8-B

MOTION: **December 14, 2010**
Regular Meeting
SECOND: **Ord. No. 10-**

RE: **COMPREHENSIVE PLAN AMENDMENT #PLN2009-00547 ENVIRONMENT CHAPTER UPDATE - ALL MAGISTERIAL DISTRICTS**

ACTION:

WHEREAS, under Section 15.2-2229 of the Code of Virginia, Ann., the Board of County Supervisors may consider amendments to the Comprehensive Plan; and

WHEREAS, as stated in Res. No. 09-548, the Prince William Board of County Supervisors initiated consideration of Comprehensive Plan Amendment #PLN2009-00547, Environment Chapter Update, on June 23, 2009, and referred it to the Prince William County Planning Commission; and

WHEREAS, as stated in Res. No. 10-555 that became effective on July 1, 2010, the Board of County Supervisors directed the Planning Commission to conduct a public hearing and make a recommendation for the Environment Chapter of the Comprehensive Plan on September 15, 2010; and

WHEREAS, the Planning Commission duly considered citizen, civic association, interest group, and business/development community input during numerous work sessions and a public hearing that was held on September 15, 2010; and

WHEREAS, at its September 15, 2010 public hearing, the Planning Commission voted to recommend adoption subject to a series of amendments, as stated in Planning Commission Resolutions 10-138, 10-139, 10-140, 10-141, 10-142, and 10-143; and

WHEREAS, the Prince William Board of County Supervisors duly ordered, advertised and held a public hearing on December 7, 2010, at which time public testimony was received and the merits of the above-referenced comprehensive plan amendment were considered; and

WHEREAS, at the December 7, 2010 public hearing, the Prince William Board of County Supervisors approved Comprehensive Plan Amendment #PLN2009-00547, Environment Chapter Update, as recommended by staff with the exception of the definition of Significant Non-RPA Stream and 12 action strategies; and

WHEREAS, at the December 7, 2010 public hearing, the Prince William Board of County Supervisors deferred consideration of the definition of Significant Non-RPA Stream and 12 action strategies to December 14, 2010; and

WHEREAS, the Prince William Board of County Supervisors believes that the public general welfare as well as good planning practices are served by the adoption of this comprehensive plan amendment;

NOW, THEREFORE, BE IT ORDAINED that the Prince William Board of County Supervisors does hereby adopt CPA #PLN2009-00547, Environment Chapter Update with the proposed additional text amendments as attached to this ordinance.

ATTACHMENT: Proposed Additional Text Amendments

Votes:
Ayes:
Nays:
Absent from Vote:
Absent from Meeting:
For Information:
Planning Director
Public Works Director

ATTEST: _____
Clerk to the Board

Extracted from Proposed Text Amendments, as Recommended by Staff

Significant Non-RPA Stream: A stream that is determined to significantly contribute to the health of an RPA stream or public drinking water source and/or that has a defined channel, sorted substrate, groundwater input, and supports aquatic life according to the U.S. Environmental Protection Agency's Rapid Bioassessment Protocol. The determination will also consider the Virginia Unified Stream Methodology's criteria such as channel condition, riparian buffer, in-stream habitat, presence of wetlands and overall sub-watershed conditions. The stream will generally score > 18 points when assessed with the County's preferred stream assessment protocol during the Perennial Flow Determination (PFD) process or as part of a watershed management plan.

EN3.2 Amend the cluster ordinance to ensure that open space is permanently protected, as defined in the Open Space Chapter and managed as a natural area.

EN3.7 Encourage the use of open space/conservation easements to preserve open space in already developed areas in order to provide natural areas, protect environmentally sensitive resources, preserve wildlife habitat and ensure a scenic appearance over time. Consider development at the high end of the density range for those projects that preserve sensitive features, identified in the ECA, beyond the minimum preservation requirements such as buffers, the RPA and floodplain.

