ARTICLE IX. PROTECTION OF WATER QUALITY, STREAMS, WETLANDS AND FLOODPLAINS Baltimore County, Maryland

Sec. 14-331. Legislative findings of fact.

- (a) Section 101(a) of the Federal Water Pollution Control Act amendments of 1972 (P.L. 92-500), as amended by the Clean Water Act of 1977 (P.L. 95-217), declares that the objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters. In order to achieve this objective it is hereby declared that, consistent with the provisions of this Act:
 - (1) It is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985;
 - (2) It is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983;
 - (3) It is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited;
 - (4) It is the national policy that federal financial assistance be provided to construct publicly owned waste treatment works;
 - (5) It is the national policy that area wide waste treatment management planning processes be developed and implemented to assure adequate control of sources of pollutants in each state;
 - (6) It is the national policy that a major research and demonstration effort be made to develop technology necessary to eliminate the discharge of pollutants into the navigable waters, waters of the contiguous zone, and the oceans; and
 - (7) It is the national policy that programs for the control of non-point sources of pollution be developed and implemented in an expeditious manner so as to enable the goals of this Act to be met through the control of both point and non-point sources of pollution.
- (b) COMAR 26.08.02, Water Pollution Water Quality, prohibits pollution of the waters of this state and prohibits degradation of the quality of certain waters of this state.
- (c) The state is committed to the 1987 Chesapeake Bay Agreement, the goal of which is to reduce nutrient loads entering the Chesapeake Bay by forty (40) percent by the year 2000 and is initiating implementation of Maryland's Chesapeake Bay Nutrient Reduction Plan 1985--2000, which calls for the establishment of forested buffer strips along stream channels adjoining cropland.
- (d) The county department of environmental protection and resource management has received delegation from the state for the administration of environmental programs.
- (e) The county master plan 1979--1995 calls for the protection of the natural functions of stream valleys and the county master plan 1989--2000 states that wetland and riparian vegetation play an essential role in the natural functioning of stream systems.
- (f) Section 35-1 of this Code, entitled Reservoir Watershed; Subdivision Applications; Studies and Reports, provides for hydrogeological studies and environmental effects reports and authorizes the disapproval of any subdivision within the watershed of a public water supply reservoir if such

studies and/or reports show that such is required in the interest of the protection of the watershed and the public health, safety, and welfare.

- (g) Section 26-276 of this Code, entitled Floodplain and Wetland Protection, restricts construction in or alteration of any floodplain; prohibits dredging, filling, or construction in any wetland; and requires that any wetland must be adequately protected from contamination.
- (h) Section 26-278 of this Code, entitled Preservation of Natural or Historical Features, requires that natural features, including watercourses and significant vegetation, must be preserved.
- (i) Section 22-1 of this Code provides for abatement of nuisances affecting health or the environment.
- (j) The county is a signatory to the 1984 Reservoir Watershed Management Agreement and the 1990 Reaffirmation Agreement which calls for the county to adopt policies to maintain vegetated buffers along streams in new subdivisions.
- (k) The county water quality steering committee has determined that forest buffers are necessary to protect water quality, streams, wetlands, and floodplains and has recommended that regulations concerning the same be enacted.

 (Bill No. 224, 1990, 1(38-28))

Sec. 14-332. Legislative intent.

The purpose of the county council in adopting these regulations is to protect the county's streams, wetlands, and floodplains; to protect the water quality of the county's watercourses, reservoirs, lakes, and the Chesapeake Bay; to protect the county's riparian and aquatic ecosystems; and to provide environmentally sound use of the county's land resources. Multiple environmental protection and resource management values are provided by forest buffers. Forest buffers enhance and protect the natural ecology of stream systems; water quality; wildlife habitat; the aesthetic and scenic qualities of natural features; environmentally sensitive areas, such as aquifer recharge areas; and flora and fauna preservation sites. Forest buffers adjacent to stream systems do the following:

- (1) Restore and maintain the chemical, physical, and biological integrity of the water resources;
- Filter nutrients and toxics;
- (3) Reduce erosion and control sedimentation;
- (4) Stabilize stream banks;
- (5) Provide infiltration of storm water runoff;
- (6) Maintain base flow of streams;
- (7) Provide the organic matter that is the source of food and energy for the aquatic ecosystem;
- (8) Provide tree canopy to shade streams and encourage trout and other desirable aquatic species;
- (9) Provide riparian wildlife habitat;
- (10) Provide scenic value and recreational opportunity; and
- (11) Minimize public investment in waterway restoration, storm water management, and other water resource expenditures.

