(iv) Degree of salinity of waters impacted by the proposed project.

(v) Quality of waters affected by the proposed project.

(vi) Primary purpose of the impoundment.

(c) All applications for the impoundment of wetlands must be accompanied by a detailed management plan setting forth the intent and method of managing the impounded areas. The management plan must be approved by the Department prior to permit issuance and shall become a condition of the permit. This plan must contain, but not necessarily be limited to, the following information:

(i) Applicant's objective(s) for the impoundment.

(ii) Schedule of water level manipulations.

(iii) Methods of pest and predator control (i.e., use of pesticides, prescribed burning, etc.).

(iv) Water quality management plan.

L. Drainage Canals or Ditches:

(1) Drainage canals or ditches should follow the least damaging alignment and should meet one or more of the following needs:

(a) insect or vector control as a public health necessity;

(b) other public health purposes;

(c) the control of runoff as part of a comprehensive flood plain management plan. Upland treatment of runoff is required if new drainage ways are permitted in critical areas.

(2) In addition to the application standards for dredging and filling and navigation channels and access canals, the following standards shall apply:

(a) Drainage canals and ditches shall not create dead water or stagnant pockets;

(b) To the extent feasible, the alignment of drainage canals should avoid the more productive wetlands;

(c) To the extent feasible, alignments of canals shall make maximum use of existing deep water channels to avoid unnecessary excavation;

(d) To the extent feasible, the quantity and quality of any discharged waters shall not result in extensive alteration of wetlands or the quality of coastal waters;

(e) All dredged material must be disposed of in accordance with the regulations under R.30-12(I).

M. Nonwater-Dependent Structures:

(1) Nonwater-dependent structures, as defined in Section R.30-1(D), have been built in the past on pilings, moored or in other ways situated over coastal water and/or tideland critical areas. These structures are a serious threat to the values set forth in Section 48-39-20(E).

(2) Nonwater-dependent structures, including buildings, houses, or offices that float shall be prohibited from being constructed, moored, or otherwise placed in or over tidelands and coastal water critical areas unless there is no significant environmental impact, an overriding public need can be demonstrated, and no feasible alternatives exist.

(3) The Department shall at its discretion determine on a case-by-case basis whether or not a floating structure is a boat and thus exempt from the Act or in fact is a nonwater-dependent structure. This shall be based upon the primary function of the floating structure. The mere fact that a structure is registered as a vessel or capable of being propelled does not mean it is exempt from the Department regulations.

N. Access to Coastal Islands. This section applies to applications for permits for bridges and docks as a means of obtaining access to coastal islands.

(1) Purpose and Intent:

(a) South Carolina has several thousand coastal islands, including barrier islands, sea islands, back barrier islands and marsh hammocks. Almost all of these islands are surrounded by expanses of salt marsh, occasionally bordered by tidal creeks or rivers. Historically, few of these islands have been built upon or altered, and most have been protected by their remoteness and inaccessibility. In recent years, however, a trend toward greater potential for development of these islands has stimulated questions and concerns about the ecological significance of these islands. The South Carolina Department of Natural Resources conducted a field study of a number of non-barrier islands. Their report, *An Ecological Characterization of Coastal Hammock Islands*, December, 2004, has shown that these islands are unique ecosystems with diverse flora and fauna. That study recommends protection and buffering of important habitats and resources associated with these islands.

(b) Access to coastal islands by bridges or docks involves the placement of structures into critical area coastal tidelands and waters that are protected by the statute, the critical area regulations, and by the public trust doctrine.

(c) Construction of bridges within critical area tidelands and waters involves impacts on critical area coastal tidelands and coastal waters, including temporary damages to salt marsh and shellfish beds, temporary increased turbidity, permanent displacement of marshes by installation of pilings, and permanent shading of marsh.

(d) The requirements of R.30-12.N apply only to islands for which a bridge or dock permit is issued, and are not intended to apply to upland areas or to otherwise modify, alter, conflict, create precedent or otherwise impact existing regulations and law.

(2) Eligibility to apply for a bridge permit.