EN5.1 When designing a project, use the following priorities for protecting the natural landscape when compatible with the proposed land use:

- Development in the coastal plain in areas of 15% or greater slopes where shrink-swell soils exist should address slope stability through mitigation or avoidance.
- Along significant non-RPA streams, discourage development in all areas of 25% or greater slopes at least 50 feet from the edge of the stream.
- Encourage the preservation of a natural buffer of existing woodland or forestation area of at least 50 feet along each side of all significant non-RPA streams.
- Encourage mitigation where impacts are unavoidable.
- Emphasize the preservation of jurisdictional wetlands over mitigation, including measures that ensure the wetland's sustainability.

EN5.2 Amend the DCSM to require identification of and limit development on all areas with shrink/swell soils, 15% slopes with an erodibility factor K of greater than 0.4, and/or with underlying marine clays. Where impacts are unavoidable, require mitigation.

EN5.9 For properties that include jurisdictional wetlands and waters, 15% or greater slopes, or unique habitats of special concern, require enhanced erosion and sedimentation controls, including super silt fences, erosion control blankets, soil stabilization matting, temporary vegetative cover, and other controls, as required by the Erosion and Sediment Control Program Administrator.

EN5.17 ~~**EN-Policy 12**~~ Identify, manage, and protect ecological communities and wildlife – especially critical habitats – as well as endangered and threatened species, and species of special concern, as identified in official Federal and State lists.

EN5.18 Ensure the County considers the most recent information available on the status and location(s) of rare, threatened and endangered species, rare plant communities and critical habitat areas.

EN6.5 Require adherence to the following guidelines for determination of density or intensity of development:

RESIDENTIAL

Preclude the development of habitable structures within 100-year floodplains. The allowable dwelling unit density for a property in the Urban and Suburban Area shall be calculated based on the area outside the Environmental Resource (ER) area, ~~floodplain, the Chesapeake Bay RPAs, and areas~~ as shown in ~~an~~ the environmental constraints analysis submitted with a rezoning or special use permit application ~~with wetlands; 25 percent or greater slopes; areas with 15 percent or greater slopes in conjunction with soils that have severe limitations; soils with a predominance of marine clays; public water supply sources; and critically erodible shorelines and stream banks.~~ The allowable dwelling unit density areas of the property encumbered by such features shall be based upon the maximum density permitted by the existing zoning of the property at the time of adoption of the Comprehensive Plan. Other relevant Comprehensive Plan components – such as the capacity of the transportation network, environmental constraints, and zoning requirements – must be addressed, as well, in determining the appropriate number of dwelling units on a property.

EN6.10 Update the DCSM to include a protocol for defining Significant Non-RPA Streams during the Perennial Flow Determination (PFD) process and establish standards for protection of these streams including but not limited to buffers, steep slope avoidance, development setbacks and necessary mitigation measures when the proposed development affects these streams.

EN8.2 Amend the DCSM to manage stormwater, to meet the 1-year, 10-year, and 24-hour storm event.

EN8.3 Amend the DCSM to establish and encourage low impact development (LID) standards, including:

- filtering the "first flush" of urban run-off
- expanded use of constructed wetlands, multiple BMPs in a series, and superior BMPs
- enhanced and extended detention on-site (dry ponds with control structures or shallow marsh)

EN10.2 Amend the Zoning Ordinance and DCSM requirements for buffer areas, landscaping, and tree cover requirements to prioritize tree preservation instead of tree replacement.

COUNTY OF PRINCE WILLIAM

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Melissa S. Peacor
County Executive

December 8, 2010

TO: Board of County Supervisors

FROM: Thomas Blaser
Acting Planning Director

THRU: Melissa S. Peacor
County Executive

RE: Comprehensive Plan Amendment #PLN2009-00547, Environment Chapter Update
(All Magisterial Districts)

At the December 7, 2010 public hearing, the Board adopted the majority of proposed amendments to the Environment Chapter with the exception of the definition of Significant Non-RPA Stream and the following action strategies: EN 3.2; EN 3.7; EN 5.1; EN 5.2; EN 5.9; EN 5.17; EN 5.18; EN 6.5; EN 6.10; EN 8.2; EN 8.3; and EN 10.2. These items were deferred until the December 14, 2010 Board meeting.