(Bill No. 224, 1990, 1(38-29))

Sec. 14-333. Scope.

- (a) These regulations shall apply to all proposed development except that section 14-341 of these regulations, Design Standards for Forest Buffers and Building Setbacks, shall not apply to those developments which, prior to January 1, 1991:
 - (1) Have been issued building permits;
 - (2) Have been issued grading permits and an executed public works agreement whenever required; or
 - (3) Have had substantial construction commenced during the period prior to January 1, 1991 and thereafter said construction is pursued to completion with reasonable diligence.
- (b) These regulations shall apply to all forest harvesting operations, except that section 14-341 of these regulations, Design Standards for Forest Buffers and Building Setbacks, shall not apply to those forest harvesting operations which are implementing a forest management plan approved by the department, the state department of natural resources, the county forest conservancy district board, or the county soil conservation district.
- (c) These regulations shall apply to all surface mining operations, except that section 14-341 of these regulations, Design Standards for Forest Buffers and Building Setbacks, shall not apply to active surface mining operations which are operating in compliance with a state surface mining permit. Reclamation of the affected land shall include: the reestablishment of the original stream system to the degree possible, including the reestablishment of the stream channel, one-hundred-year floodplain and wetlands; and the establishment of forest buffers in accordance with sections 14-341 and 14-342 of these regulations.
- (d) The basic purposes of the forest buffer standards and requirements outlined herein shall apply to all agricultural operations and shall be administered by the county soil conservation district through the implementation of an approved soil conservation and water quality plan which includes the application of best management practices, such as the establishment of vegetative buffers and other water quality and stream protection measures.
- (e) Except as provided in subsection (d) of this section and section 14-337(d) herein, these regulations shall apply to all parcels of land, structures and activities which are causing or contributing to:
 - (1) Pollution, including non-point pollution, of the waters of this state within the county;
 - (2) Erosion and sedimentation of stream channels; or
 - (3) Degradation of aquatic and riparian habitat.

(Bill No. 224, 1990, 1(38-30))

Sec. 14-334. Variances.

- (a) The director of the department may grant a variance:
 - (1) For those projects or activities where strict compliance with the requirements of the regulations herein would result in practical difficulty or unreasonable hardship;
 - (2) For those public improvement projects or activities where no feasible alternative is available;
 - (3) For the repair and maintenance of public improvements where avoidance and minimization of adverse impacts to non-tidal wetlands and associated aquatic ecosystems have been addressed; or

- (4) For those developments which have had stream buffers/forest buffers applied in conformance with the requirements outlined in the county water quality management policy (February 1, 1986) or the county executive order for the protection of water quality, streams, wetlands and floodplains (June 4, 1989) and for which the potential for water quality and aquatic resource degradation is minimal.
- (b) The applicant shall submit a written request for a variance to the director of the department. The application shall include specific reasons justifying the variance and any other information necessary to evaluate the proposed variance request. The department may require an alternatives analysis that clearly demonstrates that no other feasible alternative exists and that minimal impacts will occur as a result of the proposed project, activity, or development.
 (c) In granting a request for a variance, the director of the department may require site design, landscape planting, fencing, the placement of signs, and the establishment of water quality ``best management practices" in order to reduce adverse impacts on water quality, streams, wetlands, and floodplains.

(Bill No. 224, 1990, 1(38-31))

Sec. 14-335. Authority.

The county department of environmental protection and resource management is responsible for enforcing the provisions of the regulations herein, and the director is authorized to promulgate rules, policies, and regulations as necessary to implement the provisions of this article, pursuant to Bill No. 88-90.

(Bill No. 224, 1990, 1(38-32))

Sec. 14-336. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section:

Agriculture means all methods of production, processing, storage, and management of livestock, crops, vegetation, and soil. This includes, but is not limited to, the related activities of tillage, fertilization, pest control, harvesting, and marketing. It also includes, but is not limited to, the activities of feeding, housing, and maintaining of animals such as cattle, dairy cows, sheep, goats, hogs, horses, and poultry, and handling their by-products.

Agricultural operation means properties used for the production of agricultural products in accordance with a soil conservation and water quality plan approved by the county soil conservation district.

Applicant means any person who is an owner, contract purchaser, or the legally authorized representative of either requesting approval of development pursuant to this title or article V of title 26

Best management practices or practices (BMPs) means conservation practices or systems of practices and management measures that control soil loss and reduce water quality degradation caused by nutrients, animal wastes, toxics, sediment, and runoff.

Department means the county department of environmental protection and resource management is termed the "department."

