



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF MANAGEMENT AND BUDGET  
STATE PLANNING COORDINATION

December 21, 2007

Mr. David Baker  
Sussex County Administrator  
P.O. Box 856  
Georgetown, DE 19947

RE: PLUS 2007-11-11 – Sussex County Comprehensive Plan

Dear Mr. Baker:

Thank you for meeting with State agency planners on November 28, 2007 to discuss the proposed Sussex County Comprehensive Plan.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The County is also responsible for meeting with the Governor's Advisory Council on Planning Coordination which will make the final recommendation to the Governor concerning certification.

According to 9 DelCode, §69 Sussex County is required to include certain elements in their comprehensive plan for certification. This letter lists any certification issues needed as well as recommendations from State agencies.

**Certification Issues – The issues listed below must be addressed before the plan can be certified by the Governor:**

Per 29 Del Code 9103 (a) The comprehensive plan review and certification process is intended to compare planning goals and development policies among levels of government for the purpose of attaining compatibility and consistency among the interests of state, county and municipal governments. Plan review and certification are

necessary to properly address potential burdens on the state government for future infrastructure and public services caused by local land use actions.

The draft Sussex County comprehensive plan has not fulfilled a variety of the requirements set forth in the Delaware Code. This PLUS response letter is somewhat lengthy as we want to clearly articulate our issues and concerns. We offer the remaining comments with the purpose of working with Sussex County to revise the draft plan so that the State, the municipalities and the Sussex County government can use it to understand what we should reasonably expect to provide for the citizens of Sussex County to maintain a high quality of life in the near and long term future.

The Sussex County plan, as drafted, does not meet the standards set forth in 9 Del Code 6956 that Sussex County shall prepare a comprehensive plan which includes a future land use element designating proposed future general distribution, location and extent of the use of land for such activities as residential uses, commercial uses, industry, agriculture recreation, conservation, education, public buildings and grounds, other public facilities and other categories of the public and private uses of land. This section also states that the plan shall include standards to be followed in the control and distribution of population densities and building and structure intensities. The proposed distribution, location and extent of the various categories of land use shall be shown on a land use map or map series which shall be supplemented by goals, policies and measurable objectives.

There are no clearly defined County growth zones (except for municipal annexation areas) and the County has not included appropriate standards to be followed in the control and distribution of population densities. It appears that it is the County's intention to promote residential growth throughout the unincorporated area at suburban densities. If this plan is implemented, a recent University of Delaware buildout analysis determined that there could be as many as 1 million additional homes and ultimately a population of over two million people in Sussex. Clearly this is a magnitude of change that the plan does not anticipate. The plan is silent on whether or not this is a desirable future for Sussex County, but even if such a change is desired by the County this plan does not provide a clear path forward for how to accomplish this level of growth in an efficient, equitable, and cost effective manner.

The plan does not clearly identify how growth will be directed into the appropriate Investment Levels of the Strategies for State Policies and Spending, nor does it provide sufficient guidance to allow the State to adjust the Investment Levels to correspond with County growth priorities if necessary. The lack of coordination and collaboration is highlighted by a recent report completed by our office on behalf of the Cabinet

Committee on State Planning Issues. In this report it was determined that 45% of all lots approved in Sussex since 2001 have been in Level 4 areas, where the State has no intentions of providing infrastructure or services for new residents. Clearly, we need to coordinate our efforts more effectively for the benefit of all state taxpayers as well as current and future Sussex residents. Unfortunately, this plan does not provide us the predictability needed to do so.

The comprehensive plan gives no guidance or direction as to how future infrastructure will be provided. We question how the County has determined it can allow the proposed densities while providing the needed infrastructure and services for the future population. As the State will be expected to fund most of the infrastructure needed by the new residents, the State cannot support the certification of this draft comprehensive plan.

**1. The Plan must address the issue of Intergovernmental Coordination as stated in 29 Del Code 6956 (g)(7)**

One of the most significant issues to be understood is that no local government can deal with growth issues on its own. The reason intergovernmental coordination is so important is due to the division of responsibilities between local and state governments. As we all know, land use decisions are the purview of local governments yet provision of the majority of infrastructure and services, such as roads, schools, and emergency services, necessary to support such decisions are provided by the State of Delaware. The draft plan does not provide us such information. We feel this is either because we were not sufficiently consulted in preparation of a number of sections and/or stated state policies were either overlooked or disregarded. Land use matters must be tackled with a partnership approach and this document does not convey that such an effort was sufficiently made.

**2. The County shall develop a clear growth strategy detailing future growth and development patterns.**

This strategy will provide the State a level of predictability for future financial and land use planning. The proposed document provides for growth in all levels as defined by the Strategies for State Policies and Spending. The revised plan should provide guidance that would allow the State, County and local governments to plan for things such as:

- Placement of future state facilities,

- New schools and school recreational facilities
- Emergency services
- Road and transportation improvements
- Conservation and preservation efforts
- Economic development
- The impact of future growth within and around local jurisdictions
- The impact of private wastewater providers within Sussex County

**3. The plan must provide a Capital Improvement Plan covering at least a 5-year period.**

The Capital Improvement Plan (CIP) shall be designed to consider the need for and the location of public facilities in order to encourage the efficient utilization of such facilities. The CIP shall be consistent with 9 Del Code 6956 and the Strategies for State Policies and Spending. The comprehensive plan and the CIP should give specific guidance so the State can amend its spending priorities, if needed, to meet county growth priorities pending certification of the plan.

**4. The County must expand its discussion regarding population projections and demographic information.**

The document as written only provides information regarding the Census defined period of 1990 to 2000. No clear discussion is given to efforts taken by the State or Sussex County to understand population trends as identified by the Delaware Population Consortium. The State expects the County to develop a greater understanding of the County's population to allow for the State and County to better plan for future expenditures necessary to protect the quality of life for Sussex County residents.

**5. The County must include a discussion of the public process that identified the key issues and concerns addressed within the expanded update of the 2003 land use plan.**

Currently, the proposed draft provides no discussion of the many public meetings held with County residents nor does it discuss the meetings held to engage the local jurisdictions. Per 9 Del Code §26.56 (e), the county shall consider all relevant planning documents and define how the community was involved in this process. Please create such a section highlighting key issues and identifying those relevant elements that will work to address these issues.

**6. The Plan must integrate the various elements to support the County's growth Strategy.**

Overall, the State feels the plan needs more substance, stronger recommendations and clear implementation strategies. The plan elements are not integrated and it seems that each plan element was composed separately from the others. The integration of elements is essential to guard against potential conflicts that could hinder the provision of services to Sussex County citizens.

**7. The Plan must identify areas intended to stay rural so the State can invest its Agricultural Preservation and Forestland Preservation dollars wisely for enhanced economic development of Ag industries within the County.**

The County's plan is correct to recognize agriculture as the County's number one industry, and the importance of the agricultural community to the county. Page two of the plan states the County's intention to "encourage economic growth, strongly respect private property rights, and maintain a viable climate for preserving agriculture." However, the DDA is concerned that this statement signals the continued favoring of economic growth through the unplanned, unrestrained development of agricultural land for residential development. This approach has not, and will not, preserve agriculture in Sussex County, or be good for the future economic health of the county.

The introduction to this section highlights the economic importance of agriculture to Sussex County. However, after those opening paragraphs, the plan does not meaningfully detail how the county will support, promote, and grow the business of agriculture into the future. In fact, given the importance of agriculture to Sussex County's economy, we believe it should have its own section in the plan. The plan already has a separate section for industrial and air parks.

**8. The County must coordinate with the Department of Natural Resources and Environmental Control regarding Water, Wastewater, Conservation, Recreation, and Open Space elements of the plan.**

9 Del Code §6956 clearly states that the Water and Sewer Element, Conservation Element, and Recreation and Open Space Element are to be "developed in consultation with and reviewed by" the Department of Natural Resources and Environmental Control. This consultation and review did not take place. One result is that DNREC is uncertain about the sources and data behind the map series, resulting in inconsistent and some cases outdated maps.

In the case of Delaware's other two counties, DNREC (and other state agencies) has been a participating partner in the development of comprehensive plan elements.

On issues ranging from surface water management to source water protection to State Resource Areas, DNREC has offered assistance and advice to the county. Throughout this letter, DNREC continues to make comments and suggestions that would produce a comprehensive plan more balanced and protective of the State's air and water quality, rare and endangered species, forests and wetlands, water supplies and other resources. The County should contact DNREC regarding the coordination and assistance needed to amend the plan and address this issue.

**9. The County Source Water Protection Ordinance must meet Code.**

The County's proposed Source Water Protection ordinance, as required by Title 7, Chapter 60, Subchapter VI of the Delaware Code, does not adequately protect the quality and quantity of public drinking-water supplies. Verbiage in the Water Supply Protection section of the county's 2007 Comprehensive Plan does not accurately describe the scope of the Source Water law. For example, it does not explicitly address the required protection of excellent ground-water recharge areas.

In contrast, the county's 2003 Comprehensive Plan clearly expressed the need to protect sources of potable water. It quantified water demand, wells, average daily use, and the number of community water systems. All of these elements are missing from the 2007 draft plan. The County must provide these details and an acceptable ordinance that protects the resources as required in Delaware Code.

**10. The State Resource Area guidelines must be included in the plan**

State Resource Areas (SRAs) represent Delaware's last remaining significant and unique natural, cultural and geological resources. Approximately 67 percent of the 77,832 acres of designated SRAs in Sussex County are already under some form of protection. The remaining 38,130 acres are not off limits to development. The unique and ecologically important features on these parcels can be preserved through environmentally sensitive development that can enhance its attractiveness and value.

A January 19, 2007 letter from DNREC Secretary John A. Hughes to Sussex County Council advised the county to include eight basic ecological conservation

strategies to guide the protection and development of designated State Resource Areas in its comprehensive plan. While the SRA maps were included in the draft 2007 plan, the guidelines were not. The plan shall include the 8 basic ecological guidelines as approved by the Cabinet Committee on State Planning Issues, and offer specific details of any planned regulations, ordinances, or policies that are key to overall land preservation and natural resource protection under Title 7, Chapter 75 (the Delaware Land Protection Act).

**11. The plan must expand the discussion on housing strategies.**

Given the magnitude of housing challenges facing the County and the resources at their disposal, it is imperative that the County develop and implement a comprehensive and effective housing strategy for their current and future residents. This would include identifying their housing issues and establishing goals to address these issues. Measurable objectives and strategies would be developed with a timeline for implementation.

**12. The County must correct the references and expand its discussion with regards to the Strategies for State Policies and Spending.**

The current draft refers to the Strategies for State Policies and Spending as the “State Priority Funding Areas.” This is an inaccurate title and should be corrected. In addition as part of the requirement to review relevant planning documents, the County should further discuss this document and the County’s policies which implement this document at the County level.

**Recommendations: The following are comments and recommendations made by State agency representatives. The State would like to see these recommendations addressed in the plan.**

**Office of State Planning Coordination – Contact: Bryan Hall 739-3090**

The County should develop sub-regional planning areas to provide predictability for County, State and Private investment.

The County should consider the creation of sub-regional planning areas for the following locations, including but not limited to:

The Greenwood Area  
The Milton Area

The Bridgeville, Seaford, Blades and Laurel - US 13 Corridor Area  
The Delmar Area  
The Millville / Ocean View – Route 26 Corridor Area

The creation of such sub-regional planning areas will build consensus for development scenarios and promote intergovernmental coordination prior to the building of any future development so that there are “few surprises,” providing predictability when these areas experience future growth. This level of planning will consider, but is not limited to, sewer, stormwater management, transportation, and interconnectivity. This office encourages the County to partner with all State and Local jurisdictions as well as the private sector to develop memorandums of understanding to address all future concerns regarding growth within these areas and to support the County’s planning efforts.

**Division of Historical and Cultural Affairs – Contact: Alice Guerrant 739-5685**

The Sussex County Comprehensive Plan was reviewed (according to guidelines used by staff to evaluate Comprehensive Plans submitted through the Preliminary Land Use Service process) and was found not to address fundamental issues relating to the history, background, existing designated properties, or historic preservation activity in the County today. These are all issues that set the stage for the County’s proposed action steps. Also included is a section on how the Division of Historical and Cultural Affairs can assist the County with attaining historic preservation planning goals.

**COMMENTS:**

In responding to the request for comments on the Sussex County Comprehensive Plan, the Division of Historical and Cultural Affairs considered how historic preservation fits into the larger planning infrastructure for Delaware and looked to the guidance given to all local governments regarding building the case for the preservation of important historic properties within their jurisdictions. Governor Ruth Ann Minner established the “Livable Delaware” program in 2001 to align state, county, and municipal decisions about managing growth. Historic preservation contributes substantively to all five of Livable Delaware’s principles:

- Guide growth to areas that are most prepared to accept it in terms of infrastructure and thoughtful planning
- Preserve farmland and open space
- Promote infill and redevelopment
- Facilitate attractive, affordable housing
- Protect our quality of life while slowing sprawl

Historic preservation is integral to the planning process which emphasizes reuse, quality of life, affordability, and sustainable economic growth. The goal of land conservation is also compatible with preserving the archaeological sites, buildings, and vistas often associated with those lands.