Please find attached the following items for your reference and to be considered at the December 14, 2010 meeting:

- BOCS ordinance for the remaining sections of the Environment Chapter Update, including staff recommended text
- Attachment A – Analysis of Staff Recommendations and Chairman Alternatives

Staff: Raymond Utz, x 6846

CP Environmental Chapter - Staff Analysis of Staff and Chairman Recommendations

Staff Recommendation		BOCS Chairman Language		Staff Analysis
Significant Non-RPA Stream: A stream that is determined to significantly contribute to the health of an RPA stream or public drinking water source and/or that has a defined channel, sorted substrate, groundwater input, and supports aquatic life according to the U.S. Environmental Protection Agency's Rapid Bioassessment Protocol. The determination will also consider the Virginia Unified Stream Methodology's criteria such as channel condition, riparian buffer, in-stream habitat, presence of wetlands and overall sub-watershed conditions. The stream will generally score > 18 points when assessed with the County's preferred stream assessment protocol during the Perennial Flow Determination (PFD) process or as part of a watershed management plan.		Significant Non-RPA Stream: A stream that at a minimum has a defined channel, sorted substrate, groundwater input, and supports aquatic life. Significant Non-RPA Streams shall be determined based on the following criteria: 1. Significant streams will generally score > 18 points (if no flow is present) or 21 points (if flow is present) when assessed with the County's preferred stream assessment protocol during for the Perennial Flow Determination (PFD) process and; 2. The determination of a stream's significance will further include consideration of the channel condition, riparian buffer condition, in-stream habitat, presence of wetlands and springs, and overall condition of the contributing watershed.		Staff recommends that any stream scoring >18 points be considered a significant non-RPA stream. The alternative suggestion excludes streams with water flow that score < 21 points, and, as a result, will likely reduce the number of stream segments that will be considered significant.

CP Environmental Chapter - Staff Analysis of Staff and Chairman Recommendations

Staff Recommendation		BOCS Chairman Language		Staff Analysis
EN 3.2 Amend the cluster ordinance to ensure that open space is permanently protected, ~~as defined in the Open Space Chapter and managed as a natural area~~.		EN 3.7 Encourage the use of open space/conservation easements or fee simple dedication to preserve open space in already developed areas in order to provide natural areas, protect environmentally sensitive resources, preserve wildlife habitat and ensure a scenic appearance over time. Consider development at the high end of the density range for those projects that preserve sensitive features, identified in the ECA, beyond the minimum preservation requirements such as buffers, the RPA and floodplain.		Staff recommends a new strategy to encourage open space preservation by supporting increased density where minimum open space requirements are exceeded and the use of conservation easements as a preservation tool. The alternative suggestion expands the tools for open space preservation to also include fee-simple dedication. The suggestion could result in more open space lands dedicated fee-simple to the county or to a land conservation entity. The alternative suggestion may result in increased maintenance costs associated with land ownership.