Development means:

- (1) The improvement of property for any purpose involving building;
- (2) Subdivision;
- (3) The combination of any two (2) or more lots, tracts, or parcels of property for any purpose;
- (4) Subjecting property to the provisions of the state Condominium Act; and
- (5) The preparation of land for any of the purposes listed in (1) through (4).

Floodplain, one-hundred-year riverine, means that land which is inundated by the storm water runoff created by a one-hundred-year frequency rainfall event (which is an event which has a one (1) percent chance of occurrence in any year) and which is based on maximum development of the watershed using the current zoning and based on the current standards approved by the department of public works.

Forest buffer means a wooded area, including trees, shrubs, and herbaceous vegetation, which exists or is established to protect a stream system.

Forest management plan means a plan prepared by a registered professional forester that describes the manner in which timber will be harvested and replaced to protect water quality and plant and wildlife habitat.

Non-point source pollution means pollution which is generated by diffuse land use activities rather than from an identifiable or discrete facility and is conveyed to waterways through natural processes, such as rainfall, storm runoff, or groundwater seepage rather than by direct discharge. Plan means a written and graphic representation of all proposed development, forest harvesting operations, surface mining operations, agricultural operations and other land use activities, not exempted by section 14-333 of the regulations herein, and prepared in accordance with section 14-338 of the regulations herein.

Pollutant means:

- (1) Any waste or wastewater that is discharged from:
 - a. Any publicly owned treatment works, or
 - b. An industrial source; or
- (2) Any other liquid, gaseous, solid, or other substances which will pollute any waters of this state.

Pollution means any contamination or other alteration of the physical, chemical, or biological properties of any waters of this state, including a change in temperature, taste, color, turbidity, or odor of the waters or the discharge or deposit of any organic matter, harmful organism, or liquid, gaseous, solid, radioactive, or other substance into any waters of this state that will render the waters harmful or detrimental to:

- (1) Public health, safety, or welfare;
- (2) Domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses;
- (3) Livestock, wild animals, birds; or
- (4) Fish or other aquatic life.

Public improvement means any improvement, facility, or service together with its associated public site or right-of-way necessary to provide transportation, drainage, public or private utilities, energy or similar essential services.

Soil conservation and water quality plan means a plan for agricultural properties prepared by the county soil conservation district to protect the productivity of the land base, preserve or enhance water quality, and conserve fish, wildlife, and plant habitat, by incorporating best management practices including control of nutrients, animal wastes, toxics, sediments, and run-off. Soil erodibility K value means a soil conservation service index of the susceptibility of soil to erosion and rainfall.

Stream channel means a part of a watercourse either naturally or artificially created which contains an intermittent or perennial base flow of groundwater origin. For the practical purpose of distinguishing stream channels with base flows of groundwater origin from watercourses with exclusively ephemeral, overland storm water flows, any one (1) of the following physical indicators shall be used:

- (1) Hydrophytic vegetation, hydric soil, or other hydrologic indicators in the area(s) where groundwater enters the stream channel, in the vicinity of the stream headwaters, channel beds, or channel banks; or
- (2) Flowing water not directly related to a storm event; or
- (3) Historical records of a local high groundwater table, such as well and stream gauge records.

Stream order means a classification system of streams based on stream hierarchy; the smaller the stream, the lower its numerical classification. A first order stream does not have tributaries and normally originates from springs and/or seeps. At the confluence of two (2) first order streams, a second order stream begins. Similarly, a third order stream begins at the confluence of two (2) second order streams and so on.

Stream system means a stream channel together with one (1) or both of the following:

- (1) One-hundred-year floodplain, and/or
- (2) Hydrologically related non-tidal wetlands.

Streams means those perennial and intermittent watercourses identified through site inspection and as approved by the department. The most recent county photogrammetric maps may be used as a guide for the preliminary establishment of possible watercourses. Surface water designated uses means designated uses for the surface waters of the state set forth in COMAR 26.08.02 and consisting of:

- (1) Use I: water contact recreation, and protection of aquatic life
- (2) Use I-P: water contact recreation, protection of aquatic life, and public water supply
- (3) Use II: shellfish harvesting waters
- (4) Use III: natural trout waters
- (5) Use III-P: natural trout waters and public water supply
- (6) Use IV: recreational trout waters
- (7) Use IV-P: recreational trout waters and public water supply.

Vegetative cover rating means a rating developed by the department for evaluating the susceptibility of soils and slopes to runoff and erosion and based on the vegetative cover types and hydrologic conditions utilized in the USDA-SCS TR-55 method.