*Better Models for Development in Delaware*, a report of the Livable Delaware Advisory Council Subcommittee on Community Design, also points to historic preservation as a core principle for development:

- Principle 4. Preserve Historic Resources

Delaware's rich history is still evident in the wealth of historic buildings and neighborhoods found in cities, small towns and rural areas throughout the state. Historic assets should be identified and protected, and developers should be encouraged to rehabilitate and reuse historic structures. Protecting historic resources such as small-town main streets is also important because historic preservation is a powerful tool for economic revitalization that generates jobs and attracts tourists, residents and investors.<sup>1</sup> *Better Models* advocates new developments that incorporate some of the best features of older neighborhoods that have kept a “small town” feel: architectural variety, shops and schools within walking distance, clustered housing, public open space. The citizens of Delaware consistently indicate that they want to retain more open space and farmland. Historic preservation provides technical tools and infrastructure choices essential for successfully achieving the State’s approach to smart growth.

The ability to fulfill the goal to provide better protection for historic properties is within the jurisdiction of municipal and county governments. The review of the draft Sussex County Comprehensive Plan by Delaware Division of Historical and Cultural Affairs relates to the implementation of these important goals.

### **Setting the Stage- Include a History of the County**

As William Shakespeare wrote in his play *The Tempest*, “what’s past is prologue,”<sup>2</sup> in the context of setting the stage for the historic preservation section of the County Preservation Plan, it is important to provide a brief narrative summarizing the history of Sussex County. Since Sussex County was the location of some of the earliest settlements

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<sup>1</sup> Better Models, p.4

<sup>2</sup> Act II, Scene I, Antonio speaking. *The Tempest* by William Shakespeare.

in Delaware, it is important to help plan readers understand their home county's role in United States' history.

### **What's Already Been Identified? - Include National Register Listings**

The National Register of Historic Places recognizes historical resources that meet specific criteria. Sussex County has 137 listings in the National Register including buildings, sites, structures, districts, and objects. Many municipalities in Sussex County value their historic properties. National Register historic districts are located in Bethel, Bridgeville, Laurel, Lewes, and Milford, while other communities have identified individually important resources within their jurisdictions.

Just a listing in the National Register does not keep buildings standing. Several buildings included in the list have been demolished in the past few years, a bit of information important for the county to note as well. Two prominent demolitions occurred in Sussex since the last update of the county's comprehensive plan. The Greek Revival Style house, Lawrence, formerly located north of the Seaford town limits, was annexed into the town of Seaford and demolished to make way for unspecified development. The Ross Point School #215 C, located east of Laurel, a school built in the 1920s by P.S. DuPont for the education of African American children, was lost to arson. Historic properties in the county are clearly under threat. There are other important losses to cite as well. These losses make the surviving historic properties crucial for preservation as physical hallmarks of our collective past.

### **Which Towns in Sussex County Protect Historic Properties?**

Protection of notable properties in historic districts is most effective when ordinances regulate proposed work to protect and enhance the character these important resources provide to their communities. Lewes and Milton have recently passed such preservation ordinances. Selbyville also has an ordinance to protect historic properties even though they have not gone through the process to list their historic district in the National Register of Historic Places.

### **What Can the County Do to Protect Historic Properties?**

The Sussex County Comprehensive Plan does call for implementation of some protective measures for historic properties, including proposing demolition regulation as a first priority and promoting local zoning within municipalities. The county can also propose to regulate historic properties within areas of their jurisdiction through historic designations. A first step would be to appoint a committee to review the issue and

propose a course of action. This committee would provide a forum for public discussion of the issue and make recommendations to the County Council for action.

### **What Assistance Can the Division of Historical and Cultural Affairs Provide?**

The County can consider applying for Certified Local Government designation. The municipalities of Lewes and Milton have applied for and received this designation. This program provides for the distribution of grant funds from the State Historic Preservation Office for local governments that provide a forum for public discussion on the protection of historic resources through appointing a committee and protect their historic properties through some form of regulation.

The County can consider having their preservation planner work with interested citizens to list their properties in the National Register of Historic Places. Requests frequently come from County residents interested in the honor of the designation since it provides: income tax benefits (useful for repairs to historic buildings) and the recognition the designation brings (generates interest in assisting with historical preservation.)

Additionally, the County can support the documentation of historic properties within their jurisdiction. The Division of Historical and Cultural Affairs can provide technical assistance and grant funding if the County considers becoming a Certified Local Government, to accomplish baseline collection of data for properties within the county. Not every old building is worth saving. Surveys and subsequent levels of documentation provide information for the county's decision on what is worthy of preservation and what is not.

### **Department of Transportation – Contact: Bill Brockenbrough 760-2109**

The November 2007 draft of the Comprehensive Plan is a good start in many ways. DelDOT has done a page-by-page review and have numerous comments on how various parts of the Plan can be improved. The fundamental concern that DelDOT has is that the plan would continue the use of zoning that permits residential development at two dwellings per acre throughout most of the County. The Plan does well in defining Developing, Environmentally Sensitive Developing and Low Density Areas, but without a commitment to change the zoning code to reflect the idea of having different development densities in different areas, the Plan cannot be effective.

DelDOT recognizes that they are responsible for providing transportation services and facilities in Sussex County. DelDOT is asking the County to plan in partnership with them. However, if the County does not plan for greater densities in some places and

lower densities in others, the State cannot afford to provide the kind of services and facilities that at least some Sussex Countians have said they want to have.

At two dwellings per acre, DelDOT cannot afford to provide sidewalks and bicycle paths for all the residents who might want them and the distances between destinations are such that few people use them.

At two dwelling units per acre, transit service is not feasible. Even if the State could afford to route scheduled bus service within walking distance of most people at that density, the time it would take those buses to get everyone to their destinations would discourage people from riding them. If that were not so, the paratransit service that DelDOT offers now would receive greater usage.

At two dwellings per acre, travel by automobile is the only good option, and when everyone is dependent on that mode, congestion necessarily becomes worse. The results are already apparent in the spread of congestion outside the summer peak season. Road widening can help relieve congestion to some extent, but it takes time and money and has its own impacts, which must also be addressed.

If DelDOT is to plan effectively for the County's transportation needs, there is a need for a land use plan that better defines those geographic areas to be protected and preserved and those that should be developed. The Plan as drafted does not provide that.

The DelDOT detailed comments on the Plan are as follows.

- 1) In the Table of Contents and at the start of the chapter, the Mobility Element is parenthetically marked "DelDOT." Why is this done? The Parks and Recreation element is not marked "DNREC." The Historic Preservation Element is not marked "SHPO." If the concern is that DelDOT is the primary author of the Mobility Element, they acknowledge the County's authority to change the text as they fit. DelDOT sees their role as providing assistance in this regard.
- 2) On page 1, in the first paragraph of the Introduction, the last sentence reads "Nearly all public roads in Sussex County are administered by the Delaware Department of Transportation (DelDOT)." That is not quite correct.

As stated in the draft Mobility Element, DelDOT maintains 86 percent of the roads in Sussex County. If the words "nearly all" are important, the County could say "Excluding subdivision streets, nearly all non-municipal public roads in

Sussex County are administered by the Delaware Department of Transportation (DelDOT).”

- 3) On page 4, the first paragraph states “Migration creates a greater immediate impact than gaining population via natural increase. Most migrants to an area arrive as people needing housing and municipal services right away.”

As general statements, these sentences are correct. However, to the extent that these immigrants are people who are moving full-time to what had been their vacation homes, their impact will be reduced.

- 4) On the map of Developed and Protected Lands (page 10), it appears that the Environmentally Sensitive Developing District is shown with cross-hatching. The cross-hatching should be explained in the legend.
- 5) Table 7, on page 12, lists the assessment districts with the strongest growth in construction of new housing units from 2003 to 2006. Does this table include municipal construction? DelDOT would have expected District 131 or District 530 to have more building permits because of the Heritage Shores development.
- 6) On page 13, the last sentence of the first paragraph states that “The location of growth areas designated by Sussex County also influences Delaware state policy on: a) where the State hopes to apply certain growth management strategies; and b) how the State allocates its infrastructure spending.” DelDOT suggests that the more general word “decisions” should be used in place of the word “policy.”
- 7) Again on page 13, the third bullet point is the following goal, “Protect critical natural resources, such as the inland bays and others, by guarding against over-development and permanently preserving selected lands.” DelDOT sees a conflict between the terms “critical” and “over-development.” If the County views a natural resource as critical, it seems to us that the goal should be to protect it from any development. If protection from a certain level of development is sufficient, the resource may be important but it is apparently not critical.
- 8) On page 20, there is a statement that “The County envisions base density in [Developing Areas] to be 2 units per acre with the option to go to 4 units per acre if the developer uses optional density bonuses.” On page 21, there is a similar statement regarding density in Environmentally Sensitive Developing Areas. Two units per acre seems quite low for a growth area, in that such densities

- consume a great deal of land and cannot be practically served by transit. At the same time it seems too high for an unsewered area in that it provides minimal separation between wells and septic systems.
- 9) On page 21, the first sentence under Permitted Uses, reads “Environmentally Sensitive Developing Areas are areas that can accommodate development provided special environmental concerns are addressed.” Some examples should be provided as to what those concerns might be and how the County intends to, or proposes to, address them.
  - 10) On page 22, the next-to-last paragraph on Environmentally Sensitive Developing Areas states “All applicants for developments of a minimum size (as specified in zoning) should continue to be required to provide information that analyzes the development’s potential environmental impacts...” DelDOT disagrees with the idea of exempting developments under a certain size from this requirement. DelDOT recommends an additional requirement that applicants for development in such areas provide mitigation plans resulting in no net degradation, including the cumulative effects of the related transportation improvements.
  - 11) On page 24, there is a statement that “Base densities in Low Density Areas should be unchanged from the current zoning provisions. The minimum lot size should be  $\frac{3}{4}$  acre for lots served by on-lot septic systems and  $\frac{1}{2}$  acre for lots with central sewers.” Combined with parallel statements on pages 20 and 21, this statement points to a real problem that the County needs to acknowledge. Specifically, the Plan as written would continue to specify the same two unit per acre density for Developing Areas, Environmentally Sensitive Developing Areas and Low Density Areas, in short most of the area within the County’s jurisdiction. While there is more to planning, the direction of residential development to appropriate places and in appropriate densities is a fundamental part of it. The Plan needs to do more to address this issue.
  - 12) On page 24, the last of the bulleted policies and actions addresses Transfer of Development Rights. This item could be clarified by the adding the underlined text as follows, “As described later in this chapter, the County also intends to implement techniques such as Transfer of Development Rights (TDR), which gives developers the right to build at higher densities in other, more suitable locations (receiving areas), if they agree to permanently preserve certain rural lands (sending areas).”

- 13) Under The Future Land Use Map, the last sentence on page 25 seems incomplete. “This Draft Plan also does not signal a shift in the County Council’s overall view about the future of land development and land preservation in the County.” The next sentence should be a clear and concise statement of that overall view.
- 14) As contained in the map on page 26, the Future Land Use Plan is too busy to be readily understood. DelDOT recommends some supplemental maps, most especially a two-color map showing growth areas vs. other areas.
- 15) On page 27, in the list of Other Important Land Use Topics, it is suggested that the broader topic of “Affordable Housing” be substituted for “Manufactured Housing.”
- 16) Again on page 27, in the first paragraph under Transfer of Development Rights, DelDOT recommends that the last sentence be ended after the word “property.” The remainder is unnecessary and could be perceived as a slight to the State program mentioned there.
- 17) Yet again on page 27, the last paragraph describes the County’s pay-for-density program as “a variation of TDR” (Transfer of Development Rights). It is not TDR and to describe it in that way seems disingenuous.
- 18) On pages 34 and 35, a “four-step process is recommended in the design of new development in order to emphasize land conservation principles.” The last sentence of the first step reads “The areas with the fewest important natural, scenic and historic features should be considered the ‘Potential Development Area.’” This is not a way of conserving valuable resources. If the resources being mapped are of sufficient importance, there should necessarily be some tracts of land with no “Potential Development Area.”
- 19) DelDOT questions some of the criteria listed on page 36 for evaluating open space. Should a wet pond be considered open space? Should roads, parking, or buildings be counted as open space at all? DelDOT feels it would be better to begin by defining “open space.”
- 20) At the top of page 43, there is a statement that “The Nanticoke River watershed covers about one-third of Delaware.” That is not correct. It may cover one third of Sussex County.