CP Environmental Chapter - Staff Analysis of Staff and Chairman Recommendations

Staff Recommendation		BOCS Chairman Language		Staff Analysis
EN 5.1 When designing a project, use the following priorities for protecting the natural landscape when compatible with the proposed land use: Development in the coastal plain in areas of 15%or greater slopes where shrink-swell soils exist should address slope stability through mitigation or avoidance. Along significant non-RPA streams, discourage development in all areas of 25% or greater slopes at least 50 feet from the edge of the stream. Encourage the preservation of a natural buffer of existing woodland or forestation area of at least 50 feet along each side of all significant non-RPA streams. Encourage mitigation where impacts are unavoidable. Emphasize the preservation of jurisdictional wetlands over mitigation, including measures that ensure the wetland's sustainability..		EN 5.1 When designing a project, use the following priorities for protecting the natural landscape when compatible with the proposed land use: Development in the coastal plain in areas of ~~15% 25~~ or greater slopes where shrink-swell soils exist should address slope stability through mitigation or avoidance. Along significant non-RPA streams, discourage development in all areas of 25% or greater slopes at least 50 feet ~~from the edge of the stream~~ along each side of all significant non-RPA streams Encourage the preservation of a natural buffer of existing woodland or forestation area of at least 50 feet along each side of all significant non-RPA streams. Encourage mitigation where impacts are unavoidable. Emphasize the preservation of jurisdictional wetlands over mitigation, including measures that ensure the wetland's sustainability.		Staff recommends a new strategy suggesting appropriate ways to protect the natural landscapes including identification and mitigation of slopes 15% or greater with shrink-swell soils. The alternative suggestion increases from 15% to 25% the slopes where development would need to address slope stability through mitigation or avoidance. The suggestion would result in slopes between 15% and 25% with shrink-swell soils not receive the same level of scrutiny at time of rezoning as slopes 25% or greater. Slope stability is reviewed at time of site plan through required geo-technical analysis but there may be an increased chance of slope failure. This would, however, not put as stringent a cost or regulation on areas of the County planned for development which have more areas of steep slopes.

CP Environmental Chapter - Staff Analysis of Staff and Chairman Recommendations

Staff Recommendation		BOCS Chairman Language		Staff Analysis
EN 5.2 Amend the DCSM to require identification of and limit development on all areas with shrink/swell soils, 15% slopes with an erodibility factor K of greater than 0.4, and/or with underlying marine clays. Where impacts are unavoidable, require mitigation.		EN 5.2 Amend the DCSM to require identification of and limit development on all areas with shrink/swell soils, 15% slopes with an erodibility factor K of greater than 0.4, and/or with underlying marine clays. Where impacts are unavoidable, require mitigation.		Staff recommends a new strategy to develop a DCSM amendment to identify and limit or mitigate development on certain poor soils. The alternative suggests identifying these poor soils and requires avoidance or mitigation where avoidance is impracticable. The alternative may enable development in areas with poor soils. Since these soils are primarily located in the Potomac Communities area east of Interstate 95, the suggestion could increase opportunities for economic development in this area - which is slated for redevelopment and is a prime area for BRAC related economic growth.

CP Environmental Chapter - Staff Analysis of Staff and Chairman Recommendations

Staff Recommendation		BOCS Chairman Language		Staff Analysis
EN 5.9 For properties that include jurisdictional wetlands and waters, 15% or greater slopes, or unique habitats of special concern, require enhanced erosion and sedimentation controls, including super silt fences, erosion control blankets, soil stabilization matting, temporary vegetative cover, and other controls, as required by the Erosion and Sediment Control Program Administrator.		EN 5.9 Amend the DCSM to require enhanced erosion and sedimentation controls ~~F~~for properties that include jurisdictional wetlands and waters, 15% or greater slopes, or unique habitats of special concern, ~~require enhanced erosion and sedimentation controls~~, including super silt fences, erosion control blankets, soil stabilization matting, temporary vegetative cover, and other controls, as required by the Erosion and Sediment Control Program Administrator.		Staff recommends a new strategy to require rezoning and special use permit cases to utilize enhanced erosion and sediment controls in areas with sensitive features, which constitute a large portion of the county. The alternative is stronger language, suggests that these requirements should be incorporated into the DCSM. The alternative would result in enhanced erosion control to apply to by-right development in addition to development going through the rezoning and special use permit process. These controls will result in reduced sediment leaving a development site but could increase development costs when they are utilized.
EN 5.17 Identify, manage and protect ecological communities and wildlife- especially critical habitats - as well as endangered and threatened species, rare plant communities and critical habitat areas.		EN 5.17 Encourage identification, management, and protection of Identify, manage and protect ecological communities and wildlife- especially critical habitats - as well as endangered and threatened species and species of special concern, as identified in the official Federal and State lists.		The Plan currently contains language to identify, manage, and protect certain critical habitats, in addition to habitats for endangered and threatened species and species of special concern. The alternative eliminates references to endangered and threatened species.