Waste means industrial waste and all other liquid, gaseous, solid, and other substances which will pollute any waters of this state.

Wastewater means:

- (1) Liquid waste substance derived from industrial, commercial, municipal, residential, agricultural, recreational, or other operations or establishments; and
- (2) Other liquid waste substance containing liquid, gaseous, or solid matter and having characteristics which will pollute any waters of this state.

Watercourse means any natural or artificial stream, river, creek, ditch, channel, conduit, waterway, gully, ravine, or wash, flowing in a defined bed or channel, including any area adjacent thereto, which is subject to inundation by reason of overflow of floodwater. It need not flow continuously.

Waters of this state includes:

- (1) Both surface and underground waters within the boundaries of this state subject to its jurisdiction, including that part of the Atlantic Ocean within the boundaries of this state, the Chesapeake Bay and its tributaries, and all ponds, lakes, rivers, streams, tidal and non-tidal wetlands, public ditches, tax ditches, and public drainage systems within this state, other than those designed and used to collect, convey, or dispose or sanitary sewage; and
- (2) The floodplain of free-flowing waters determined by the state department of natural resources on the basis of the one-hundred-year flood frequency.

Wetland (non-tidal) means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation. The determination of whether an area is a non-tidal wetland shall be made in accordance with the publication known as the ``Federal Manual for Identifying and Delineating Jurisdictional Wetlands," published in 1987 and as may be amended. Wetland (tidal) means all state and private tidal wetlands, marshes, submerged aquatic vegetation, lands and open water affected by the daily and periodic rise and fall of the tide within the Chesapeake Bay and its tributaries and additional tidal wetlands identified through site inspection by the department of environmental protection and resource management that are subject to the daily and periodic rise and fall of the tide.

(Bill No. 224, 1990, 1(38-33); Bill No. 10-96, 3, 3-23-96)

Sec. 14-337. Prohibition, abatement and correction of water pollution.

- (a) The department shall manage and regulate the waters of this state within the county according to the surface water quality standards and stream segment designations set forth in COMAR 26.08.02.
- (b) The waters of this state within the county may not be polluted by:
 - (1) Substances attributable to sewage, industrial waste, or other waste that will settle to form sludge deposits that:
 - a. Are unsightly, putrescent, or odorous, and create a nuisance, or
 - b. Interfere directly or indirectly with designated uses:
 - (2) Any material, including floating debris, oil, grease, scum, sludge, and other floating materials attributable to sewage, industrial waste, or other waste in amounts sufficient to:
 - a. Be unsightly,
 - b. Produce taste or odor,
 - c. Change the existing color,

- d. Change other chemical or physical conditions in the surface waters,
- e. Create a nuisance, or
- f. Interfere directly or indirectly with designated uses; and
- (3) High-temperature, or corrosive substances attributable to sewage, industrial waste, or other waste in concentrations or combinations which:
 - a. Interfere directly or indirectly with designated uses, or
 - b. Are harmful to human, animal, plant, or aquatic life;
- (4) Acute toxicity from any discharge; and
- (5) Toxic substances attributable to sewage, industrial wastes, or other wastes in concentrations outside designated mixing zones, which:
 - a. Interfere directly or indirectly with designated uses, or
 - b. Are harmful to human, plant, or aquatic life.
- (c) The director of the department may order:
 - (1) The abatement and correction of any pollution, including nonpoint pollution, of the waters of this state within the county;
 - (2) The abatement and correction of any erosion and sedimentation of stream channels, including the abatement of runoff which contributes to erosion and sedimentation of stream channels; and
 - (3) The abatement and correction of any degradation of aquatic and riparian habitat.
- (d) In the event that there are stream degradation problems resulting from agricultural practices in agricultural operations or the basic purposes of the forest buffer standards and requirements are not being met in agricultural operations, the department shall pursue correction of these stream degradation problems in conjunction with the state department of the environment and the county soil conservation district according to the memorandum of understanding between the state departments of agriculture, health and mental hygiene, and natural resources regarding enforcement procedures in cases of water pollution caused by agriculture (December 29, 1986) or subsequent memoranda.

(Bill No. 224, 1990, 1(38-34))

Sec. 14-338. Plan information.

