

Fiscal Analysis

Areas of Environmental Concern within Ocean Hazard Areas

15A NCAC 07H .0304

Prepared by

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Basic Information

Agency	DENR, Division of Coastal Management (DCM) Coastal Resources Commission
Title of the Proposed Rule	Areas of Environmental Concern (AECs) within Ocean Hazard Areas
Citation	15A NCAC 07H .0304
Description of the Proposed Rule	07H .0304 defines and establishes AECs that are considered to be within the Ocean Hazard Areas along the State's Atlantic Ocean shoreline. Ocean Hazard Area AECs include the Ocean Erodible Area, High Hazard Flood Area, Inlet Hazard Area and the Unvegetated Beach Area.
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Authority	G.S. 113A-107; 113A-113; 113A-124
Necessity	The Coastal Resources Commission is proposing to amend its administrative rules in order to reflect physical changes in the environment that influence how and where oceanfront development is permitted. These changes will serve the public interest by preventing confusion of the regulated community, protecting life and property from the destructive forces indigenous to the Atlantic shoreline and by removing overly restrictive development standards from areas where they are no longer necessary.
Impact Summary	State government: No Local government: No Substantial impact: No Federal government: No Private property owners: Yes

Summary

The proposed rule amendments (see proposed rule text in the Appendix) will remove the temporary Unvegetated Beach (UB) designation from the area in the vicinity of Hatteras Village. The existing vegetation line has exhibited recovery since 2004 and is deemed by the CRC to be no longer necessary for permitting purposes. The proposed changes will also remove the Inlet Hazard Area designation from the site formerly occupied by Mad Inlet, which closed in 1997 and is not expected to reopen.

The groups most affected by these changes will be 137 oceanfront property owners in the area of Hatteras Village designated as an unvegetated beach and 126 property owners within the Mad Inlet designated Inlet Hazard Area. The Division of Coastal Management (DCM) estimates that there will be potential benefits to property owners of increased development potential for parcels in the vicinity of Hatteras Village and Mad Inlet. However, any estimate by the Division of how many structures would be re-built or existing lots could be recombined to increase density would be highly speculative as it would depend upon the occurrence of storms, normal deterioration and other events such as structure fires, as well as

upon the individual willingness of landowners to redevelop properties or rebuild in locations where their prior home had been damaged or destroyed.

The Division of Coastal Management does not expect costs and benefits from these proposed rule changes to exceed \$500,000 annually.

The Division of Coastal Management anticipates the effective date of these rule amendments to be December 1, 2013.

Introduction and Purpose

The Coastal Resources Commission (CRC) is initiating rule making to amend its administrative rules governing two separate sections within 15A NCAC 07H .0304 (AECs within Ocean Hazard Areas). The first rule change is to 07H .0304(4) related to the Unvegetated Beach (UB) Area of Environmental Concern (AEC) designation. The CRC has approved rule language that will remove the current temporary UB designation for Hatteras Village (adopted in 2004). The removal the UB designation near Hatteras Village is necessary as the vegetation line has exhibited recovery since 2004 and can once again be used for setback determinations. The UB designation was a temporary designation connected with damage from Hurricane Isabel (2003) and with subsequent recovery of the vegetation line, this action is seen as being consistent with established CRC policy. The second rule change removes the Inlet Hazard Area designation for Mad Inlet, which closed in 1997. It is considered highly unlikely by the CRC's Science Panel on Coastal Hazards that Mad Inlet will reopen under current conditions.