CP Environmental Chapter - Staff Analysis of Staff and Chairman Recommendations

Staff Recommendation		BOCS Chairman Language		Staff Analysis
EN 5.18 Ensure the County considers the most recent information available on the status and locations(s) of rare, threatened, and endangered species, rare plant communities and critical habitat areas		EN 5.18 Ensure the County considers the most recent information available on the status and locations(s) of rare, threatened and endangered species, rare plant communities and unique habitats of special concern. Critical habitat areas located on the DCR map.		Staff suggests a new strategy to ensure the most recent information is used regarding critical habitats. The alternative recommends a focus on Unique Habitats of Special Concern found on the DCR map which is currently on their database while removing the reference to federal and state parameters. Staff's recommendation would have the County be more involved in implementing the Federal Endangered Species Act up front vs. at the permit stage where the developer may or may not need a permit from the Federal government.

CP Environmental Chapter - Staff Analysis of Staff and Chairman Recommendations

Staff Recommendation		BOCS Chairman Language		Staff Analysis
EN6.5 Require adherence to the following guidelines for determination of density or intensity of development: Preclude the development of habitable structures within 100-year floodplains. The allowable dwelling unit density for a property in the Urban and Suburban Area shall be calculated based on the area outside the Environmental Resource (ER) area, ~~floodplain, the Chesapeake Bay RPAs, and areas~~ as shown in ~~an~~ the environmental constraints analysis submitted with a rezoning or special use permit application ~~with wetlands; 25 percent or greater slopes; areas with 15 percent or greater slopes in conjunction with soils that have severe limitations; soils with a predominance of marine clays; public water supply sources; and critically erodible shorelines and stream banks.~~ The allowable dwelling unit density areas of the property encumbered by such features shall be based upon the maximum density permitted by the existing zoning of the property at the time of adoption of the Comprehensive Plan. Other relevant Comprehensive Plan components – such as the capacity of the transportation network, environmental constraints, and zoning requirements – must be addressed, as well, in determining the appropriate number of dwelling units on a property.		EN6.5 RESIDENTIAL Preclude the development of habitable structures within 100-year floodplains. The allowable dwelling unit density for a property in the Urban, ~~and~~ Suburban, and Semi-Rural Areas shall be calculated based on the area outside the ~~Environmental Resource (ER) area,~~ floodplain~~,~~ and Chesapeake Bay RPAs, as shown in ~~an~~ the environmental constraints analysis submitted with a rezoning or special use permit application ~~with wetlands; 25 percent or greater slopes; areas with 15 percent or greater slopes in conjunction with soils that have severe limitations; soils with a predominance of marine clays; public water supply sources; and critically erodible shorelines and stream banks.~~ The allowable dwelling unit density areas of the property encumbered by such features shall be based upon the maximum density permitted by the existing zoning of the property at the time of adoption of the Comprehensive Plan. Other relevant Comprehensive Plan components – such as the capacity of the transportation network, environmental constraints, and zoning requirements – must be addressed, as well, in determining the appropriate number of dwelling units on a property. Amend the land use classifications in the Long–Range Land Use Plan chapter to reflect these guidelines..		Staff suggests language that makes it clear that the gross acreage minus the Environmental Resource (ER) portion of a property is the basis for calculating residential density, consistent with the Long-Range Land Use Plan. The alternative suggestion would change the basis for calculating density to the gross acreage minus only the RPA and floodplain portions of a property. The alternative could increase development density on certain properties with a preponderance of steep slopes and sensitive soils. The suggestion also makes this more consistent with the land use chapter by including semi-rural residential. In addition, this alternative could facilitate the implementation of the Potomac Communities revitalization efforts.