- (a) In accordance with the provisions of section 14-333 of these regulations or article V of title 26, a plan approved by the department is required for all development, forest harvesting operations, surface mining operations, and agricultural operations.
- (b) The plan shall set forth an informative, conceptual and schematic representation of the proposed activity by means of maps, graphs, charts, or other written or drawn documents so as to enable the department an opportunity to make a reasonably informed decision regarding the proposed activity.
- (c) The plan shall contain the following information:
 - (1) A location or vicinity map;

- (2) Property lines;
- (3) Existing structures or facilities including buildings, roads, wells, and sewage disposal systems (include one hundred (100) feet into adjacent properties where possible);
- (4) Existing and proposed contour lines;
- (5) Proposed sewage disposal areas;
- (6) Field delineated, marked, and surveyed streams, springs, seeps, bodies of water, and wetlands (include two hundred (200) feet into adjacent properties where possible);
- (7) Field delineated, marked, and surveyed forest buffers;
- (8) County department of public works approved one-hundred-year floodplain limits;
- (9) Soils mapped and labeled in accordance with the soil survey of the county;
- (10) Slopes greater than ten (10) percent for areas adjacent to and within five hundred (500) feet of streams, wetlands, or other water bodies; slopes greater than twenty-five (25) percent for all other areas;
- (11) Rare, threatened, or endangered species habitat;
- (12) Existing vegetation;
- (13) Location and type of storm water management facilities;
- (14) Building envelopes;
- (15) Existing and proposed utility lines and easements;
- (16) Historical and archaeological sites;
- (17) A note indicating: ``There shall be no clearing, grading, construction or disturbance of vegetation in the forest buffer, except as permitted by the Baltimore County Department of Environmental Protection and Resource Management";
- (18) Supporting documentation for variance requests including alternatives analyses and conceptual mitigation plans.

(Bill No. 224, 1990, 1(38-35))

Sec. 14-339. Approval of permits.

Before the issuance of any grading permit or building permit by the department of permits and licenses or the approval of any sediment control plan, the director of the department or his designee shall determine that the proposed development is in compliance with the provisions of the regulations herein. A permit may not be issued without compliance with the regulations herein.

(Bill No. 224, 1990, 1(38-36))

Sec. 14-340. Plats and protective covenants.

- (a) Any plat submitted to the county in accordance with the provisions of article V of title 26 shall be accompanied by irrevocable offers of dedication to the county of all forest buffer areas in fee or easements, the scope of which shall be determined by the applicant, but which shall not be a lesser grant than a right of access by the county for the purpose of inspecting and maintaining the forest buffer and providing for the abatement and correction of water pollution, erosion, and sedimentation of stream channels, wetlands, and floodplains, in a form approved by the bureau of land acquisition and the county attorney, and the plat shall be marked with a notation indicating such offers of dedication.
- (b) If an applicant retains any forest buffer, he shall be required to submit for approval by the office of law a declaration of protective covenants. This declaration may be drafted by the county bureau of land acquisition and shall include, at minimum, the management requirements for forest buffers listed in section 14-342 of the regulations herein. The protective covenants shall be recorded in the land records of the county, and shall run with the land and continue in perpetuity. (c) In addition to the provisions of the development regulations concerning plats, all plats prepared for recording and all right-of-way plats shall clearly:
 - (1) Show the extent of any forest buffer on the subject property by metes and bounds;
 - (2) Label the forest buffer;
 - (3) Provide a note to reference any forest buffer stating: ``There shall be no clearing, grading, construction or disturbance of vegetation in the forest buffer except as permitted by the Baltimore County Department of Environmental Protection and Resource Management"; and
 - (4) Provide a note to reference protective covenants governing any forest buffer stating: ``Any forest buffer shown hereon is subject to protective covenants which may be found in the Land Records of Baltimore County and which restrict disturbance and use of these areas."
- (d) An offer of dedication of a forest buffer area to the county shall not be interpreted to mean that this automatically conveys to the general public the right of access to this area. (Bill No. 224, 1990, 1(38-37))

Sec. 14-341. Design standards for forest buffers and building setbacks.

- (a) General requirements.
 - (1) A forest buffer for a stream system shall consist of a forested strip of land extending along both sides of a stream and its adjacent wetlands, floodplain, and slopes. The forest buffer width shall be adjusted to include contiguous, sensitive areas, such as steep slopes or erodible soils, where development or disturbance may adversely affect water quality, streams, wetlands, or other water bodies. This adjustment shall be accomplished by evaluating the potential of a site for impacts that result from runoff, soil erosion, and sediment transport.
 - (2) For those sites where forest vegetation does not exist, it is acceptable to allow the forest buffer to succeed naturally to a wooded state. However, if channel erosion, stream pollution, or habitat degradation exists at that site or has been caused downstream from that site, the director may

require planting of the forest buffer and any additional water quality protection measures.