- 21) In the Water and Wastewater Element, it would be very helpful to supplement the map on page 64 with more detailed maps of the existing and planned sewer service areas.
- 22) Beginning on page 72 and continuing on page 73, a strategy is outlined for addressing “public-private sewage treatment service area conflicts and other issues”. As written, this strategy would limit the County’s authority, allowing them to regulate private service only within the County’s officially-designated sewer service areas. Outside those areas they could only comment.

Such a strategy leaves the County without an authority and a responsibility that they should have. The County should review and approve or deny applications outside of service areas and should do so only if consistent with the Plan.

- 23) At the top of page 90, in the Economic Development Element, there is a Strategy “Continue coordinating with DeIDOT to provide safe and convenient road access to areas zoned for business uses.” DeIDOT appreciates this comment and look forward to continuing that coordination and partnership.
- 24) Absent from the Intergovernmental Coordination Element, and apparently from the Plan, is any mention of the County’s 1988 Memorandum of Understanding with DeIDOT regarding land development coordination. There is one aspect of it where a change is needed, and another, where they believe a change is desirable.

Specifically, the Memorandum specifies that D shall be the minimum acceptable level of service when addressing rezoning proposals. Until now, DeIDOT regulations have not addressed this point, but pending DeIDOT regulations would make C the minimum acceptable level of service in rural areas and D the minimum acceptable level of service elsewhere, except where the local government specifies a different standard. Therefore, at a minimum, the Plan must recognize the need to renegotiate the Memorandum. Ideally, it should specify any locations where the County wants to apply a specific LOS standard that is different from the statewide default standard.

In renegotiating the Memorandum, DeIDOT believes it would also be desirable to streamline the process currently in use to allow more efficient handling of development applications. Presently, before accepting a rezoning or conditional use application, the County sends DeIDOT a Service Level Evaluation Request and DeIDOT replies with a Support Facilities Report. The purpose of this exchange is to determine whether a traffic impact study is needed, and if one is

- needed, to stop the application process until that study is completed and reviewed. The process is effective but it includes applications that clearly will not warrant traffic impact studies and applications where the same information is conveyed through the Preliminary Land Use Service process. DelDOT would like to work with the County to identify types of rezoning and conditional use applications that they can accept or not accept without first consulting DelDOT on the particular application. If the County agrees that this would be desirable and wants to do so, they would be most appreciative if it were mentioned in the Plan.
- 25) On pages 104 and 107, there are references to the “Delaware Department of Community Development and Housing.” While there is a department by that name in the Sussex County government, the parallel State agency is the Delaware State Housing Authority.
- 26) On page 110 in the Community Design Element, there is a statement that the Plan encourages traditional neighborhood development, followed by a list of features that the County could promote to achieve such development, notably a “modest density... [of] 5 to 10 homes per acre.” DelDOT recommends that the County act to implement what it claims to encourage, by including such areas in the Future Land Use Plan and change the emphasis by changing “could” to “intends to”.
- 27) Again on page 110, one item addresses front-entrance garages and specifically states that “snout” houses, with the garage entrance placed closer to the street than the rest of the house, should be avoided. DelDOT agrees but the concept was developed to reduce driveway lengths and thereby minimize the amount of impervious surface created. Sometimes desirable goals conflict.
- 28) On page 116, there appear to be words missing from the paragraph on buffering and landscaping. DelDOT recommends that the underlined words be added to the second sentence, “A high impervious coverage should be discouraged but can be mitigated and can still be attractive with the proper landscaping.”
- 29) On pages 116 and 117, in the Community Design Element, there is a discussion of Preserved Open Space within New Developments. This discussion should be linked with the discussion of Eligible Open Space on pages 35 and 36 in the Future Land Use Plan. As a general comment, DelDOT recommends a review of the plan to look for other places where the various elements can and should reference each other and be consistent.

- 30) Further to the discussion of open space on pages 116 and 117, it may be appropriate for the County to distinguish between active open space, which can be used for walking and other recreation, and passive open space, which is part of the aesthetics of a development but which residents cannot or should not enter. DelDOT would agree that passive open space is valuable, but they would expect most people to want some minimum amount of active open space in their developments as well.
- 31) In the discussion of Green Architecture and Green Site Design, a paragraph on page 119 reads “Whenever practical, the turnaround of a cul-de-sac street should include a landscaped island. This island improves the appearance and reduces runoff.” While such an island may be aesthetically desirable, the reduction in runoff may not occur because adding the center island creates a need for a larger outside radius. To use minimum dimensions from DelDOT’s proposed subdivision street standards, a cul-de-sac without an island can have a radius of only 38 feet, which means 4,536.5 square feet of pavement. Adding a 24-foot island increases the radius to 46 feet, which means 4,838 square feet of pavement, not including any curb on the island.

**The Department of Natural Resources and Environmental Control – Contact:  
Kevin Coyle 739-9071**

The purpose of a comprehensive plan is to lay out a strategy for attaining long-range community goals and objectives. From DNREC’s perspective, these objectives should include improvement of the general welfare and quality of life through sustainable economic development and protection of natural resources that benefit all the citizens of Sussex County.

There is a fundamental problem with bypassing discrete and measurable goals and objectives and proceeding directly to a base zoning density of two units per acre throughout the county. The property rights of individual landowners are not absolute and must be balanced with the rights and expectations of their neighbors. Citizens have a right to and expect clean air and water; adequate water supply and wastewater treatment that safeguards their health; protection from flooding and erosion; access to fishing and hunting and other outdoor recreation; healthy and regenerative ecosystems that support the biodiversity necessary to sustain life; and preservation of the rural character that makes a place special and attractive in the first place.

Ironically, universal agricultural/residential zoning does not even recognize the rights of a farmer who chooses to stay in agriculture. It encroaches on that farmer’s rights,

devaluing his business by allowing sprawling residential development to clash with his ability to make a living from the land. If the farmer has agreed to sell his development rights to the state, A/R zoning diminishes the investment of state taxpayers who overwhelmingly support the preservation of farmland.

Likewise, Title 7, Section 723 of Delaware Code sets up a safety zone for hunting and trapping and requires that a weapon not be discharged within 300 feet of a dwelling, barn or stable. A base zoning density of two units per acre will inevitably encroach on public and private hunting areas, so there is definitely a need to balance competing rights.

A consistent defense of A/R zoning at two units per acre is that DNREC permits individual septic systems on ½-acre lots. This argument is a circular one: When DNREC attempts to address siting density in any regulatory revisions, they are reminded that local governments are in charge of land use, not the state. As other jurisdictions have, Sussex County should keep in mind this is a maximum siting density, and their planning decisions should not be based on this maximum siting density.

What is scientifically feasible does not always make for sound land-use policy – or even for responsible environmental policy – because the cumulative effect of large developments in rural areas on half-acre lots is environmental degradation: destroyed wildlife habitat, widespread impervious cover, water pollution, flooding, diminished air quality, increased traffic congestion, and the loss of valuable ecological services provided by forests and wetlands.

The Department of Natural Resources and Environmental Control found three certification issues as noted at the front of this letter. Besides the certification issues, DNREC has several additional concerns related to the 2007 Sussex County comprehensive plan.

**Water quality.** Besides the certification issue of Source Water protection, the plan does not recognize that all 19 of the County's watersheds are subject to pollution reduction targets because they are impaired. The Plan mentions the State's attempt to adopt Pollution Control Strategies in the Inland Bays, Broadkill and Nanticoke watersheds, but does not speak to how its own land-use strategies will improve water quality in all watersheds.

**Environmentally Sensitive Developing Districts.** Despite the name, this designation does not afford a higher level of protection for natural resources. If it retains this designation, the county should develop an overlay zone that incorporates the results of the required environmental assessments into the design of the development so that

sensitive resources are protected and Total Maximum Daily Load (TMDL) requirements are met in these impaired areas.

**Forest loss.** This Plan does not directly address the need for a higher level of forest protection in Sussex County than what is currently afforded. DNREC consistently sees PLUS applications for Sussex County that remove large, continuous tracts of forest. The County should adopt policies that discourage the conversion of valuable forestlands, revise policies that contribute to forest loss, and use mitigation programs to more accurately reflect the full value of ecological services lost when forest land is cleared for development. For example, promoting conservation design in forested areas would enable development to occur while protecting this resource.

**Surface Water Management.** The County should consider existing and future drainage concerns and the cumulative impact on resources prior to approving new development. Consider the impacts of the development on a watershed rather than an individual site scale. Flooding has been a chronic issue not just along the coast, but in western Sussex areas such as Seaford and Laurel. New development can have an unintended but significant economic and environmental impact on downstream property owners, the State and County.

**Air Quality.** The build-out scenarios DNREC has seen for the County (67,000 lots already recorded or in the pipeline for unincorporated Sussex) would generate more than 34,000 tons of carbon dioxide per year and almost 300 tons per year of Volatile Organic Compounds (VOCs) and NO<sub>x</sub>, which produce ground-level ozone and smog. Other significant pollutants include fine particulates and sulfur dioxide (acid rain). Such a level of pollution would trigger a Notice of Violation at a permitted facility. Continuing to generate pollution through an increase in Vehicle Miles Traveled (VMT) caused by sprawl could have a profound affect on economic development in the County if tighter federal and state air controls force businesses to purchase pollution offsets.

## **FUTURE LAND USE ELEMENT**

Page 8, Incorporated Municipalities, last paragraph: Identify the thousands of acres that have been permanently preserved. It should also be noted in the plan where these lands are and who maintains them.

Page 10, Developed and Protected Lands Map: The County needs to update the map. There are lots shown as “proposed” along the coastline that have been built for 10+ years, particularly from Broadkill north to Slaughter Beach. In general, coastal development has been ignored in this plan except in the Inland Bays watershed.

Page 11, Pace of Development: This section reports the number of new development proposals in 2004, 2005 and 2006 for the entire county, including municipalities. It would be more instructive for this section to include data on the number of housing units proposed in areas solely under the county jurisdiction. It is difficult to discern where development is truly occurring – municipality or county – with the data provided.

Page 11, Location of Development: Please identify the assessment districts in the text by name and/or number.

Page 12, Table 7: This table is difficult to use because the assessment districts are not in numerical order. Please revise the table to either include the tax assessment district name in alphabetical order, or put the assessment numbers in numerical order. In addition, this table does not indicate whether the totals include permits that were issued within municipalities.

Page 13, Goals and Purposes of the Future Land Use Plan: The 7<sup>th</sup> goal states “ensure that new developments incorporate preserved usable open space...” Did you mean preserved and usable? DNREC recommends using “passive and active open space” or, to make it clear to the average citizen “...incorporate recreational open spaces and conservation areas.”

Page 20 & 21, Densities: In the description of developing area densities, the Plan states that density bonuses based on road improvements “may not be allowed in the Environmentally Sensitive Developing District Overlay Zone;” but in the Environmentally Sensitive Developing District (ESDD) description, trading road improvements for density bonuses is encouraged.

DNREC does not support increased density in the ESDD. DNREC especially does not support density bonuses in the ESDD that are based upon road improvements. If density bonuses are considered in the ESDD, they should be based upon *significant* conservation measures and restoration (e.g., no less than 300-foot forested buffer from all water bodies, coupled with phragmites control on tidal marshes, upland invasive species control, 2:1 mitigation for unavoidable tree losses on-site, etc).

DNREC fully supports basing the “net” acreage on the developable upland portions of parcel, not only for the ESDD but for the entire County.

Page 21, Environmentally Sensitive Developing Areas: Are there any additional restrictions to limit density in the Environmentally Sensitive Developing Districts?

Density language in this section reads the same as in other areas. What kind of road improvements could be applied for density bonuses? Who decides what is adequate?

In addition to road improvements for density bonuses, consider requiring drainage improvements in areas with drainage issues.

Section 9.0 of the current State Sediment and Stormwater Regulations identifies criteria for Designated Watersheds. A designated watershed or subwatershed is proposed by a Conservation District, county, municipality, or State agency and approved by the Department. The Department may establish additional requirements in those watersheds and subwatersheds due to existing water quality or water quantity problems. The requirements shall be implemented on an overall watershed or subwatershed master plan that is developed for water quality and/or water quantity protection. Consider proposing the ESD area(s) as a designated watershed to require additional surface water management controls.

Page 22, Highway Commercial Areas: Regional stormwater management should be considered a priority in Highway Commercial areas due to the excessive volume management needed.

Page 27, Transfer of Development Rights (TDR): The program in Sussex County as identified in the Plan may have some critical unintended consequences. By focusing open space in the western part of the County and focusing all the density to the east, there is little or no open space available for stormwater management. This program as written has a major impact on the type of practices that can be implemented for surface water management (stormwater management) quality AND quantity controls. More costly and less effective controls may be necessary in highly dense areas.

Page 29, State Resource Areas (SRAs): Add the underlined language to the last sentence on the page: “identifying lands the State and conservation partners may wish to acquire...”