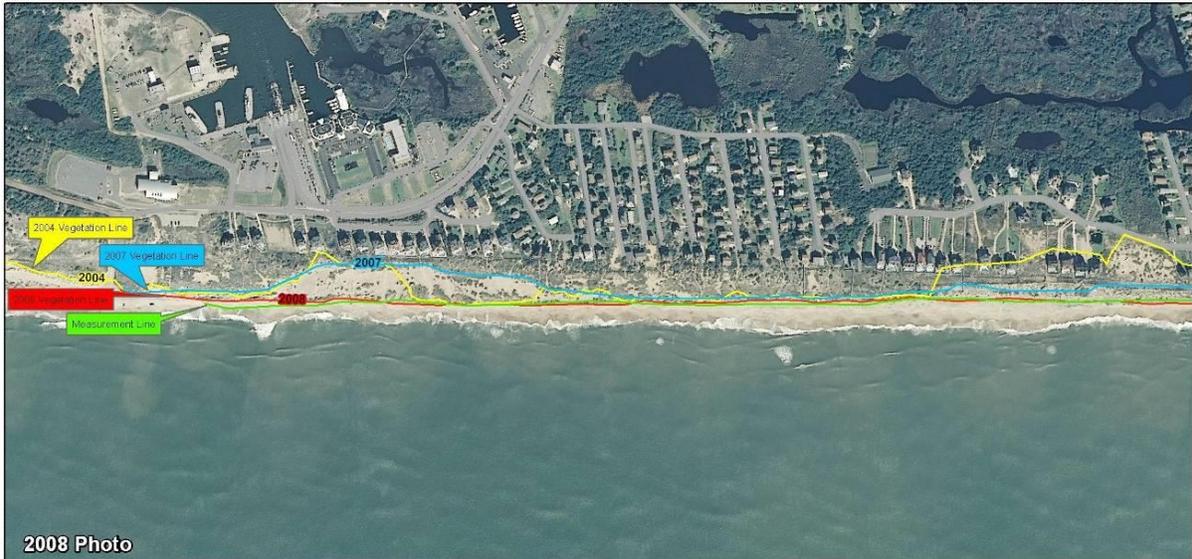
The removal of the temporary UB designation on Hatteras Village will have no significant effect as the stable and natural vegetation has re-established itself at or oceanward of the measurement line set forth in the UB designation (i.e., in some cases, the UB designation has been more restrictive for development setbacks). The removal of the Inlet Hazard Area designation for the former location of Mad Inlet removes all of the restrictions and use standards (15A NCAC 07H .0310) set forth by the CRC for development adjacent to active tidal inlets. Future development would then be subject to the use standards common along all oceanfront shorelines.

Description of the Proposed Rules

UNVEGETATED BEACH AREA

The first issue being addressed through this proposed rule change focuses on the Unvegetated Beach (UB) AEC designation and its application by the CRC on either a temporary or permanent basis to areas where no stable natural vegetation is present. In May 2004, the CRC approved the UB designation as a temporary measurement line used in place of the actual first line of stable and natural vegetation after the loss of vegetation from Hurricane Isabel (September 2003). The only oceanfront community currently with an UB designation is Hatteras Village and this proposed rule change would remove the UB designation from the Village.

After on-the-ground observations at Hatteras Village in February 2010 and a review of the vegetation line recovery since 2004, the temporary UB designation for Hatteras Village is recommended for removal. The photos below show how the vegetation line has reestablished itself since 2004. The result of this action will be an easing of the setback restrictions with a return in many areas to pre-storm conditions. The actual number of properties that will benefit is unknown as setback delineations (based on the first line of stable and natural vegetation) are determined on a lot-by-lot basis and dependent upon the size (square footage) of development proposed for the property.



Hatteras Village

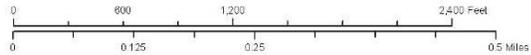
Oceanfront Vegetation Line

- Legend**
- Measurement Line (*Un-Veg. Beach*)
 - Vegetation Line - 2007
 - Vegetation Line - 2008
 - Vegetation Line - 2004

NOTE: Vegetation Line represents "stable-natural" as interpreted from photography