- (3) The department may post the forest buffer.
- (b) Forest buffer standards for streams, wetlands, and floodplains.
 - (1) For a first or second order stream, the forest buffer shall be measured from the centerline. For all higher order streams, the forest buffer shall be measured from the stream bank of the active channel (bank-full flow).
 - (2) For a use I or I-P stream, the forest buffer shall be the greater of the following:
 - a. Seventy-five (75) feet,
 - b. Twenty-five (25) feet from the outer wetland boundary, or
 - c. Twenty-five (25) feet from the one-hundred-year floodplain reservation or easement boundary.
 - (3) For a use III, III-P, IV or IV-P stream (natural and recreational trout waters), the forest buffer shall be the greater of the following:
 - a. One hundred (100) feet,
 - b. Twenty-five (25) feet from the outer wetland boundary, or
 - c. Twenty-five (25) feet from the one-hundred-year floodplain reservation or easement boundary.
- (c) Adjusted forest buffer standards and requirements for streams and wetlands with adjacent steep slopes and erodible soils.
 - (1) A steep slope and erodible soils evaluation shall be conducted in accordance with the evaluation procedures and criteria specified herein or a comparable method approved by the director for sites containing or adjacent to streams, wetlands, or other water bodies where:
 - a. Slopes exceed ten (10) percent within five hundred (500) feet of the streams, wetlands, or water bodies;
 - b. Soil erodibility K values exceed .24 within five hundred (500) feet of the streams, wetlands, or water bodies; or
 - c. The vegetative cover within one hundred (100) feet of the streams, wetlands, or water bodies is: bare soil; fallow land; crops; active pasture in poor or fair condition; orchard-tree farm in poor or fair condition; brush-weeds in poor condition; or woods in poor condition.
 - (2) An evaluation report shall be submitted for review to the department. This report shall include, as a minimum, the following:

- a. A plan, at a scale not smaller than 1" = 100', that shows:
 - 1. Existing topography with contour intervals no greater than five (5) feet. County photogrammetric maps are an acceptable source for preparing existing topography.
 - 2. Mapped soils as shown in the county soil survey,
 - 3. Field delineated, marked, and surveyed streams and wetlands.
 - 4. Existing vegetation,
 - 5. Existing subdrainage areas of the site, and
 - 6. Slopes in each subdrainage area segmented into sections of slopes less than or equal to ten (10) percent; eleven (11) to nineteen (19) percent; and greater than or equal to twenty (20) percent;
- b. All slope analysis data forms;
- c. A summary of findings including information pertinent to the evaluation of the site; and
- d. A mitigation plan that describes the proposed additional protective measures for those areas where development is allowed with restrictions.
- (3) The site shall be evaluated by assessing each segment of each subdrainage area using the evaluation criteria in Table 1. Each segment shall be given a score for slope, slope length, soil erodibility, vegetative cover, and sediment delivery. A total score shall be assigned for each segment. A segment of a subdrainage area with a total score of thirty-five (35) or greater shall be designated as part of the forest buffer and no development shall be approved in that segment. A segment with a total score of twenty-five (25) or thirty (30) shall require the application of additional protective measures; however, development shall not be prohibited and that area shall not be part of the forest buffer. A segment with a score of twenty (20) or less shall be developed with standard protective measures and that area shall not be part of the forest buffer.

Table 1 Evaluation Criteria for Steep Slopes and Erodible Soils			
Factors	Scores		
	High(10)	Medium (5)	Low (0)
Slope (S)	S >= 20%	10% < S <20%	S <= 10%
Slope Length (SL)	SL >= 200'	50' < SL < 200'	SL <= 50'
Soil Erodibility (K)	K >= 0.32	0.24 < K < 0.32	K < 0.24
Vegetative Cover	pasture in poor condition, orchard-	Active pasture in fair condition, brush-weeds in poor condition, orchard-tree farm in fair condition, woods in poor condition	Active pasture in good condition, undisturbed meadow, brush-weeds in fair condition, orchard-tree farm in good condition, woods in fair condition
slope limit of	watercourses or wetlands (<100'	Adjacent to watercourses or wetlands (100'300' buffer)	Not adjacent to watercourses or wetlands (>300' buffer)

- (d) Standards for building setbacks.
 - (1) At a minimum, the primary or principal structure on a parcel or lot shall be set back from the outer edge of the forest buffer as follows:
 - a. Residential dwellings, thirty-five (35) feet;
 - b. Commercial structures, twenty-five (25) feet;
 - c. Industrial structures, twenty-five (25) feet.
 - (2) The setback can include either private or public land or both. Appurtenant or accessory structures including roads and driveways, utilities, recreational facilities, patios, etc., are permitted within the setback area.