(a) The decision on whether to issue or deny a permit for a bridge to a coastal island must be made with due consideration of the impacts to the public trust lands, critical area, coastal tidelands and coastal waters, weighed against the reasonable expectations of the owner of the coastal island. Giving due consideration to these factors, the Department has determined that some islands are too small or too far from upland to warrant the impacts on public resources of bridges to these islands, and thus no permit for a bridge shall be issued.

(b) Bridge permits, other than non-vehicular bridges for access by the general public, will not be issued in areas of special resource value unless they qualify under the special exceptions in R.30-12.N(10). These are the ACE Basin Taskforce Boundary Area, the North Inlet National Estuarine Research Reserve, and the Cape Romain National Wildlife Refuge.

(c) The Department will not consider applications for bridge access to islands less than two acres in size.

(d) The Department will, however, consider applications for bridge access in the following instances:

(i) Bridges not exceeding 15 feet in total width

(a) where the size of the island is two acres or greater, but less than or equal to three acres, and the distance from the upland and the length of the bridge does not exceed 200 feet;

(b) where the size of the island is greater than three acres but less than or equal to five acres and the distance from the upland and the length of the bridge does not exceed 300 feet;

(c) where the size of the island is greater than five acres, but less than or equal to ten acres and the distance from the upland and the length of the bridge does not exceed 500 feet.

(ii) Bridges may be constructed exceeding 15 feet in total width

(a) where the size of the island is greater than 10 acres, but less than or equal to 30 acres, and the distance from the upland and the length of the bridge does not exceed 500 feet;

(b) where the size of the island is greater than 30 acres and the distance from the upland and the length of the bridge does not exceed 1,500 feet.

(e) Notwithstanding the provision of R.30-12.N(2)(c), the Department shall consider applications for bridge access to coastal islands greater than one acre in size if the distance from the upland is 100 feet or less in distance.

(f) All measurements to coastal islands for the purpose of establishing whether an island may qualify for a bridge permit are taken from upland as defined in this section.

(i) Upland is:

(a) the naturally occurring mainland, and

(b) Waites Island in Horry County; Pawleys Island in Georgetown County; Isle of Palms, Sullivans Island, Folly Island, Kiawah Island, Seabrook Island, Edisto Island, Johns Island, James Island, Woodville Island, Slann Island and Wadmalaw Island in Charleston County; Daniel Island in Berkeley

County; Edisto Beach in Colleton County; Harbor Island, Hunting Island, Fripp Island, Hilton Head Island, St. Helena Island, Port Royal Island, Ladies Island, Spring Island and Parris Island in Beaufort County.

(ii) The length measurements for all proposed bridges will be taken from a current Department approved critical area line. The length of a bridge is defined as the distance between critical area lines at each end of the bridge.

(g) In order to apply for a bridge permit, the applicant must submit a survey, produced and stamped by a registered surveyor licensed to practice in South Carolina, showing that the length of the proposed bridge will not exceed the lengths allowed in these regulations.

(3) Dock and Bridge Construction Standards Associated with Coastal Islands.

(a) Docks.

(i) The following standards apply to docks in projects associated with applications for bridge access to coastal islands. The project standards in this section are in addition to the other Department standards applicable to docks.

(ii) The application for the project shall reflect that the applicant has eliminated 75 percent of the number of private residential docks allowed by the Department's critical area permitting regulations as they existed on September 1, 2005. The dock reduction shall be made binding on the land by a conservation easement meeting the requirements of R.30-12.N(4).

(iii) Docks longer than 500 feet over the critical area are prohibited. This is inclusive of pierheads, floats, ramps, mooring piles and other associated structures.

(iv) No boat lifts, davits or similar structures are allowed.

(v) Roofs are not allowed on private docks, but are allowed on community docks.

(vi) All docks proposed for an island must be shown on a dock master plan that is submitted with the bridge application.

(b) Development Plan.

(i) All bridges shall be the minimum possible size and height to accommodate the intended use, aligned to minimize environmental damage, and constructed of materials approved for marine applications.

(ii) The applicant must submit a site development plan.

(c) Lighting on bridges must be designed with the minimum illumination necessary to meet local, state, or federal requirements for safety and navigation.

(d) All utilities servicing the island must be located within the footprint of the bridge and attached to the bridge if feasible, but must not be placed overhead.