The State Resource Area map as presented is misleading, as SRAs that “overlap known wetlands” are assumed to be protected from development. However, the State has no law protecting non-tidal wetlands. Non-tidal wetlands in the State are protected only by federal law, whose interpretation is in a constant state of flux. Therefore, many hundreds of acres of SRAs within non-tidal wetlands are not protected from development activities. The map should be revised; if the wetland designation is to be kept, it should reflect tidal wetlands only.

Huckleberry Swamp is identified as a State Resource Area that is already protected. However, it is in private ownership with no conservation easement associated with it. Should it be colored blue instead?

Page 30, top of page: Replace “DNREC and the State Office of Planning Coordination have urged...” with “The Delaware Land Protection Act requires...”

Comment on this section: The County did not specifically list the basic ecological conservation strategies for land use decision-making presented in a January 19, 2007 letter to County officials. However, the eight points from the letter are scattered through the draft document in the Future Land Use, Conservation and Parks and Recreation elements. The specific details of any regulations, ordinances, or policies are key to overall land preservation and natural resource protection.

Page 33, Community Design Criteria: Poor and natural drainage areas as well as suitable stormwater management facilities should also be located with roads and trails when locating home sites. Natural hydrology and geography should be considered early in the design. Doing so will save time and money by minimizing future design issues, protecting natural resources, and reducing future drainage and flooding problems for homeowners and developers during and post construction.

The County should consider existing and future drainage concerns and the cumulative impact on resources prior to approving new development. Consider the impacts of the development on a watershed rather than an individual site scale. New development can have an unintended but significant economic and environmental impact on downstream property owners, the State and County. The County may want to consider evaluating the existing drainage patterns within future growth areas to ensure adequate long-term drainage and the cumulative stormwater impact upon full build out.

The County should consider adding a new requirement for developers to submit a Stormwater Impact Findings Report from the Sussex Conservation District prior to pre-approval. This is a new process that has been developed to identify potential drainage and stormwater problems early in the design process. Please find attached a draft of the Findings Report along with supporting documentation. The Sussex Conservation District can provide additional assistance if necessary.

The Drainage and Stormwater Section can provide assistance in identifying tax ditches and areas with historic drainage problems. For the benefit of drainage, stormwater management, water quality, and recreational opportunities, DNREC can provide

recommendations and requests appropriate ordinances be in place before rezoning or development. Contact the Drainage Program using the contacts attached.

Page 35, Eligible Open Space: The second bullet should read as follows: DNREC suggests adding “State Resource Areas” at the end of this sentence: “To preserve environmentally sensitive areas, particularly creek valleys, concentrations of mature woods, and State Resource Areas.” This seems to be boilerplate language, taken from another jurisdiction, as Sussex County has no “creek valleys.”

Page 36, 1<sup>st</sup> bullet item: The first bullet item discusses the use of isolated areas and narrow areas of land as open space. Tax ditch rights of way should be considered open space; however, they are often narrow strips of land, often along the perimeter of the parcel. Please clarify the statement to allow for this instance. Tax Ditch rights of way can include unpaved walking trails if desirable.

Page 36, 5<sup>th</sup> bullet item: Replace “natural” vegetation with “native” vegetation at the end of the sentence.

Add the following bullet item to this section:

- Required open space should consider State Resource Area lands first.

## **CONSERVATION ELEMENT**

Page 37, State Land: Should read as follows: “DNREC’s Division of Parks and Recreation manages 3 Administrative Units in Sussex County which include 5 State parks, 7 nature preserves and 4 other recreation lands for a total of 14,265 acres.

Page 38, State Land (continued): Change 18,000 acres to 19,969 acres; change 9,500 acres to 10,588 acres.

Page 38, Private Preserved Land and Land Under Conservation Easements: Add to the last paragraph in this section the following: “In addition, DNREC holds 17 conservation easements protecting an additional 338 acres.

Page 38, Regulated Wetlands: In the first paragraph of this section, it should be noted that Sussex County does not have a specific ordinance or regulation addressing non-tidal wetlands, and many non-tidal wetlands are not under the jurisdiction of the U.S. Army Corps of Engineers. The statement that the Army Corps of Engineers regulations stringently regulate construction activities in non-tidal wetlands is misleading. Federal

law does protect non-tidal wetlands, but recent court decisions have severely limited the Corps jurisdiction of “isolated” wetlands. It is unknown whether many of the non-tidal wetlands in the center and western portion of the state would be protected under Federal law. It may be advisable to delete non-tidal wetlands from the “protected” layer of the Protected Lands map.

Change the second paragraph to read:

Both tidal and non-tidal wetlands have extensive resource values. The location of these areas must be accurately determined by qualified professionals prior to any site plan reviews or before any County permits may be issued. Wetlands protection is much more effective under state and federal law if qualified professionals are involved in site plan design at the earliest possible stage. Qualified professionals should be informed on the status of relevant court cases and the regulations associated with state and federal programs – including, but not limited to: The State of Delaware Subaqueous Lands Act, Delaware Wetlands Act, Water Quality Certification and Coastal Zone Consistency.

- [Section 10 of the Rivers and Harbors Act of 1899 \(33 U.S.C. 403\)](#) prohibits the obstruction or alteration of navigable waters of the United States without a permit from the Corps of Engineers.
- [Section 404 of the Clean Water Act \(33 U.S.C. 1344\)](#). Section 301 of this Act prohibits the discharge of dredged or fill material into waters of the United States without a permit from the Corps of Engineers.
- [Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended \(33 U.S.C. 1413\)](#) authorizes the Corps of Engineers to issue permits for the transportation of dredged material for the purpose of dumping it into ocean waters.

Other laws may also affect the processing of applications for Corps of Engineers permits. Among these are the National Environmental Policy Act, the Coastal Zone Management Act, the Fish and Wildlife Coordination Act, the Endangered Species Act, the National Historic Preservation Act, the Deepwater Port Act, the Federal Power Act, the Marine Mammal Protection Act, the Wild and Scenic Rivers Act, and the National Fishing Enhancement Act of 1984.

Aside from the benefits of wetlands for flood control, there does not appear to be any other discussion of flood management in the plan.

Page 39, Major Conservation Initiatives Underway: This section is just a review of State and Federal programs; there are no County initiatives mentioned.

Page 40, Delaware Open Space Program: Who are the appropriate State Agencies?

Page 40, State Resource Areas: Revised numbers should be substituted as follows:

- Replace “115,962 acres” with “116,010 acres (18% of the land area)”
- Replace “(77,832 acres)” with “(77,864 acres)”
- Replace “(38,130 acres)” with “(38,146 acres)”

Page 41, Wetlands Conservation: No specific County wetland ordinances were mentioned.

Pages 41-42, Inland Bays Preservation: Is the County concerned about stormwater runoff from development in other watersheds in addition to the Inland Bays?

Page 42, Watershed Pollution Control for the Nanticoke River and Broadkill River:  
Please add:

Under Section 303(d) of the 1972 Federal Clean Water Act (CWA), states are required to identify all impaired waters and establish total maximum daily loads to restore their beneficial uses. A TMDL defines the amount of a given pollutant that may be discharged to a water body from point, nonpoint, and natural background sources and still allows attainment or maintenance of the applicable water quality standards.

A TMDL is the sum of the individual Waste Load Applications (WLAs) for point sources and Load Allocations (LAs) for nonpoint sources and natural background sources of pollution. A TMDL may include a reasonable margin of safety (MOS) to account for uncertainties regarding the relationship between mass loading and resulting water quality. A TMDL matches the strength, location and timing of pollution sources within a watershed with the inherent ability of the receiving water to assimilate the pollutant without adverse impact.

A Pollution Control Strategy (PCS) specifies actions necessary to systematically achieve pollutant load reductions specified by a Total Maximum Daily Load for a given water body and must reduce pollutants to level specified by State Water Quality Standards.

Sussex County is located within the greater Delaware River and Basin drainage, Chesapeake Bay drainage, and the Inland Bays/Atlantic Ocean drainage. Within the

combined area of all three of these basins are 19 individual watersheds. These individual watersheds are assigned specific nutrient (nitrogen and phosphorus) and bacterial TMDL load reduction rates that must be met in order to comply with the State Water Quality Standards. The following table is a listing of nutrient and bacteria reduction requirements for the 19 Sussex County watersheds, and is strongly recommended for incorporation within the revised Sussex County Comprehensive Plan:

Table1.TMDL Reduction Targets for Sussex County Watersheds

<b>Delaware River and Bay Drainage</b>		<b>N</b>	<b>P</b>	<b>Bacteria</b>
1	Mispillion River	57%, 88% in Kings Causeway Branch	57% 88% in Kings Causeway Branch	87%
2	Cedar Creek	45%	45%	96%
3	Broadkill	40%	40%	75%
<b>Chesapeake Bay Drainage</b>		<b>N</b>	<b>P</b>	<b>Bacteria</b>
4	Marshyhope	20%	25%	21%
5	Nanticoke	30%	50%	2%
6	Gum Branch			
7	Gravelly Branch			
8	Deep Creek			
9	Broad Creek			
10	Wicomico	NL	NL	NL
11	Pocomoke	55%	55%	28%
<b>Inland Bays/Atlantic Ocean Drainage</b>		<b>N</b>	<b>P</b>	<b>Bacteria</b>
12	Lewes/Rehoboth Canal	40% low reduction area, 85% high reduction area	40% low reduction area, 65% high reduction area	40% Fresh, 17% Marine
13	Rehoboth Bay			
14	Indian River	40% low reduction area, 85% high reduction area	40% low reduction area, 65% high reduction area	40% Fresh, 17% Marine
15	Iron Branch			
16	Indian River Bay			
17	Buntings Branch	31%	19%	
18	Assawoman	NL	NL	

19	Little Assawoman	40%	40%	
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**Pages 43-44, Sussex County Regulations:**

Bullet Item 1: The Environmentally Sensitive Development District Overlay Zone designation does not afford a higher level of protection for natural resources. An effort to change this and to provide meaning to this designation should be made. Results of environmental assessments should be incorporated into the design of the development so that sensitive resources are protected.

Bullet Item 2: The current buffer requirement is inadequate and should be at least 100 feet in width; in areas that contain rare species or sensitive/critical habitat, the buffer width should be at least 300 feet. This buffer should not be comprised of mowed grasses but of either existing vegetation or planted with native grasses, shrubs, trees or other herbaceous vegetation. If the site is forested, it should be stipulated that common open space must consist of forested lands or a certain percentage must be forested lands, or a percentage should be designated to be reforested.

Bullet Item 3: What exactly is the setback? Is it at least 100 feet, and is this good enough to protect sensitive dune habitat?

Bullet Item 5: Currently, the building setback is 50 feet. This is inadequate as discussed previously and pointed out by other DNREC programs. It should be at least 100 feet in width and vegetated as noted above in Bullet 2.

Last Paragraph: A large percentage of rare species occur within non-tidal wetlands and other critical habitat types. Instead of “evaluating” alternative approaches until the next comprehensive plan review, it is recommended the County consider implementing recommendations that are being put forth now.

As the County revises codes and ordinances, you should coordinate with DNREC regarding road setbacks for coastal construction, drainage rights of way, buffers, vegetated setbacks, floodplain management, etc. These programs have multiple concerns and can provide technical assistance and information during the revision process.

**Page 44, Land Preservation Strategies:**

First bullet item: Natural Heritage Staff would be a good source of information for identifying areas that need protection or where rare species and critical habitat occur.

Second bullet item: The County should provide additional money to the State for buying development rights on lands enrolled in the Agricultural Lands Preservation Program.

Third bullet item: Should add “in cooperation with all land protection entities” to the end of the sentence.

Fifth bullet item: Should read: “Strengthen County development regulations to ensure adequate and properly located open space within residential and commercial developments.” Regulations should mandate connectivity of open spaces within the subdivision and mandate connectivity of open spaces within the region. They should also prohibit designation of isolated, small and unusable areas as open space. New regulations will clearly stipulate allowable uses within open space, will clearly define areas that can constitute passive and active open space and define allowable extent of impervious surfaces and accessory buildings within active open space. For example, stormwater ponds and spray irrigation areas should not count towards open space requirements. Open space regulations should also stipulate the condition in which open space is to be left when dedicated to the community or County and stipulate a preference that passive open space be placed into a permanent conservation easement. Should add “Any required subdivision open space should look at State Resource Area land first, if applicable,” at the end. What is meant by “legitimate” open space?

#### **Page 45, Resource Protection Strategies:**

First bullet item: Non-tidal wetlands provide many valuable functions as well as habitat for a variety of plants and animals, and there are currently no statewide regulations protecting them. Buffer zone distances as discussed above should be a required minimum of 100 feet (and in some cases 300 feet).