Datum: NAD 83
Projection: North Carolina State Plane
Units: Feet



2008 Photo
Map 1 of 2

NC DENR - Division of Coastal Management - 2010



Hatteras Village

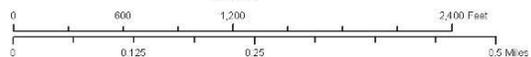
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Datum: NAD 83
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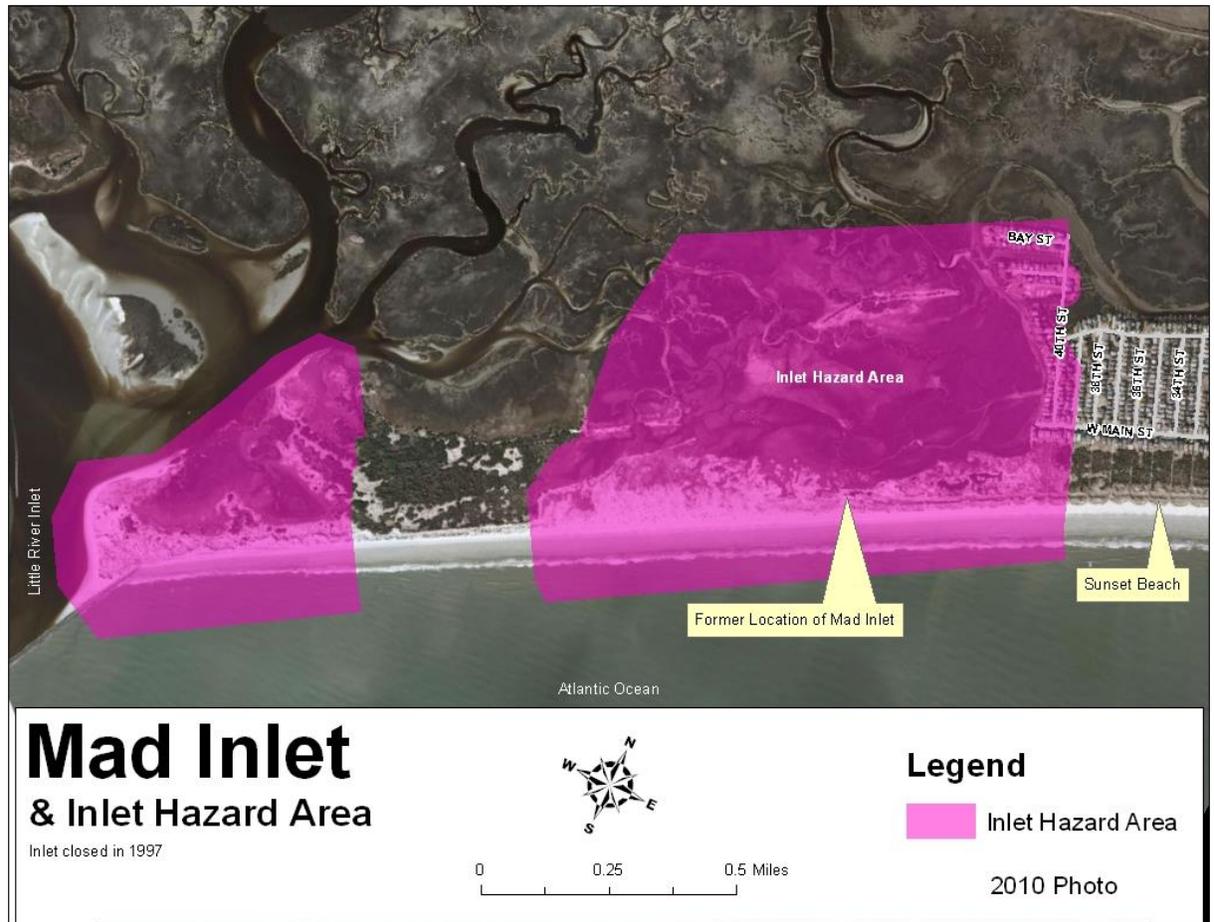


2008 Photo
Map 2 of 2

NC DENR - Division of Coastal Management - 2010

INLET HAZARD AREA

The Inlet Hazard Area (IHA) designations are based on a 1978 study (minor amendments in 1981) of areas that are subject to the dynamic influence of ocean inlets. Mad Inlet, which closed in 1997, previously separated Sunset Beach and Bird Island (part of the North Carolina Coastal Reserve system). As part of the CRC Science Panel's ongoing review of the State's 12 developed inlets, the Panel opted not to review the boundary for the former Mad Inlet as it was generally accepted that the inlet would not reopen. The CRC is therefore proceeding with removing the Inlet Hazard Area designation from the area formally known as Mad Inlet. Removal of the IHA designation will allow property owners to develop under the more common oceanfront development standards as opposed to the more restrictive IHA standards.