(e) Onsite Disposal Systems (OSDS). If the island is to be served by OSDS, all alternative systems must meet a horizontal setback requirement of 150 feet from any part of the OSDS to the Department critical line.

(4) Conservation easements. Whenever a reduction in environmental impact is either required or offered, the affirmative commitment must be accomplished by a conservation easement, the conservation easement must meet the requirements of this part.

(a) The conservation easements shall be prepared in accordance with the South Carolina Conservation Easements Act of 1991, S.C. Code Ann. Section 27-8-10 through 27-8-120, and any amendments thereto (the "Act").

(b) The conservation easements must provide for permanent protection in perpetuity that will run with the title to the land.

(c) The conservation easement must incorporate by reference a recorded plat that depicts the environmental impact reduction. Once the conservation easement and associated plat are properly recorded in the chain of title, the failure to show the required delineations on a future plat shall not affect the validity of the conservation easement.

(d) The conservation easement must be held by the state or a land trust with a proven track record in the region and with the resources to enforce the terms of the easement. The conservation easement must provide for rights of enforcement by the Department and by any organization authorized to be a "holder" under the Act, provided that any legal action by a party other than the Department taken to enforce the terms of the conservation easement must include the Department as a party, and no such action may be settled without the written consent of the Department.

(e) Draft conservation easements must be submitted to the Department for review to determine compliance with the Act and the applicable limits and commitments related to the permit at issue, prior to issuance of the bridge permit.

(f) Prior to commencement of any work under a permit issued under this section, the recorded conservation easement must be filed with the Department, accompanied by an opinion of an attorney duly licensed to practice in South Carolina, certifying that the instrument has been duly executed by the fee simple owners of the property, that the individual signers of the instrument have full legal authority to execute the instrument, that the instrument has been properly recorded and indexed in the office of the county Register of Deeds, and that all holders of prior mortgages or other liens on the property have consented to the instrument and have subordinated their liens to the conservation easement.

(5) The owners of bridges are entitled to repair and maintain existing bridges as allowed under R.30-5.D and any applicable county or municipal regulations.

(6) If an existing bridge to a coastal island is destroyed or rendered unusable by natural causes or accidental destruction, the owner shall be entitled to a permit to replace the bridge with a like bridge that imposes no greater adverse impact on the critical area as the one destroyed.

(7) Permits for expansion of existing bridges will be processed as new bridges and must meet all applicable standards.

(8) Causeways.

(a) Permanent filling of critical areas for access to coastal islands is prohibited, except for fill associated with existing useable causeways.

(b) Existing useable causeways are defined as those causeways that have a drivable lane above the critical area.

(i) Permits for fill associated with existing usable causeways shall be granted only for minor fills that are minimized by use of containment structures to limit to the maximum extent feasible the square footage of fill, and where the fill would cause less damage to the critical area than would be caused by construction of a new bridge or other access structure.

(ii) Mitigation for critical area fill at a ratio of 2:1 will be required for fill associated with existing usable causeways.

(9) Non-vehicular bridges to be utilized by the general public on publicly owned lands for purely recreational, educational, or other institutional purposes will be exempt from all other sections of R.30-12.N and will be allowed by the Department provided there is no significant harm to coastal resources and the following minimum standards are met.

(a) The applicant must demonstrate that the structure is necessary for the overall planned use of the site.

(b) The structure must be aligned to minimize environmental impacts.

(10) Special Exceptions.

(a) Islands one acre or larger that do not qualify for a bridge permit under these regulations may apply for a special exception. To receive a special exception, the applicant shall present clear and convincing evidence that granting the bridge permit will serve an overriding public interest.

(b) For an application to meet the overriding public interest test, it must demonstrate by clear and convincing evidence that it will create overriding public benefits resulting from mitigation and diminished impacts to public trust resources compared with development that would likely occur without the bridge.

(c) All public benefits considered under this exception must be secured by a permanent conservation easement meeting the requirements of R.30-12.N(4) on all affected property.

(d) Impact reductions that the Department may consider are:

(i) permanent protection of habitat,

(ii) major reductions in building density,

(iii) major reductions in subdivision rights,

(iv) major reductions in docks,

(v) major increases in riparian buffers,

(vi) other architectural and site design improvements, and

(vii) minimization of bridge impacts to environmental and visual resources.