DNREC is especially concerned about the impact development has on the water quality and usefulness of State-owned ponds. These ponds are owned by the public and provide much needed recreational opportunities. A private (for profit) entity should not be permitted to detrimentally impact water quality or aquatic habitat by providing inadequate pond edge buffers. Many of these ponds already experience some level of water-quality degradation and require continued State funding to remediate. There should be no less than a required 100-foot buffer between any new development and the edge of the pond. This buffer should not contain lot lines or infrastructure and should not be comprised of mowed grasses but existing vegetation or planted with native wildflowers, grasses, shrubs or trees.

This section should reference “Castelle, A. J., A. W. Johnson and C. Conolly. 1994. *Wetland and Stream Buffer Requirements – A Review*. J. Environ. Qual. 23: 878-882.” This research has documented that a buffer width of less than 100 feet is not sufficiently protective of water quality.

In addition, the County may wish to include language that protects non-tidal wetlands from development as Federal regulations may be inadequate to protect this resource.

Second bullet item: Should read: “Support the Center for the Inland Bays and other conservation groups in their efforts to protect the Inland Bays Watershed.” What exactly is meant by ‘support’? Does the County provide some funding for this effort? If not, providing funds would be a clear indication of support.

Third bullet item: Should read: “Participate in the Tributary Action Teams and other initiatives to formulate Pollution Control Strategies and to focus on implementing these strategies.”

Fourth bullet item: The ‘value’ of setbacks have already been adequately described. This item should read: “Support efforts to protect the waterways by adopting a 100-foot setback from all streams.” Particularly in light of the potential impact from predicted sea level rise in Sussex County and the value that visitors and residents place on scenery and natural settings, the County should be seeking to pass strong and meaningful buffer ordinances.

Fifth bullet item: DNREC would like to see more specificity regarding which codes are going to be amended and what will be included in these amendments.

Sixth bullet item: This item mentions critical wildlife habitat, yet there are no maps in this Plan depicting where it is located. It is strongly suggested that the County include the map of “Key Wildlife Habitat” that is used in the Delaware Wildlife Action Plan. Also, what sections of the zoning and subdivision codes are being considered for new regulations? Some of the key wildlife habitat occurs within large forest blocks and there are currently no regulations protecting forested wildlife habitat. Providing adequate forest preservation may require a new regulation.

Eighth bullet item: Should read: “Adopt a Source Water Protection Program that is protective of the resource.”

Eleventh bullet item: Should read: “In the Environmentally Sensitive Developing Area, delete tidal and non-tidal wetland areas from the gross lot-size calculation used as the

basis for determining allowable site density.” The County should extend this protection to all parts of the County, not just in ESDAs.

Twelfth bullet item: Replace “building coverage” regulations with “impervious surface (or cover)” regulations.

**Page 46, Resource Protection Strategies (continued):**

Second bullet item: This item should include a specific distance. There should be at least a 100-foot setback. For developments that border State Wildlife Areas (and other protected lands), the buffer zone should be at least 300 feet. State lands are owned by the public and are for public use. Because hunting is prohibited within 300 feet of a dwelling, the State will lose use of its land for this recreational purpose if adequate buffers are not put in place by the developer. A private (for profit) entity should not be permitted to take the usefulness of any portion of State land from the public.

In addition, this buffer zone will reduce human disturbance to wildlife and provide a windbreak to prevent trash from blowing into the wildlife area. The buffer will also benefit residents who will be subject to habitat management activities that routinely occur such as prescribed burns, herbicide use, dust/noise from farming, and noise from firearms and barking dogs in pursuit of game.

Third bullet item: While DNREC recognizes the importance of working forests, the protection of such should not be mistaken as protection of critical forested habitat for species of concern. Many of these species require large continuous blocks of forest for breeding or mature forested areas and “working forests” are often those that have been (or will be) harvested to some degree. Working forests are not necessarily managed for biodiversity or forest conservation.

Forest Conservation Initiative

This Plan does not directly address the need for a higher level of forest protection in Sussex County than what is currently afforded. Current provisions by County, State and Federal government do not include a forest conservation element, especially of large, continuous tracts of forest or forests recognized as key wildlife habitat. The majority of these provisions regulate forestry activities or provide incentives for maintaining lands utilized for commercial forestry.

It is highly recommended that this Plan include a forest conservation element and the county should work on developing regulations. A useful document is “Protecting

Delaware's Forests for Biodiversity. December 2003. The Environmental Law Institute, Washington, D.C. ISBN No. 0-0000-00-0 ELI Project No. 972513". There are forest conservation laws adopted by adjacent states that are working in terms of providing conservation while allowing for economic growth. The Maryland Forest Conservation Act is located in Appendix A of the ELI document.

Suggested components:

- 1) The County should set a goal amount of acres to be preserved. Forested areas recognized as the most valuable should be given priority conservation status. Key Wildlife habitat maps (as noted above), SRA maps, and maps depicting areas with highest water quality value would be a useful tool. Development should be discouraged in these areas.
- 2) Developments that are permitted to occur on forested parcels should include a conservation element, such as: required retention of a percentage of forest cover; mitigation plan (that would encourage developers to retain existing forest and would mandate that mature trees unavoidably lost are replaced at a 2:1 ratio); requirement that every reasonable effort to minimize cutting or clearing of trees first be exhausted prior to allowing clearing to occur, and submission of a conservation plan for the site.
- 3) The County should adopt policies that discourage the conversion of valuable forestlands, revise policies that contribute to forest loss, and use mitigation programs to more accurately reflect the full value of ecological services lost when forest land is cleared for development.
- 4) Work with government agencies, legislative delegations, land trusts, or other stakeholders to create or augment dedicated sources of funding for the conservation of forests important to water quality, that occur within an SRA, or that provide key wildlife habitat.

Add the following bullet items:

- Promote conservation design in development plans that addresses land preservation and natural resource protection.
- Adopt floodplain regulations with standards higher than FEMA's minimum requirements in accordance with 60 CFR (Code of Federal Regulations). Contact the Division of Soil and Water Conservation for technical assistance.
- Require setbacks for future maintenance along public ditches, streams, etc.

It is strongly recommended that the County enact an ordinance requiring a best management practice (BMP) implementation plan for all residential and/or commercial development exceeding 20% imperviousness. Studies have shown a strong relationship between increases in impervious cover to decreases in a watershed's overall water quality. Reducing the amount of surface imperviousness through the use of pervious paving materials ("pervious pavers") in lieu of asphalt or concrete, is an example of a practical BMP that could easily be implemented to help reduce surface imperviousness. As a consequence, it is strongly recommended that the County's plan incorporate a recommendation to enact an ordinance that requires the use of pervious paving materials, whenever practicable, in lieu of conventional paving materials. The use of pervious paving materials is especially important for large commercial parking lot areas. Other practices to control impervious area are recommended by the Division of Soil and Water Conservation.

Additionally, the Plan should adopt an ordinance that specifically defines how developers may calculate surface imperviousness. This ordinance should specify and require that the calculation for surface imperviousness include all of the following forms of constructed surface imperviousness: all paved surfaces, rooftops, and stormwater management structures.

It is strongly recommended that the County adopt an "open-space" ordinance recommendation which specifically excludes structural Best Management Practices (BMPs), community wastewater treatment areas, and wetlands from consideration as open space.

The County should develop forest protection levels, especially when a site includes forest identified on Delaware's Natural Areas Inventory.

Finally, the Plan should incorporate the following as recommendations for future ordinances:

- a) An ordinance requiring all applicants to submit a United States Army Corps of Engineers (USACE) approved wetlands delineation to the County as conditional approval for any new commercial and/or residential development. Additionally, this ordinance should also require DNREC approval of all wetland delineations involving tidally influenced wetlands (if applicable).
- b) An ordinance requiring a 100-foot upland buffer (planted in native vegetation) from all wetlands and water bodies.

- c) An ordinance requiring the calculation for surface imperviousness for all commercial and residential development include all constructed forms of surface imperviousness, including all paved surfaces, rooftops, and stormwater management structures.
- d) An ordinance requiring a best management practice (BMP) implementation plan for all residential and commercial development exceeding 20% imperviousness.
- e) An ordinance prohibiting the placement of stormwater management ponds within 100 feet of water bodies and wetlands. That is, all “newly approved” commercial and/or residential projects should contain a vegetated (i.e., native vegetation) 100-foot upland buffer from all stormwater management ponds and water bodies/wetlands.
- f) An ordinance should be adopted that prohibits the placement of lot lines within wetlands within all “new” commercial and/or residential developments. Existing or established lots should “maximize” – to the greatest degree practicable – the distance from building structures and the wetlands line.
- g) An ordinance that restricts development on hydric soil mapping units (using the NRCS soil survey or a licensed soil scientist as determinants).
- h) An ordinance requiring the applicant to use “green-technology” stormwater management in lieu of “open-water” stormwater management ponds whenever practicable.

## **RECREATION AND OPEN SPACE ELEMENT**

A full complement of outdoor recreational facilities provided by municipal, County and State agencies is necessary to meet the public’s outdoor recreation needs. The County continues to remove itself as a direct provider. Under the proposed Land Use Plan, current zoning density and ordinances, outdoor recreational needs will continue to be unmet in the County. Because the County does not address the need to provide county parks and facilities, the gap between current outdoor opportunities and the population’s demand for outdoor facilities will become wider as growth and development increase. The Plan does not demonstrate: 1) that the County will take the initiative to develop a county park system; 2) that the County will take initiative to directly fulfill outdoor recreation facility needs; 3) that it will establish a steady and consistent funding stream to support park land acquisition, park management and park development; and 4) that the County understands its growing population will have diverse recreational needs.

### Inventory

While the inventory does cover all State Parks (repeated in Conservation Element), it does not adequately address: 1) holdings by the Division of Fish & Wildlife (lands and

access sites); 2) municipal parks in Sussex; 3) James Farm Ecological Preserve (Conservation Element); and 4) private recreational facilities (outdoor and indoor). Within coastal State Parks, visitor capacity is reached on weekends by mid-morning. As development increases, greater numbers of area residents and vacationers will not have beach access for coastal-based recreation.

### Greenways and Trails

The Plan incorrectly states that the East Coast Greenway Trail is being analyzed for extension into the County.

The Captain John Smith National Historic Water Trail was added to the National Trail System in December 2006. A trail segment falls in the Nanticoke River. The plan does not address how the County will protect, enhance or promote this historic trail.

The County should require intercommunity bicycle/pedestrian pathways that would serve as both recreational resources and alternative transportation facilities.

### County and Municipal Involvement

The Plan needs to define the level of commitment to being “very active” in helping finance open space preservation. The plan should identify what level of general revenue will be earmarked. The Plan states that the County makes donations to various recreation-related community groups but does not identify them nor define/outline their role in providing recreational services and opportunities. This information should be included in the plan.

### Parks and Recreation Strategies

Nowhere does the Plan state that the County will fill recreation facility gaps by managing land or directly providing indoor *or* outdoor recreational opportunities. Though the County states it will give selected grant assistance to non-profits, the Plan does not address the role non-profits may play in providing recreational opportunities.

Though the Sussex Land Trust is mentioned in both the Recreation and Open Space and Conservation Elements, the Plan does not provide a specific outline of the Trust's long-range vision for land protection. Include a map and in-depth description of the Sussex Land Trust vision. Is there a vision to protect lands that will support active recreational facilities?

The County is very vague and noncommittal in stating its role as a partner in building the outdoor recreation estate within the County.

Demonstrate and be specific in stating how it will work with DNREC (specifically which Divisions) and other state agencies to increase active and passive recreational facilities.

Sussex endorses statements and findings reported in the State Comprehensive Outdoor Recreation Plan (page 56,) but the Plan does not state what actions the County will take to implement SCORP recommendations.

Page 55, first bullet item, fourth sub-item: In new developments, recreation areas open to the public should be identified in covenants and ordinances to clearly allow public access. Open space requirements should be variable, depending on the use (active or passive).

The County should consider allowing the purchase of active open space credits through contribution to the open space fund. In addition, the County should require maintenance plans for woodlands/open space in new developments.

### **WATER AND WASTEWATER ELEMENT**

Page 57, Water Supply Overview

The third sentence is incorrect. It should read: DNREC regulates wells and water allocations. The Division of Public Health, Office of Drinking Water (ODW) regulates drinking water systems.

The DNREC Water Allocation Program reviewed the Sussex County 2007 Comprehensive Plan Update to determine whether the County has provided adequate water supply planning. The following comments are preliminary, due to the scope of the document and the lack of adequate background information.

The Water Allocation Program has the following concerns about the future water use:

1. Adequacy of supply for future growth
2. Impacts of current and future ground-water withdrawals

Adequacy of supply: Future water availability cannot be predicted using the proposed Plan, because of the following omissions from the Plan:

1. The projected population increase of 46,483 new residents by 2020 has not been broken down by water service areas.
2. The Major Proposed Developments shown on page 10 are not listed, tabulated or otherwise planned for in any other part of the document.