NC Division of Coastal Management - 06/13/2013

COSTS OR NEUTRAL IMPACTS

NC Department of Transportation

Removal of Unvegetated Beach Designation

Pursuant to G.S. 150B-21.4, the agency reports that the proposed amendments to 07H .0304 will not affect environmental permitting for the NC Department of Transportation (NCDOT). Roads are subject to setback requirements (development such as roads, parking lots, and other public infrastructure such as utilities have a minimum setback factor of 60 feet or 30 times the shoreline erosion rate, whichever is greater as defined by 07H .0306(a)(2)(I)). Since Hwy 12 already exists in this area, DCM has permitted the repair of the road in its existing location in the event the area is breached during storms. CRC

rule 15A NCAC 07H .0208(a)(3) also allow for the consideration of public benefits consistent with the findings and goals of the NC Coastal Area Management Act when the proposed development is in conflict with its rules. In the event that NCDOT needs to build or maintain a road located within the area currently designated as Unvegetated Beach, the proposed amendments will not change the CRC's approach to permitting that activity. For these reasons, DMC estimates no fiscal impact on DOT.

Removal of Inlet Hazard AEC Designation of Mad Inlet

Pursuant to G.S. 150B-21.4, the agency reports that the proposed amendments to 07H .0304 will not affect environmental permitting for the NC Department of Transportation (NCDOT). Removal of the Inlet Hazard AEC designation will not affect the siting of access roads or the maintenance and replacement of existing bridges per 15A NCAC 07H .0310(a)(3). In the event that NCDOT needs to build or maintain a road located within the area currently designated as an Inlet Hazard AEC for Mad Inlet, the proposed amendments will not change the CRC's approach to permitting that activity. For these reasons, DCM estimates no fiscal impact on DOT.

Local Government

Removal of Unvegetated Beach Designation

Public infrastructure (roads, parking lots, & utilities) have a minimum setback factor of sixty feet (60) or thirty (30) times the shoreline erosion rate (whichever is greater) as defined by 07H .0306(a)(2)(I). In the event that local governments need to replace or rebuild public infrastructure within an Ocean Hazard AEC, the proposed amendments will not change the CRC's approach to permitting that activity per 15A NCAC 07H .0310(a)(3). While the amendment may have a positive impact on the local government's tax base by preserving the tax value (destroyed structures may be re-built due to the seaward movement of the vegetation line), any estimate of how many structures would be re-built would be highly speculative as it would depend upon the occurrence of storms, normal deterioration and other events such as structure fires, as well as upon the individual willingness of landowners to rebuild in locations where their prior home had been destroyed or damaged.

Removal of Inlet Hazard AEC Designation of Mad Inlet

Currently, the IHA designation limits the density of development to no more than one commercial or residential unit per 15,000 square feet of land area and only residential structures of four units or less or non-residential structures less than 5,000 square feet. There are approximately 126 properties located in this area. Less than 10 are undeveloped. These properties would no longer be required to adhere to the density and size restrictions should they be developed or redeveloped. However, they will still be subject to local zoning restrictions as well as designation under the federal Coastal Barriers Resources Act which may also restrict development potential.

BENEFITS

Private Property Owners

Removal of Hatteras Village Unvegetated Beach Designation

Property owners will benefit from recovery of the beachfront and the associated dunes that will allow natural conditions to dictate the siting of development as opposed to a measurement line imposed in the aftermath of a storm. The primary economic impact of this proposed rule change are potential benefits to 137 property owners of structures that may be damaged beyond 50 percent of their value and requiring a CAMA permit. Replacement of structures damaged or destroyed by natural elements, fire or normal deterioration is considered development, requiring a CAMA permit and compliance with current CRC rules including oceanfront setback provisions. Should these property owners replace their structures, they will be able to re-build the structure based on the existing vegetation line with a possibly expanded building envelope.

Removal of Inlet Hazards Area Designation

This action will affect property owners in the vicinity of the area formally known as Mad Inlet. The result of the removal of the designation will lift the restrictions placed on development in the area. Currently, density of development is limited to no more than one commercial or residential unit per 15,000 square feet of land area and only residential structures of four units or less or non-residential structures less than 5,000 square feet. There are approximately 126 properties located in this area. Less than 10 are undeveloped. These properties would no longer be required to adhere to the density and size restrictions should they be developed or redeveloped. This action may be beneficial to any large, not previously subdivided parcel as it could be developed at a greater density than under the Inlet Hazard Area designation. The benefit to property owners is a greater development potential. The Division, however, does not expect this impact to be substantial since less than 10 properties are undeveloped and the largest parcel of affected land is a 104 acre site that comprises the Bird Island Coastal Reserve, which is managed by the Division for conservation purposes.