(11) Severability Clause. In the event that any portion of these regulations is construed by a court of competent jurisdiction to be invalid, or otherwise unenforceable, such determination shall in no manner affect the remaining portions of these regulations, and they shall remain in effect, as if such invalid portions were not originally a part of these regulations.

O. Mariculture:

(1) Mariculture means the confined cultivation of aquatic species in the marine environment, including the spawning and rearing of juveniles and adults, either alone or in combination with other species, and the trafficking in said species.

(2) Mariculture activity is increasing in the coastal waters of the State and it can be expected to grow considerably in the coming years. Overall mariculture activities have the potential to increase food supplies and provide employment and with proper management can be a compatible activity for the coastal critical areas. As with all activities in these sensitive areas, there need to be controls to insure that disruptions caused by such operations are minimized or eliminated and public trust issues are properly addressed.

(3) Specific standards which shall apply are as follows:

(a) No commercial mariculture operation will be allowed within 50' of an existing dock or block access to such dock unless conducted by the dock owner or with the dock owner's permission. If a dock is later permitted and constructed in a mariculture area, any affected mariculture operation must be moved to comply with this regulation.

(b) Each mariculture activity must file an operations plan as an addendum to its permit application. This plan must be complete and in the approved format before the application will be placed on public notice. Written confirmation of this by the Department is required. The applicant is advised this list is not all inclusive and other sections of SCDHEC, as well as other agencies, may have additional requirements. The plan must address:

(i) Description of proposed activities, including intended use of products, with maps showing actual coverage of critical area.

(ii) Potential environmental impacts and their mitigation.

(iii) Potential conflicts with existing co-users and their mitigation.

(iv) Navigational issues and plans for marking areas and identifying confinement structures.

(v) Steps taken to guarantee removal of mariculture structures in case of abandonment.

(vi) Storm damage plan.

(c) All structures, such as holding pens, shall be designed to be as unobtrusive visually as possible, with navigational markers meeting Coast Guard requirements, if any.

(d) All mariculture permits will be conditioned to require the permittee to agree to adopt Best Management Practices (BMP's). These BMP's must be updated as industry standards and technology changes.

(e) Private, non-commercial mariculture operations will be limited to no more than two hundred square feet of growing surface. These operations will be permitted only if the permittee owns the adjacent highland and is a riparian property owner.

(4) If a proposed mariculture activity complies with the standards stated in this regulation, a permit shall be issued unless the Department concludes that the activity is inconsistent with the basic state policies contained in Section 48-39-30, or that the activity is contrary to the public interest in that the proposed activity would unreasonably conflict with existing public uses; the proposed activity would unreasonably interfere with navigation; or the proposed activity would be otherwise inconsistent with the Coastal Zone Management Program.

P. Mooring Buoys:

(1) Mooring buoys provide moorage for vessels in open water areas. Mooring buoys, however, may cause navigational problems and hazards.

(2) Specific standards which shall apply to the placement of mooring buoys are as follows;

(a) Mooring buoys may be used to moor private or commercial vessels. Mooring buoys for private waterfront property owners shall be limited to one buoy per property, must be placed within extended property lines and placed on the same side of the channel as the property. No more than two vessels may be moored to the buoy at any time;

(b) With the exception of pumpout facilities, no commercial activity including, but not limited to, food services, T-shirt sales, concessions and boat maintenance services, may be allowed on or around moored vessels;

(c) There shall be no discharge of waste from vessels moored to buoys. Examples of such waste includes, but is not limited to, sewage, garbage and debris;

(d) Permits for private mooring buoys will only be issued to adjoining highground property owners. The mooring diameter (extent of vessel swing) does not allow the moored vessel to swing within 20 feet of extended property lines;

(e) The mooring buoy's anchor(s) must be of a type and or weight to prevent drag of the buoy and must be clearly indicated in the permit application;

(f) The mooring buoy shall be a minimum of 18 inches in diameter, be made of pliable material and have sufficient reflective material so it may be seen at night. The buoy shall have the owners name, address and permit number placed on the buoy with at least one inch letters and must be legible at all times;

(g) If the mooring buoy becomes an impedance or hazard to navigation, it must be removed or relocated by the permittee upon request by the Department. Failure to remove a mooring buoy shall result in permit revocation.