In order to address the adequacy of water supply for the predicted growth, each proposed new development should be listed with its location, projected build-out population, and proposed source of water supply. If the development falls within an existing public or private water service area, the Water Allocation Program can address the adequacy of that supply for the proposed new population.

If the proposed new development falls outside an existing public or private water service area, the County must decide if the location is appropriate for individual wells. There has apparently been in the past an assumption that all areas are appropriate for individual wells. However, past incidences of contamination of domestic wells by nitrates and saltwater intrusion demonstrate that this is not always the case.

The County must make an informed decision about the use of domestic wells and follow that decision by action to prevent the construction of developments that rely on individual domestic water supplies in inappropriate areas. Only the County has the authority to take this action. It is impractical to expect DNREC's Water Supply Section to deny permits to homeowners who have already bought their homes and are waiting for the well permit so they can occupy them.

Impacts of current and future withdrawals: In the past, ground-water withdrawals have been known to have impacts to the unconfined aquifer and other ground-water supplies.

For example, after the construction of the Lewes well field east of the Lewes-Rehoboth Canal, the aquifer was contaminated with saltwater. The well field was relocated to the property adjacent to the high school, but the saltwater in the aquifer at the original location persisted. Similar instances of saltwater intrusion have been documented in South Bethany, Long Neck and Fenwick Island (see USGS Water Resources Investigations Report 87-4229).

Although the larger municipal well fields have adjusted their supplies to reduce the risk of saltwater intrusion, there continues to be a problem with individual wells. The Delaware Geological Survey (DGS) has reported contamination by saltwater in wells adjacent to saltwater bodies throughout the Southern Coastal area, and relates those concentrations to ground-water development and pumping (see Hydrologic Map Series No. 7). The same document reports the presence of high-chloride ground water at the base of the Manokin aquifer (which lies underneath the unconfined aquifer) throughout the Southern Coastal Region. Recent water samples collected from domestic wells in Winding Creek Village, on Angola Neck, show saltwater intrusion in those wells located close to the bay (DHSS, Office of Drinking Water samples).

The County needs to heed the warning of the DGS and prevent future saltwater intrusion by requiring that water supplies with minimal impact be installed prior to construction of new residences. In areas where problems of saltwater intrusion are known to exist, further problems can be prevented by taking one of the following precautions:

1. Maintaining a setback distance of at least 100 feet from a salt-water body for home lots served by individual well and septic systems. The setback area could be maintained as community common areas, or lot sizes adjacent to salt-water bodies would have to be adjusted to facilitate this setback.
2. Requiring that all new home lots within 100 feet of a salt-water body be served by a remote central water supply, rather than an on-site domestic well, or
3. Requiring the applicant to drill a well to test the water quality and demonstrate that adequate fresh water is available on the site prior to issuing a building permit

**Additional Notes and Information:**

These precautions will avoid the necessity for the Water Supply Program to issue permits for substandard wells that are needed when the home has already been constructed and the owner finds himself without water. For example, in a typical shoreline home lot, extending 150 feet inland from the shore, the septic tank must be located at least 100 feet from the saltwater body, for protection of the shellfish population. If the well must be 100 feet from the septic system, it will be very close to the shoreline, where it is

vulnerable to saltwater intrusion and flooding. This violates section 5.02 of the Well Construction Regulations, which require that the well also be located on the inland side of the property. The Water Supply Section is left to either permit a substandard well or leave the homeowner without any water supply. A similar problem in the past was resolved through a change in the County's building code. When very small lots were common, it was often necessary to violate the 100-foot setback requirement for wells on the same site with a septic system. The County has resolved this problem in most cases by increasing the minimum lot size, leaving ample room for the separation of the well and septic system. The shoreline setback requirement would alleviate the problem of vulnerability of wells to saltwater intrusion and flooding.

**Page 58, Water Supply Protection:**

The Water Supply Protection section describes the basic components needed to protect the sources of public water, but it is not clearly written and seems to miss the dual aspect of source water protection: protection of water quality and also protection of water quantity. DNREC offers the following suggestions to improve the contents of this section and to be more aligned with the State source water law:

First, the 2003 Plan clearly expressed the need to protect sources of potable water. It quantified water demand, wells, average daily use, and the number of community water systems. All of these elements are missing from the 2007 Plan. DNREC suggests following this level of detail in the 2007 Plan update.

The 2007 Plan states that the source water protection ordinance is "primarily designed to minimize the threat of pollution to water supply wells." The Source Water law requires local communities to write ordinances that minimize contaminant threats not only to public water supply source areas but also to areas that provide significant recharge to underlying aquifers. The law requires measures that provide for maintaining water recharge to the underlying aquifers (e.g. by placing limits on impervious cover).

**Page 65, Waste Water Treatment Overview:**

Fortunately, the County is taking advantage of nearly every federal and state program to provide central waste water treatment for the protection for water quality. The County's investment in wastewater infrastructure continues to improve and protect water quality in certain areas of the County.

The second paragraph should change, “private companies Artesian and Tidewater” to “Private wastewater utilities regulated by the Public Service Commission such as Artesian and Tidewater” because in the future there may be other companies.

**Page 65, County Wastewater Treatment Services:**

The plan should include a countywide water and sewer element developed in consultation with and reviewed by the Department in the last five years. There have been several area-wide planning studies in which DNREC has been involved with County staff and consultants. These studies are:

South Coastal Area Planning Study  
North Coastal Planning Study  
Dagsboro-Frankford Planning Study  
Western Sussex Planning Study

**Page 67, Inland Bays Region (continued):** Fifth paragraph should read: “The study also says that disposal capacity could be increased by converting spray irrigation sites to rapid infiltration if DNREC requirements including Total Maximum Daily Loads (TMDLs) are met.”

**Page 71, On-Lot Septic Systems:** Change the second sentence to read: “DNREC regulates on-lot septic systems and requires a spare area or replacement system be identified for future needs prior to permitting the system.”

Change the second paragraph by adding: “DNREC regulates holding tanks and requires annual inspections be performed which includes a review of pump-out records.”

Please add language: “The County will create an ordinance for all proposed minor subdivisions using on-lot septic systems. The owners of the property must supply the County with an approved site evaluation from DNREC showing that the lot can meet the DNREC requirements for an on-lot septic system.”

The Ground Water Discharges Section would like the to assist the County to address regional approvals for public utilities such as conditional use requirements, wastewater ordinances, collection system requirements, and any legal requirements.

Holding Tanks should be prohibited. No more building permits, certificates of occupancy, subdivisions or any approval should be issued for holding tanks. The County needs to eliminate the use of existing holding tanks. For example, under an ordinance,

any grandfathered existing holding tanks that are well managed could continue as pre-existing non-conforming uses until they are vacated, sold or transferred.

DNREC invites the County to discuss any ideas or concepts to eliminate holding tanks.

### **Additional Notes and Information:**

The 1985 regulations allowed the use of a permanent holding tank on lots that were denied a system due to poorly drained soils or isolation distances from wells, ditches etc. provided the parcel was recorded prior to April 8, 1984. When the regulations were amended in 2002, DNREC honored the denials that were on file before the 2002 change. In addition, the 2002 amendments grandfathered all site evaluations on file for 5 years (until March 2007) and set expiration dates for new site evaluations at 5 years. As a result, many of the denial properties that would have been eligible for permanent holding tanks will now have to be re-evaluated.

It will be the new DNREC policy that if the new evaluation is submitted as a denial of a septic system AND a septic-system denial was already on file prior to March 2002, then the property owner may proceed with a permanent holding tank without going through a formal variance. Keep in mind that our regulations allow a property owner to apply for a holding tank and other types of relief through a formal variance process. So while the amendments prohibited permanent holding tanks, the formal variance option makes it possible.

### **Temporary Holding Tanks**

Permits are issued for parcels with a legal commitment from a governmental unit or wastewater utility that within five (5) years from the date of application, the wastewater utility will extend service to the property. The community or area-wide central wastewater system must have received the necessary approvals for full operation (established sewer district) which includes the anticipated flow to the holding tank. In addition the use of a temporary holding tank may be approved if the installation of an approved system has been delayed by weather conditions or the tank is to serve a temporary construction site up to five (5) years.

### **Permanent Holding Tanks**

For unimproved property, a formal variance must be obtained. For replacement systems on improved property, a permanent holding tank may be issued if the property has severe limitations such as limited area or well isolation distances. For properties denied systems

prior to March 2002 that are re-evaluated and denied again, a permanent holding tank may be obtained without a formal variance.

### Surface Water Management

This entire section lacks a surface water management and/or planning component. The County may want to include a section on Surface Water Management to more comprehensively provide a strategy for stormwater, flooding, drainage, and dam safety (see attached draft language).

Sussex County is a supporting partner in a Level of Service Analysis for Surface Water Management that is being conducted in the County. The purpose of the study is to identify how surface water is being managed and by whom. The study will identify needs and gaps as well as identify recommendations for future management alternatives. Because of the County's critical role in this study, the County should consider incorporating the information generated from the study in their plan and commit to establishing priorities based on the recommendations/outcome of the study.

## **HOUSING ELEMENT**

**Air Quality.** An air quality section should be added to this chapter. Air quality issues are not only an overriding concern to quality of life (human health and environment) but can also have a significant impact on economic issues such as jobs and investment. The Air Quality Management Section provides comments to the air emission impacts of individual residential developments throughout the state through the PLUS forum. Perhaps the most pertinent forum for addressing these accumulated impacts of growth on air quality is in this comprehensive plan process. Vehicle emissions are a direct impact to air quality (see additional comments on the Mobility Element) but there are other emissions associated with the growth in the number of housing units the county will experience over the coming years.

Therefore, DNREC suggests that the Plan include a discussion of energy efficiencies that housing units could incorporate to lower their need for electricity and heating fuel which directly or indirectly cause increases in air pollution. Every one percent increase in energy efficiency equals a one percent decrease in air emissions. The county could do more to affect more energy efficient building. It is highly recommended that the county provide incentives or code requirements to developers to implement EPA Energy Star strategies.

While DNREC supports the Moderately Priced Housing Unit Program (MPHUP) discussed in the Plan, the zoning requirements in the County still allow for two units per acre in all of the residential zoning districts in the County. MPHUP attempts to bring residences and places of employment and other activities closer together. The “two unit per acre” allowance invites residential sprawl. The Plan should discuss limiting low-density sprawl and provide a discussion of higher density allowances when developers shift their projects to growth areas that are targeted for infrastructure improvements.

Another housing policy discussion that should be incorporated in this chapter of the Plan is residential sprawl. The County should consider a policy of disincentives for developments within the Level 4 areas according to the Strategies for State Policies and Spending.

The State Planning Office estimates that the County has 67,000 housing units recorded or in the application pipeline already, with another 23,000 on the books or in process in municipalities within the County. That number is exclusive of a single new project being approved in the county. The Air Quality Management section calculated that the number of new homes would increase emissions each year in the following pollutant category:

<b>Pollutant</b>	<b>Tons Per Year</b>
Volatile Organic Compounds	288.6
Nitrogen Dioxides	212.3
Sulfur Dioxides	247.6
Fine Particulate Matter	21.0
Carbon Dioxide	34,409.1

If these levels of air pollution were emitted from an industry such as the Delaware City Refinery, DNREC would issue a Notice of Violation and seek penalties and reductions through control technologies. DNREC has no less concern, ton-for-ton, regarding this level of air pollution created by uncontrolled suburban growth. Sussex County is currently “non-attainment” for ozone air pollution, meaning that the air in Sussex County fails to meet the minimum ambient air quality standards (National Ambient Air Quality Standards – NAAQS) for protecting human health. Ozone is known to exacerbate asthma problems, particularly in children, the elderly and people with respiratory problems. EPA recently proposed more stringent standards for ozone because of the emerging science that it is a more serious health concern than previously believed. It may seem like a stretch to connect lack of effective land use planning to children in hospital emergency rooms with asthma attacks, but to environmental engineering professionals, the connection is clear.

Moreover, if Sussex County exceeds NAAQS – as a result of more cars or VMTs or any source – DNREC must impose more stringent regulations on all sources. The economic impacts of exceeding NAAQS could be severe. When air pollution gets worse, DNREC will impose tighter controls, such as “Lowest Achievable Emission Rate” (LAER), which is required on major new or modified sources in non-attainment areas. These controls are more costly than other levels of air pollution control such as “Best Available Control Technology (BACT),” which is required on major new or modified sources in clean areas (i.e., attainment areas). The cost of siting a new facility in a clean-air county requiring BACT, versus locating in a dirty-air county with too many cars and VMTs, could be millions of dollars. At a minimum, it must certainly be a factor in any business conducting site selection. Finally, businesses that buy pollution offsets in dirty air counties must buy offsets at a higher ratio than in clear air counties. Hence, even if one disregards the health impacts of dirty air as difficult to quantify, the economic impacts are indisputable and easily calculable.