Local Government

This action may affect the tax base of the local government in the vicinity of the area formally known as Mad Inlet. The result of the removal of the designation will lift the Coastal Resources Commission restrictions placed on development in the area. However, local zoning and federal restrictions may affect overall development potential. The second largest property impacted, after the Bird Island Coastal reserve, is a 35 acre tract comprised of mostly open water and marshland with some high ground. This is a zone Conservation Reserve District by the Town of Sunset Beach. Development is restricted to habitat conservation and limited single family residential development. Minimum lot size is 1 acre with only half of that being buildable high ground. The entire area is also within the Waites Island Complex CBRA Unit (Coastal Barriers Resources Act) administered by the US Fish and Wildlife Service. Development in CBRA areas is ineligible for National Flood Insurance from FEMA. While some development is possible, there will still be substantial restrictions.

Division of Coastal Management

These amendments do not significantly change how various projects are reviewed or permitted by the Division of Coastal Management and the Division does not anticipate a change in permitting receipts due to the proposed action. Since the areas discussed are mostly built out, the Division does not foresee any significant increase in permit requests; therefore the Division does not expect staff to expend more time on permit activities.

COST/BENEFIT SUMMARY

There will be a return to the standard practice of utilizing the first line of stable and natural vegetation in the determination of oceanfront setbacks for the Hatteras Village area. This proposed rule change would ease the setback restrictions with a return in many areas to pre-storm conditions. While there are 137 parcels in the currently designated area, the actual number of property owners who will benefit is unknown as setback delineations (based on the first line of stable and natural vegetation) are determined on a lot-by-lot basis and dependent upon the size (square footage) of development proposed for the property. However, removal of the fix measurement line will allow the use of existing vegetation to determine setbacks. As the vegetation continues to recover, building envelopes within the area will likely increase offering more opportunities for development by property owners. The Division's estimate of how many structures will be re-built would be highly speculative as it would depend upon the occurrence of storms, normal deterioration and other events such as structure fires, as well as upon the individual willingness of landowners to rebuild in locations where their prior home had been damaged or destroyed.

With regard to the Inlet Hazard designation of Mad Inlet, the amendments respond to natural changes in the environment by removing the Inlet Hazard AEC designation and its associated development restrictions for properties in the vicinity of the now closed Mad Inlet. These 126 properties would no longer be required to adhere to the density and size restrictions should they be developed or redeveloped. This action will be particularly beneficial to any large, not previously subdivided parcel as it could be developed at a greater density than under the Inlet Hazard Area designation. However, there are other restrictions including local zoning and federal designation as a CBRA unit that may limit overall development potential. As with lifting the Unvegetated Beach designation, the Division's estimate of how many properties could take advantage of the lifting of density restriction would be highly speculative. The benefit to property owners in the area of Mad Inlet is a greater development potential. Given the reliance on decisions by individual property owners that would affect future development plans on their properties, the Division does not expect there to be a significant economic impact in a 12-month period.

APPENDIX

15A NCAC 07H .0304 AECS WITHIN OCEAN HAZARD AREAS

The ocean hazard AECs contain all of the following areas:

- (1) Ocean Erodible Area. This is the area in which there exists a substantial possibility of excessive erosion and significant shoreline fluctuation. The ~~seaward~~ oceanward boundary of this area is the mean low water line. The landward extent of this area is determined as follows:
 - (a) a distance landward from the first line of stable and natural vegetation as defined in 15A NCAC 07H .0305(a)(5) to the recession line that would be established by multiplying the long-term annual erosion rate times 60, provided that, where there has been no long-term erosion or the rate is less than two feet per year, this distance shall be set at 120 feet landward from the first line of stable natural vegetation. For the purposes of this Rule, the erosion rates are the long-term average based on available historical data. The current long-term average erosion rate data for each segment of the North Carolina coast is depicted on maps entitled “2011 Long-Term Average Annual Shoreline Rate Update” and approved by the Coastal Resources Commission on May 5, 2011 (except as such rates may be varied in individual contested cases, declaratory or interpretive rulings). In all cases, the rate of shoreline change shall be no less than two feet of erosion per year. The maps are available without cost from any ~~local permit officer~~ Local Permit Officer or the Division of Coastal Management; and
 - (b) a distance landward from the recession line established in Sub-Item (1)(a) of this Rule to the recession line that would be generated by a storm having a one percent chance of being equaled or exceeded in any given year.
- (2) The High Hazard Flood Area. This is the area subject to high velocity waters (including hurricane wave wash) in a storm having a one percent chance of being equaled or exceeded in any given year, as identified as zone V1-30 on the flood insurance rate maps of the Federal Insurance Administration, U.S. Department of Housing and Urban Development.
- (3) Inlet Hazard Area. The inlet hazard areas are natural-hazard areas that are especially vulnerable to erosion, flooding and other adverse effects of sand, wind, and water because of their proximity to dynamic ocean inlets. This area extends landward from the ~~normal~~ mean low water line a distance sufficient to encompass that area within which the inlet ~~shall~~, shall migrate, based on statistical analysis, ~~migrate~~, and shall consider such factors as previous inlet territory, structurally weak areas near the inlet and external influences such as jetties and channelization. The areas identified as suggested Inlet Hazard Areas included in the report entitled INLET HAZARD AREAS, The Final Report and Recommendations to the Coastal Resources Commission, 1978, as amended in 1981, by Loie J. Priddy and Rick Carraway are incorporated by reference ~~without future changes~~ and are hereby designated as Inlet Hazard Areas ~~except that the Cape Fear Inlet Hazard Area as shown on the map does not extend northeast of the Baldhead Island marina entrance channel. These areas are extensions for:~~
 - (a) the Cape Fear Inlet Hazard Area as shown on the map does not extend northeast of the Bald Head Island marina entrance channel; and

(b) the former location of Mad Inlet, which closed in 1997.

In all cases, the Inlet Hazard Area shall be an extension of the adjacent ocean erodible areas and in no case shall the width of the inlet hazard area ~~are not be~~ less than the width of the adjacent ocean erodible area. This report is available for inspection at the Department of Environment and Natural Resources, Division of Coastal Management, 400 Commerce Avenue, Morehead City, North Carolina. Photo copies are available at no charge.

- (4) Unvegetated Beach Area. Beach areas within the Ocean Hazard Area where no stable natural vegetation is present may be designated as an ~~unvegetated beach area~~ Unvegetated Beach Area on either a permanent or temporary basis as follows:

(a) An area appropriate for permanent designation as an ~~unvegetated beach area~~ Unvegetated Beach Area is a dynamic area that is subject to rapid unpredictable landform change from wind and wave action. The areas in this category shall be designated following studies by the ~~Coastal Resources Commission~~ Division of Coastal Management. These areas shall be designated on maps approved by the Coastal Resources Commission and available without cost from any ~~local permit officer~~ Local Permit Officer or the Division of Coastal Management.

(b) An area that is suddenly unvegetated as a result of a hurricane or other major storm event may be designated as an ~~unvegetated beach area~~ Unvegetated Beach Area for a specific period of time. At the expiration of the time specified by the Coastal Resources Commission, the area shall return to its pre-storm designation.

~~The Commission designates as temporary unvegetated beach areas those oceanfront areas on Hatteras Island west of the new inlet breach in Dare County in which the vegetation line as shown on Dare County orthophotographs dated 4 February 2002 through 10 February 2002 was destroyed as a result of Hurricane Isabel on September 18, 2003 and the remnants of which were subsequently buried by the construction of an emergency berm. This designation shall continue until such time as stable, natural vegetation has reestablished or until the area is permanently designated as an unvegetated beach area pursuant to Sub Item 4(a) of this Rule.~~

*History Note: Authority G.S. 113A-107; 113A-113; 113A-124;
Eff. September 9, 1977;
Amended Eff. December 1, 1993; November 1, 1988; September 1, 1986; December 1, 1985;
Temporary Amendment Eff. October 10, 1996;
Amended Eff. April 1, 1997;
Temporary Amendment Eff. October 10, 1996 Expired on July 29, 1997;
Temporary Amendment Eff. October 22, 1997;
Amended Eff. February 1, 2013; January 1, 2010, February 1, 2006; October 1, 2004;
Amended Eff. December 1, 2013; April 1, 2004; August 1, 1998.*