(3) The cumulative impact of private, single family mooring buoys may lead to navigational impedance and these concentrations may be considered a marina type facility. Therefore, developers and communities are encouraged to create and utilize limited mooring fields for the restricted use of the community property owners. These limited mooring fields should be in conjunction with a community docking structure and/or boat ramp for access.

Q. Living Shorelines: Living shorelines, as defined in 30-1.D, are encouraged as an alternative to traditional hardened erosion control structures in estuarine environments because they provide an environmental benefit and reduce the environmental impacts associated with hardened structures. Living shoreline methods involve planting of native vegetation and/or the installation of other green infrastructure. Green infrastructure includes softer approaches to protecting estuarine shorelines and consists of materials that promote growth of native biological components and maintain continuity of the natural land-water interface. Environmental conditions of a site will be considered in the evaluation of living shoreline applications including whether the type of living shoreline has demonstrated success. Demonstrated success can include an increase in the presence of native vegetation and/or oysters, and an increase in elevation on the landward side of the living shoreline installation.

The following standards are applicable for all living shoreline installations:

(1) Living shorelines are limited to waterfront parcels or lots as defined in R.30-1.D.

(2) Living shorelines must be constructed within extended property boundaries of the permittee for individual projects. One application may be submitted for a living shoreline installation that involves more than one adjoining waterfront parcel. The Department may consider an alternative alignment on a site-by-site basis if site-specific characteristics warrant such an alignment.

(3) Living shorelines must be shore parallel and aligned to conform to the natural contours of the shoreline to the maximum extent feasible.

(4) Living shorelines must not be installed in creeks less than twenty (20) feet in width as measured from marsh vegetation on each side unless special geographic circumstances exist. In all cases, the Department will consider any navigational concerns when evaluating the siting of living shoreline projects.

(5) All living shoreline applications must demonstrate that the installations are designed to promote growth of native biological components. Only native vegetation may be used if the site is planted. Living shoreline installations must be composed of Department approved materials. Approval of materials by the Department may require the applicant to submit a certified letter from the supplier of the source material.

(6) The size and extent of the living shoreline must be limited to that which is reasonable for the intended purpose. All living shoreline applications must demonstrate that the living shoreline is designed and constructed in a manner that:

- (a) does not restrict the reasonable navigation or public use of state lands and waters;
- (b) has minimal effect on natural water movement and in no case prohibits water flow;
- (c) does not prevent movement of aquatic organisms between the waterbody and the shore;
- (d) maintains, restores, and/or enhances shoreline ecological processes;
- (e) maintains continuity of the natural land-water interface; and
- (f) prevents the installation from being displaced which can result in marine debris.

(7) Filling or excavation of vegetated tidelands for the construction of a living shoreline is prohibited. Minimal impacts to non-vegetated tidelands may be permitted to achieve a successful installation only if

no feasible alternative exists. Projects with proposed non-vegetated tideland impacts must provide sufficient evidence that no feasible alternative exists and must demonstrate avoidance and minimization of impacts. Construction of living shorelines must not disturb established, live shellfish beds. Living shoreline installations must not be constructed in a manner that results in the creation of upland.

(8) Living shorelines must be maintained by the permittee such that the installation is generally intact and functional. The Department may require the permittee to monitor the living shoreline subject to the critical area permit to determine whether the installation is functioning as intended, results in marine debris, or impedes navigation or public use of state lands and waters.

(9) The Department may require remediation or removal of a living shoreline for reasons that include, but are not limited to:

- (a) the installation is no longer generally intact and functional;
- (b) the installation has resulted in marine debris;
- (c) the installation impedes navigation or public use of state lands and waters; or
- (d) the installation is not accomplishing the intended purpose of the living shoreline.

(10) If a living shoreline is destroyed by natural events, the installation may be rebuilt to its previously permitted configuration so long as reconstruction is completed within one (1) year of the date of the event unless there are extenuating circumstances justifying more time.