### **HISTORIC PRESERVATION ELEMENT**

**Page 101, Historic Preservation Strategies, bullet item 1:** In developing ordinances regarding historic structures, recognize the need to protect structures and meet minimum requirements (e.g., for flood hazards). Coordinate with the DNREC Flood Mitigation Program for assistance or guidelines.

### **INTERGOVERNMENTAL COORDINATION**

In Intergovernmental Coordination Areas between the County and any/all of its municipalities, the County should require developments to meet the stricter/more protective of resources requirements of the two (the County and the municipality) jurisdictions/ordinances.

#### **Page 106, Intergovernmental Coordination Strategies:**

First bullet item: How will you “expand coordination” with the towns?

Fifth bullet item: Add floodplains, wetlands, excellent recharge areas, and wellhead protection areas.

**Page 106-107, Intergovernmental Strategies: Add:**

- Coordinate with DNREC and the Sussex Conservation District to incorporate a stormwater impact report into the County's subdivision and building approval process.

This report would help land use decision makers in granting or denying preliminary approval.

DNREC's Division of Soil and Water Conservation requests that municipalities and counties require proposed development projects to submit a Stormwater Impact Study Findings Report (see attached), issued by the Sediment and Stormwater Program, to the County prior to reviewing and/or approving preliminary site plans or issuing building permits. The Sediment and Stormwater Program, through the Sussex Conservation District, will be requiring developers to have a pre-application meeting with the Sussex Conservation District for all proposed land-disturbing activities that require a Sediment and Stormwater Plan. These meetings are structured to assist developers in the site design process and for early notification of erosion and stormwater plan approval requirements.

- Coordinate with the State's Flood Mitigation Program to develop and adopt floodplain regulations with standards higher than FEMA's minimums in accordance with 60 CFR (Code of Federal Regulations).

The County should also coordinate with this program to increase the accuracy of FEMA Floodplain maps because of the County's extensive floodplain.

## **COMMUNITY DESIGN ELEMENT**

**Page 110, Traditional Neighborhood Development (continued):** In general, the ideas discussed as traditional neighborhood design make sense in areas where density is being encouraged; however, the ideas presented do not seem appropriate for the majority of Sussex County. This distinction should be made in the text of this section.

First bullet item: DNREC strongly encourages planting of street trees within residential neighborhoods. The County should consider passing ordinances that require a minimum number of street trees in new residential neighborhoods and should further require the developers to provide funding to maintain those trees for no less than 10 years, as street trees have a shorter life span than trees planted in less adverse conditions.

Fourth bullet item: A modest density of 5-10 houses per acre should not be encouraged in most portions of Sussex County. This should be revised to reflect where and when “modest” density is allowable.

**Page 116, Preserved Open Space Within New Developments:** The discussion regarding preserved open space fails to differentiate between passive open space that should be preserved for its aesthetic, habitat and functional value (water quality, flood attenuation etc.) and active open space, which is necessary for community recreation.

The County should require a minimum percentage of open space for all new development projects.

**Page 117, Preserved Open Space Within New Developments (continued):**

Fourth paragraph: This paragraph has several good ideas; however, DNREC disagrees with the idea that stormwater ponds and sewage facilities (including spray irrigation) may count as open space.

Fifth paragraph: This paragraph should be divided as it discusses two completely separate ideas. Trees should be planted in open space areas where appropriate. Open space areas adjacent to existing forested land or within a 300-foot buffer zone of streams and wetlands should be considered for reforestation. Landscape tree specimens should be planted in active open space areas where appropriate, particularly around parking areas and playgrounds.

The second part of this paragraph addresses a reduction in open space. This paragraph should be revised to state “it may be desirable to allow a reduction in the amount of active open space if the developer provides substantial recreation facilities...” However, if a pool, recreation center or community center are built, significant forethought must be put into determining how these facilities will be run, who will operate/maintain them and who will pay for them. A community center and pool are a substantial maintenance burden for a homeowners association.

Sixth paragraph: The first part of this statement is crucially important. Sussex County should ensure that cluster developments will not increase the total number housing units for the county. The text of this paragraph supports “offsetting” density by preservation of other land. Is this through TDRs? Where will increased density be supported? Where will it not be supported?

**Page 118, Water Features:** Please revise first sentence to state “As described in the Natural Features Elements, wetlands and uplands along waterways should be preserved

as passive open space. Existing native vegetation should be retained and additional native plantings should be considered in areas where natural vegetation is sparse. Invasive and non-native plant species should be controlled.”

DNREC encourages public access to waterways and encourages environmentally sensitive design. Where there are waterfront lots, access to navigable water from residential communities should be provided through community facilities (rather than individual docks and piers). The State prefers boat ramp facilities over marina facilities.

To the extent possible, trails should be constructed on upland areas. If a wetland must be crossed, the wetland crossing should be the shortest distance possible and the walkway should be elevated. In tidal wetlands, the boardwalk should be elevated to allow vegetative growth underneath the boardwalk.

Construction of boat ramps, marinas, walkways over wetlands and fishing piers are subject to permitting through the Regulations Governing State Subaqueous Lands, Delaware’s Marina regulations, Federal Clean Water Act, Federal Rivers and Harbors Act and Federal Coastal Zone Management Act.

At minimum, the following recommendations should be included:

The County will update its residential planned community and open space development provisions to require:

- a minimum percentage of passive open space within the development.
- a minimum percentage of active open space within the development.
- Stricter vegetated buffer zones from streams and wetlands than would otherwise be required.
- Impervious surface off-sets (such as green roofs, infiltration islands in parking lots etc.)
- Increased landscaping requirements, including mitigation for trees unavoidably lost during construction.

**Page 120, Green Architecture and Green Site Design (continued):**

The statement in the first full paragraph is incorrect: “Stormwater ponds ideally would be designed to hold water for several hours or more to allow pollutants to separate from runoff. However, if the ponds retain water for more than 24 hours, aeration is desirable to avoid breeding of mosquitoes.” According to the Drainage and Stormwater Section, aeration is desired for wet ponds which have a permanent pond to oxygenate water and

decrease mosquitoes. Dry ponds and bioretention areas that do not drain within 48 hours are not properly functioning. DNREC does not have technical standards requiring aeration for ponds holding water for 24 hours or more as written. Good pond design allows more open water, which reduces mosquito habitat.

The County should consider requiring a landscape and maintenance plan for all ponds in developments.

## **MOBILITY ELEMENT**

While DNREC strongly supports the implementation of the enhanced emission testing program (referenced as OBD on page 28), the mobility element of the plan should focus on strategies that provide balance for all types of transportation within the County. The mobility element should demonstrate how all modes of transportation will be provided to expected future residents.

County average annual daily traffic data in terms of vehicle miles (VMT) traveled for future years should be included in the Plan. A discussion of the VMT growth and projections should be included. On-road mobile emissions are projected to be for Volatile Organic Compounds 1,988.4 tons per year and 2,707.3 tons per year for Nitrogen Oxides in 2009. Vehicles produce these two pollutants that form ground level ozone, a criteria air pollutant that the entire State is in non-attainment for under the Clean Air Act. VMT is directly related to County growth and increases in VMT impacts the air quality of the County. Strategies for reducing VMT growth should also be discussed in the Plan.

Regionally significant transportation projects in the future could be curtailed if vehicle emissions are not kept under a "mobile emissions budget" set by the Department under the Clean Air Act Amendments. Federal funding for expansion of highways, new roads and even transit projects could be withheld if vehicle emissions in the County are calculated to be higher than the adopted emissions budget. Currently mobile emissions in the County are below the adopted emissions budget, but vehicle miles traveled are projected to grow to over eight and half million on a peak travel day by 2009.

Page 28 of the Mobility Elements discusses only one action item to mitigate the impacts of vehicle emissions in the County. However, the way the County develops its land-use policy can also be a significant action item to consider for reducing air pollution. Land-use configurations can affect whether or not vehicles are used for long and frequent commutes to work or other activities. DNREC suggests that proposed residential developments incorporate the concept of walkable communities or planned unit development design to reduce the number of vehicle trips or to significantly reduce the

length of such trips. DART should consider expanded transit service in the County, especially in the high-density coastal areas where congestion is the greatest. Building more traffic lanes to accommodate VMT growth should be considered as a supplemental action to the land-use and transit action items.

**State Fire Marshal's Office – Contact: R. T. Leicht 323-5365**

At this time, this Agency has no objection to, and makes no comments regarding, the Comprehensive Plan or an amendment to a Comprehensive Plan.

The Delaware State Fire Marshal's Office has the responsibility to review all commercial and residential subdivisions for compliance with the Delaware State Fire Prevention Regulations. This Agency asks that a MOU be established and maintained between the Delaware State Fire Marshal's Office and the Sussex County. The State Fire Marshal's Office would be issuing approvals much like DelDOT, Kent Conservation, and DNREC. This Agency's approvals are based on the Delaware State Fire Prevention Regulations only.

**Delaware State Housing Authority – Contact Karen Horton 739-4263**

The Delaware State Housing Authority has reviewed the Sussex County Comprehensive Plan, in accordance with Title 9, Chapter 49 of the Delaware Code. In summary, from this plan, we should be able to understand the County's goals for housing and how they intend to achieve these goals. That information is not found in this plan. Measurable objectives and strategies should be developed with a timeline for implementation. The following recommendations are intended to strengthen the County's ability to accomplish this:

**Include a thorough analysis of housing needs.**

A description of the housing stock and conditions, in addition to population and employment projections, would provide the basis for identifying critical housing issues. This would help identify resident's housing needs, and answer the questions such as: Who needs housing? What is the amount of housing needed? How many residents need what type of housing or housing assistance? Where is it needed? This would include existing residents and those resulting from anticipated growth.

- An in-depth housing analysis would have most likely identified some well-publicized housing issues that are not included in the plan. This would include: housing needs for extremely low-income households; issues facing owners of manufactured homes

in land-leased communities; the coastal resort job-housing imbalance; and, the needs of the elderly population.

- Current resources should be used when updating the data in the plan. The 2005 American Community Survey provides the most current and in-depth picture of the County. The projections from the Delaware Population Consortium are mentioned in another section of the plan. However, the projections should be integrated into the housing analysis here as well. The Housing Needs Assessment mentioned in the document was from 1996. Another Needs Assessment was completed in 2003 and DSHA just released the most recent study in October 2007.

Expand the discussion on housing strategies.

- The strategies appear to be a summary of what is happening in the County and not based on a strategic process. New strategies should be developed in response to the issues identified as a result of the housing analysis.
- The County's role in each of the strategies is unclear. What specific actions is the County taking over the next five years? What ordinances and policies is the County implementing?

Include progress in achieving goals established in the 2003 Plan and benchmarks moving forward with the 2007 Update.

- The housing element should also include a discussion on what the County has done over the last 5 years to achieve the housing goals established in their 2003 plan, and the success of those strategies.
- It would be helpful to have a monitoring mechanism, quantifiable performance measures, in place to ensure that the strategies established in this update are successful.

Other comments on the current Housing Element include:

Sussex County Housing Initiatives

- *Manufactured Housing as an Affordability Tool* – As written, this is not an initiative. It discusses what manufactured housing industry advocates believe are constraints to the development of manufactured housing, but there is no mention of an initiative underway. If the County does intend to use manufactured housing as an affordability tool, it would make sense to include existing owners of manufactured homes in land-leased communities. Again if

- a comprehensive housing analysis had been conducted, this population would likely have been included in the County's strategy for housing.
- *Private Workforce Housing* – While the private market is encouraged to provide affordable housing, the County's role in and the measurable result of this initiative as a strategy, is unclear. If this is a strategy, then the County should be able to report how many units sold at what price ranges to which households.
  - *Moderately Priced Housing Unit Program* – We applaud the development and adoption of this ordinance, that when fully implemented, will provide long-term affordable homeownership opportunities for the County's working households. We encourage the County to fully implement the ordinance into a working model. We also encourage the County to take similar pro-active steps to addressing other housing challenges in the County.

The surge in housing challenges, for Sussex County, the State and the Nation, is occurring at a time when traditional resources that provide assistance are being scaled back. As a result, addressing these challenges requires everyone's support, from local, state, and federal government officials to developers, and community-based organizations. However, Sussex County is in the strongest place to facilitate and provide affordable housing as they have control over the land use environment and, as a result, can make the necessary policy, regulatory, and financial changes to profoundly impact change for the better.

Overall, we believe the County desires a strong comprehensive plan. The Delaware State Housing Authority is committed to being a resource to Sussex County in achieving their housing goals. If we can be of further assistance, please do not hesitate to contact me at (302) 739-4263 (ext. 251) or via e-mail at [karenh@destatehousing.com](mailto:karenh@destatehousing.com). Thank you for the opportunity to provide comment on this important work.