CP Environmental Chapter - Staff Analysis of Staff and Chairman Recommendations

Staff Recommendation		BOCS Chairman Language		Staff Analysis
EN6.10 Update the DCSM to include a protocol for defining Significant Non-RPA Streams during the Perennial Flow Determination (PFD) process and establish standards for protection of these streams including but not limited to buffers, steep slope avoidance, development setbacks and necessary mitigation measures when the proposed development affects these streams.		~~EN 6.10 Update the DCSM to include a protocol for defining Significant Non-RPA Streams during the Perennial Flow Determination (PFD) process and establish standards for protection of these streams including but not limited to buffers, steep slope avoidance, development setbacks and necessary mitigation measures when the proposed development affects these streams.~~		Staff recommends amending the DCSM to include a specific protocol for how to define a significant non-RPA stream, along with standards for protection of those streams. Stream protection would apply to both by-right development as well as rezoning and special use permit process. The alternative suggests not including this strategy. The alternative does not recognize the need to update the DCSM to reflect a protocol for defining and protecting significant non-RPA streams, and would eliminate protections for significant non-RPA streams for by-right development.
EN8.2 Amend the DCSM to manage stormwater, to meet the 1-year, 10-year, and 24-hour storm event.		EN 8.2 Amend the DCSM to require the extended detention of the ~~manage stormwater, to meet the 1-year, 10-year and 24-hour storm event,~~ 24-hour storm volume for a minimum of 24 hours, in addition to the traditional peak control of the 2-and 10-year storm events.		Staff recommends a new strategy requiring management of the one-year storm event. This alternative appears to require detention rather than both detention and management thereby precluding other alternatives such as LID.

CP Environmental Chapter - Staff Analysis of Staff and Chairman Recommendations

Staff Recommendation		BOCS Chairman Language		Staff Analysis
EN8.3 Amend the DCSM to establish and encourage low impact development (LID) standards, including: filtering the "first flush" of urban run-off expanded use of constructed wetlands, multiple BMPs in a series, and superior BMPs enhanced and extended detention on-site (dry ponds with control structures or shallow marsh)		~~EN8.3 Amend the DCSM to establish and encourage low impact development (LID) standards, including: filtering the "first flush" of urban run-off expanded use of constructed wetlands, multiple BMPs in a series, and superior BMPs enhanced and extended detention on-site (dry ponds with control structures or shallow marsh)~~		Staff recommends a new strategy to develop a DCSM amendment to encourage Low Impact Development (LID) techniques consistent with the proposed state stormwater regulations. The alternative suggests eliminating this strategy until the Virginia stormwater regulations have been officially adopted. The suggestion would result in the county not actively promoting LID techniques until we are provided more information on state regulations

CP Environmental Chapter - Staff Analysis of Staff and Chairman Recommendations

Staff Recommendation		BOCS Chairman Language		Staff Analysis
EN10.2 Amend the Zoning Ordinance and DCSM requirements for buffer areas, landscaping, and tree cover requirements to prioritize tree preservation instead of tree replacement.		EN 10.2 Amend the Zoning Ordinance and the DCSM ~~requirements for buffer areas, landscaping, and tree cover requirements to prioritize tree preservation instead of tree replacement~~ to allow reductions in minimum lot areas, setbacks, street frontage, buffers, and other such requirements to encourage preservation of natural vegetation and other desirable features.		Staff recommends a new strategy to prioritize tree preservation over tree replacement within buffers and other landscaped areas. The alternative suggestion would allow additional flexibility for various zoning and DCSM standards to encourage preservation of natural vegetation and other desirable features. The alternative may make administration of the zoning ordinance and DCSM more difficult. However, it may also provide the necessary incentives to achieve preservation of valuable natural features. Another issue may be the impact on other priorities such as sidewalk and driveway alignments and grades.