(Bill No. 224, 1990, 1(38-38))

Sec. 14-342. Management requirements for forest buffers.

- (a) The forest buffer, including wetlands and floodplains, shall be managed to enhance and maximize the unique value of these resources. Management includes specific limitations on alteration of the natural conditions of these resources. The following practices and activities are restricted within the forest buffer, except as provided for in forest harvesting operations which are implementing a forest management plan approved by the department, the state department of natural resources, the county forest conservancy district board, or the county soil conservation district, as provided for in surface mining operations which are operating in compliance with a state surface mining permit or as provided for in agricultural operations in accordance with a soil conservation and water quality plan approved by the county soil conservation district:
 - (1) The existing vegetation within the forest buffer shall not be disturbed except as provided in (b) below. This includes, but is not limited to, disturbance by tree removal, shrub removal, clearing, mowing, burning, spraying, and grazing.
 - (2) Soil disturbance shall not take place within the forest buffer by grading, stripping of topsoil, plowing, cultivating, or other practices.

- (3) Filling or dumping shall not occur within the forest buffer.
- (4) Except as permitted by the department, the forest buffer shall not be drained by ditching, underdrains, or other drainage systems.
- (5) Pesticides shall not be stored, used, or applied within the forest buffer, except for the spot spraying of noxious weeds consistent with the recommendations of the University of Maryland Cooperative Extension Service.
- (6) Animals shall not be housed, grazed, or otherwise maintained within the forest buffer.
- (7) Motorized vehicles shall not be stored or operated within the forest buffer, except for maintenance and emergency use approved by the department.
- (8) Materials shall not be stored within the forest buffer.
- (b) The following structures, practices, and activities are permitted in the forest buffer:
 - (1) Roads, bridges, trails, storm drainage, storm water management facilities, and utilities approved by the department are permitted within the forest buffer provided that an alternatives analysis has clearly demonstrated that no other feasible alternative exists and that minimal disturbance will take place. This alternatives analysis shall be submitted to the department in accordance with section 14-334 of these regulations. These structures shall be located, designed, constructed, and maintained to provide maximum erosion protection, to have the least adverse effects on wildlife, aquatic life, and their habitats, and to maintain hydrologic processes and water quality. Following any disturbance, the impacted area shall be restored.
 - (2) Stream restoration projects, facilities and activities approved by the department are permitted within the forest buffer.
 - (3) Scientific studies approved by the department, including water quality monitoring and stream gauging, are permitted within the forest buffer.
 - (4) Horticulture practices may be used to maintain the health of individual trees in the forest buffer.
 - (5) Individual trees in the forest buffer may be removed which are in danger of falling, causing damage to dwellings or other structures, or causing the blockage of streams.
 - (6) Other timber cutting techniques approved by the department may be undertaken within the forest buffer under the advice and guidance of the state departments of agriculture and natural resources, if necessary to preserve the forest from extensive pest infestation, disease infestation, or threat from fire.

(Bill No. 224, 1990, 1(38-39))

Sec. 14-343. Conflict with other regulations.

- (a) Where the standards and management requirements for forest buffers are in conflict with other laws, regulations, and policies regarding streams, steep slopes, erodible soils, wetlands, floodplains, forest harvesting, surface mining, land disturbance activities, development in the Chesapeake Bay Critical Area, or other environmental protection measures, the more restrictive shall apply.
- (b) In addition to compliance with the regulations herein, all proposed activities, projects, and developments within a one-hundred-year riverine floodplain or one-hundred-year tidal flood area shall also comply with the regulations and requirements of the departments of public works and permits and licenses.

(Bill No. 224, 1990, 1(38-40))

Sec. 14-344. Public and private improvements of development.

- (a) In addition to the provisions of article V of title 26 and in accordance with the provisions of section 14-337 of the regulations herein:
 - (1) The applicant shall provide improvements to the forest buffer and stream system in order to abate and correct:
 - a. Water pollution,
 - b. Erosion and sedimentation of stream channels, and
 - c. Degradation of aquatic and riparian habitat; and
 - (2) The county may participate in the cost of any such improvement.
- (b) For any forest buffer or forest buffer easement:
 - (1) Access easements shall be dedicated by the applicant to the county, of which the number, locations, and design standards shall be determined by the department; and
 - (2) Permanent boundary markers, in the form of monuments, shall be installed by the applicant upon request of the department.

(Bill No. 224, 1990, 1(38-41))

Sec. 14-345. Enforcement procedures.

- (a) The director of the department is authorized and empowered to enforce these regulations in accordance with the procedures of this section.
- (b) If, upon inspection or investigation, the director or his designee is of the opinion that any person has violated any provision of these regulations, order, or permit condition promulgated or issued under these regulations, he shall with reasonable promptness issue a correction notice to the person, on such form as prescribed and approved by the director. Each such notice shall be in writing and shall describe with particularity the nature of the violation, including a reference to the provision of these regulations, order, or permit condition alleged to have been violated. In addition, the notice shall fix a reasonable time for the abatement and correction of the violation.
- (c) If, after the time fixed for abatement and correction of the violation has expired pursuant to (b) above, an inspection by the director or his designee determines that the violation or violations continue, the director shall issue a citation by certified mail to the person who is in violation on such form as prescribed and approved by the director. Each citation shall be in writing and shall describe with particularity the nature of the violation, including a reference to the provision of these regulations, order, or permit conditions alleged to have been violated, and include the penalty, if any, proposed to be assessed pursuant to section 14-346 of these regulations, and that the person so charged has thirty (30) days within which to contest the citation or proposed assessment of penalty, if any, and to file a request for a hearing with the director, said hearing to

be held before the director or his designee. At the conclusion of said hearing, the director or his designee shall issue a final order, subject to appeal to the board of appeals of the county. If, within thirty (30) days from the receipt of the citation issued by the director, the person fails to contest the citation or proposed assessment of penalty, if any, the citation and the assessment, if any, as proposed shall be deemed a final order of the director. (Bill No. 224, 1990, 1(38-42))

Sec. 14-346. Civil penalties.

- (a) Any person who violates any provision of these regulations, order, or permit condition promulgated or issued pursuant to these regulations may be assessed a civil penalty not to exceed one thousand dollars (\$1,000.00) for each violation with each day's continuance considered a separate violation.
- (b) The director of the department shall have the authority to assess all civil penalties set forth in these regulations, giving due consideration to the business of the person being charged, the gravity of the violation, the good faith of the person, and the person's history of previous violations.
- (c) Included with the citation as issued pursuant to section 14-345 shall be included instructions for the payment of any assessment levied by the director together with a notification that, upon certification to the director of budget and finance, the assessment shall constitute a lien on the property owned by the person found to be in violation hereof and shall be collectible in the same manner and to the same extent as taxes.

(Bill No. 224, 1990, 1(38-43); Bill No. 49-96, 6, 7-1-96)

Sec. 14-347. Appeals.

- (a) Any person found to be in violation by the director may appeal from the final order issued by the director or his designee to the board of appeals of the county within thirty (30) days after the date of such final order.
- (b) The county shall be a party to all such appeals, and copies of the notice of appeal and petition shall be served on the director of the department and the county attorney.

 (Bill No. 224, 1990, 1(38-44))

Sec. 14-348. Criminal penalties.

- (a) Any violation of any provision of these regulations, order, or permit condition promulgated or issued pursuant to these regulations shall be a misdemeanor and punished by a fine of not more than one thousand dollars (\$1,000.00) or by imprisonment for not more than ninety (90) days or by both. Any person who shall violate such regulations, orders, or permit conditions promulgated or issued pursuant to these regulations shall be deemed guilty of a separate offense for every day that such violation shall continue.
- (b) Whoever knowingly makes any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to these regulations shall, upon conviction, be punished by a fine of not more than one thousand dollars (\$1,000.00) or by imprisonment for not more than thirty (30) days or by both. Such violation shall be a misdemeanor.

(Bill No. 224, 1990, 1(38-45))

Sec. 14-349. Liability for expenses caused by violation.

Any person who violates any provision of these regulations, order, or permit condition promulgated or issued pursuant to these regulations may be liable for any costs or expenses incurred as a result thereof by the county.

(Bill No. 224, 1990, 1(38-46))

Sec. 14-350. Additional remedies for violation.

In addition to any other sanction under these regulations, a person who fails to comply with the provisions of these regulations, orders, or permit conditions promulgated or issued pursuant to these regulations pertaining to forest buffers, stream systems, and water pollution shall be liable to the county in a civil action for damages in an amount equal to twice the cost of restoring the forest buffer, stream system, and water quality as determined by the department. Any damages that are recovered in accordance with this section shall be used as follows:

(1) For the restoration of forest buffers, stream systems, and water quality, or

(2) For the administration of the department's program for the protection and restoration of water quality, streams, wetlands, and floodplains.

(Bill No. 224, 1990, 1(38-47)) **Secs. 14-351--14-400. Reserved.**

Contact:

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