**Department of Education – Contact: John Marinucci 739-4658**

The DOE supports the State Strategies for Policies and Spending, to the extent possible and practicable within the limits of the Federal and State mandates under which the Department operates.

In its review of Comprehensive Plans and Comprehensive Plan Amendments, the DOE considers:

- Adequate civil infrastructure availability within the region to accommodate current and future educational facilities.

- Transportation system connections and availability to support multimodal access within the community, to include but not limited to walk paths, bike paths, and safe pedestrian grade crossings.
  - Transportation road system adequacy to accommodate bus and delivery vehicle traffic to current, planned or potential educational facilities.
  - Recreation facilities and opportunities within the community and their respective proximity to current and planned or potential education facilities. The DOE also recognizes the potential that the educational facilities are to be considered recreational facilities by and within the community.
1. The DOE typically considers industrial/commercial development incompatible with educational facilities, however, residential development and educational facilities are typically considered to be compatible. As a result, the DOE is interested in the proximity of current and planned or potential education facilities to commercial/industrial development zones.
  2. The DOE recognizes the integral role of educational facilities within communities. As such, the DOE seeks to assure that residential growth, that generates additional demand on educational facilities, is managed with adequate educational infrastructure being made a part of sub-division plans as appropriate.
  3. The DOE offers its support to assist and participate by coordinating with various municipalities, the local school districts the County, the Office of State Planning Coordination as well as other school districts and stakeholders as future development and annexations may be considered.
  4. DOE suggests that the Community Design Element of the plan be modified to address the strategies the County intends to employ to support and advance education within the county.

**Department of Agriculture – Contact: Scott Blaier 698-4530**

**General Comments on the Plan:**

The Delaware Department of Agriculture (DDA) is deeply concerned that the current Draft Comprehensive Plan will do little to ensure orderly growth, plan for future growth based on available infrastructure, or protect the county's irreplaceable natural resources and working lands. In fact, as experienced land use planners, the Department of Agriculture believes it is fair to say that this plan will continue the recent history of uncontrolled growth, high public costs and commitments to future infrastructure, and the

unsustainable loss of farmlands and forests. These trends are unsupportable, and so is this plan. DDA believes that such a plan will compromise the quality of life for the county's residents, and trigger long-term economic decline for the county with an unacceptable increase in public costs, and ultimately, taxes. Put simply: this plan is unacceptable.

If the County genuinely wants to preserve agriculture, it must strike a balance between accommodating new residential development and supporting the needs of agriculture. Population growth in Delaware and Sussex County is to be expected. But it is how the State and County choose to grow to accommodate those new residents that are important. In addition, although the plan offers some laudable goals and good ideas, there is very little in the way of plans to get these accomplished. Much of the language in the plan is very uncommitted, even weak, in support of those ideas and goals.

The Department is particularly concerned about the effect of two (2) units to the acre base zoning across all rural areas of the County and the adverse impact on overall agriculture and its support systems. Such an approach will continue to promote sprawl across the county, and consume large amounts of farmland in the process. This type of growth in the county will continue to create a number of negative impacts on agriculture, and will continue to frustrate farmers and encourage them to sell their land.

Modern day agricultural operators require large amounts of land to counter balance low profit margins and make farming economically viable. Allowing low density developments to be scattered among rural farm areas, will force farmers to travel farther and farther to find enough land to make farming economically worthwhile. Allowing subdivisions to be constructed with large oversized regional water and sewer service will further drive up land costs and make it cost prohibitive for farmers to purchase, or even rent, additional farmland. Agricultural land fragmentation caused by scattered residential development further exacerbates the situation by the increasing the time required to travel between farmland. Rising fuel costs and safety issues associated with trying to travel on roads increasingly clogged with traffic only adds to the frustration.

More and more farmers have incorporated intensive animal operations into their farm business plan in order to bolster net farm income and make the farming business viable. The most notable of these is poultry production. By their very nature, these operations generate odors, noise, dust, etc. As a result, many of the new residents who desire to live in rural, "country areas" find themselves at odds with such agricultural operations. Nuisance complaints from farm odors, noise, dust, and pesticide and fertilizer applications will continue to rise as houses are commingled with working farms. Biosecurity is also a growing concern within the poultry industry. It will become increasingly difficult to contain poultry disease outbreaks as more and more rural

residents live in close proximity to concentrations of production. Impacts on human populations can only be imagined.

Agriculture support businesses like pesticide and fertilizer dealers need a critical mass of farms in order justifying having a business in an area. As farmland is replaced with houses, there comes a point where the businesses supporting agriculture do not have enough business to justify a presence in the area. As a result, they pull out and consolidate elsewhere. This increases farmer costs in terms of time and money to get to the businesses they need for support (i.e. pesticide/fertilizer/seed dealers, tractor repair, etc.). In many cases we have already seen some of those businesses just cease to exist.

There are several things that the County should discuss in its plan that will create a more favorable atmosphere for agriculture. These items already exist in code, or would be relatively easy to adopt.

- 1) The County should be aggressive and diligent in enforcing its forested buffer requirement. Establishing an effective buffer is essential for separating new residential development and agriculture. In addition, the County should try to effectively aggregate the open space areas in all new residential developments not only to create larger, more effective buffers for agriculture, but also to create meaningful habitat for wildlife. As in the past, the Department's Forest Service will continue to assist the County in developing effective forested buffers. The Department has recommended in the past new ordinances that would allow developers to "pay" for open space, utilize those acres for more intense development and have the funds aggregated in the public sector for purchasing open space, farmland, and forested areas.
- 2) The County should vigorously enforce Ordinance 862 of the Code of Sussex County. This ordinance was passed by the Sussex County Council on November 10, 1992, and provides a number of important protections to lands involved in active agriculture. For all intents and purposes, this ordinance provides all the protections afforded to land enrolled in the State's Agricultural Lands Preservation Program to all farms located in Sussex County.
- 3) The County's plan should also commit to ensuring that all farmers who own and farm land which is covered by The Farmland Assessment Act be given the property tax relief they are entitled to under law.
- 4) Page 25 of the plan states: "The County should consider establishing an agricultural zoning district within portions of these State Agricultural Preservation

Districts.” The Department strongly encourages the County to commit to doing this, and replace the words “should consider” with “will”. In addition, the County should extend this benefit beyond properties preserved through the State’s Agricultural Lands Preservation Program, and include properties participating in any future TDR program.

There are surely other “uncontroversial” ways for the County to support its agriculture community. We ask the County identify those and place them in the plan, and in practice, as well.

**Purchase of Development Rights (PDRs), Transfer of Development Rights (TDRs), and the newly created Forestland (PDR) Program:**

Regardless of how it is accomplished, most people would agree that preserving some farmland is a worthy endeavor. However, the reasons people believe in farmland preservation vary greatly. Some people enjoy the open green space and scenic beauty it provides. Some people appreciate the wildlife habitat and the numerous, often intangible, environmental benefits. While many more practical folks realize that we need to eat to survive.

While these are all good reasons, the Department believes the primary reason for farmland preservation is to preserve working farms that earn good incomes for those who work the land, and that contribute to the State’s overall economic welfare and prosperity. And as important as farmland preservation is, in the end, we must provide incentives to current and future Delaware farmers to make it an attractive profession. Engaging in farmland preservation without providing incentives that make the business of farming attractive does not make sense. In fact, as previously discussed, if engaging in the occupation of farming makes overwhelming economic sense, there is little need for land preservation, because no one would need or want to sell their land for development.

The reality in Delaware is far from that however, and land’s agricultural value has only decreased in comparison to its skyrocketing development value, which in turn, creates the economic incentive to sell. And while making conditions more conducive to agriculture will help, there remains the need for compensation to make it attractive to continue farming. This is where preservation through PDRs and TDRs come into play.

To date, the DDA and the Agricultural Lands Preservation Foundation have spent in excess of 47 million dollars in public funds to permanently preserve more than 27,000 acres of productive farmland in Sussex County. The DDA gratefully acknowledges and appreciate that the County has partnered with them to preserve many of those acres. The

DDA would encourage Sussex County to continue providing matching funds to the Agricultural Lands Preservation Program to preserve farmland in Sussex County. The State would also remind the County to take full advantage of program's maximum allowable matching provision of three (3) million dollars per year. A full County match would allow the County to leverage an additional three (3) million dollars of state monies, and up to another three (3) million dollars of federal monies (depending on availability). Given the temporary correction in land prices, the next five (5) years covered by the comprehensive plan period would be an ideal time for the County to partner with the state to preserve Sussex County farmland.

The plan discusses the use of transfer of development rights (TDRs) as a means to preserve farmland. However, with pending TDR enabling legislation scheduled for consideration during the next legislative session, the plan should have much more commitment and detail on how the County will use the legislation to meet their land preservation goals. We ask that the County commit to establishing a TDR program, and include the details of how the plan will work in its comprehensive plan. It should also include cooperation with municipalities within the county, and a map showing TDR sending and receiving areas.

The State now has a Forestland Preservation Program. The program works in much the same way the Agricultural Lands Preservation Program works, only with a focus on preserving the State's vanishing forestland. Although the program does not have a permanent source of funding, 1 million dollars was appropriated by the legislature in 2007 to begin forestland preservation. To date, 5 farms totaling 858 acres have been enrolled in Sussex County. We urge the County to help us promote the program and would welcome any matching funds. In Sussex County, especially, we have seen serious erosion of the forest base over the past twenty years. Now is the best time to curb this trend.

### **Economic Development:**

Given its tremendous economic importance, the agriculture section should include a discussion on the poultry industry, and how the County can support it. We recommend the County meet with representatives of the poultry industry, if they have not already done so, to discuss what the industry needs for continued success in Sussex County. The plan should address the unique relationship between the Delmarva Peninsula (including Sussex County) and the poultry industry. Among other issues, the plan should discuss the need for locally grown corn and soybeans as feed to support the industry, and the economic consequences of having to import feed from increasingly farther away as local farmland is developed. We also recommend the County add the Delmarva Poultry

Industry (DPI) to its list of cooperatives (page 86). We believe the County will find, after discussions with the industry, that one of the most serious threats to the future of the industry is the continued loss of land through sprawl development and the attendant frictions between residential and agricultural development. This alone should spur more attention to the land loss issue in this plan.

The plan should also include language about farm markets and other agribusiness opportunities, and a pledge to partner with the Delaware Department of Agriculture (DDA) marketing section.

**Urban Forestry and the Environment:**

The Delaware Forest Service notes that this version of the Comprehensive Plan does address the need to plant trees within new subdivisions. Ideally, we would prefer developers avoid removing any existing woodlands, and thus minimize the replanting they would have to do after the development is completed. Existing woodlands offer many benefits, including storm-water interception. If existing woodlands are left in place and trees are left throughout the development there will be less need to build complicated storm-water structures requiring maintenance.

The removal of existing woodlands should be mitigated by onsite planting requirements if such removal is unavoidable. The rate of replacement should reflect the amount of forest removed as part of the development process. At a minimum, the acres planted should equal the acres removed.

In many developments throughout the state, large expanses of passive open space are needlessly mowed at the expense of homeowners' associations. The County should require developers to plant trees in much of these areas. This would alleviate the increasing demand from residential developments for state and federal tree planting grants. This should again be explicit in the county subdivision code.

The quality of work done in regard to planting trees in developments should also be addressed. Many developments have experienced severe tree mortality after planting due to improper tree selection and planting techniques. Developers should be held responsible for tree planting just as they would for a poorly constructed house that would not pass a building inspection. The property should not be transferred to the homeowners group until planting are deemed as a success. One way to accomplish this is to have the planting done one full growing season prior to the anticipated completion of the development.

The agglomeration of open space on separately developed tracts would also benefit the landscape. The County planning staff should work to aggregate the open space required for individual subdivisions into larger areas that can provide wildlife habitat, recreational opportunities, and numerous other benefits to the community. This is suggested in the Plan on page 112, but it will require some type of unified development to ensure it will happen.

Forested buffers are a requirement on many proposed developments throughout the County. The Delaware Forest Service would like to continue to work with the County to make recommendation to developers in regard to forested buffers. It is recommended that the buffer code be revisited to clearly explain the requirements to what areas qualify for the buffer and detailed specifications of the planting. The Delaware Forest Service currently makes recommendation to the developer; however it would be useful if the County had recommended specifications on file.

It is the recommendation of the Delaware Forest Service that all communities have a tree canopy goal. The County would have an integral role in that if these land issues are addressed.

And finally, the County needs to develop a plan to assist the increasing number of Homeowner's Associations (HOA) responsible for maintaining the open space they own. HOAs are often overwhelmed by the maintenance requirements of the open space in their development. The County should have a liaison to these HOAs to help them find the resources they need to be good stewards of their land.

### **Specific Comments on the Plan:**

#### **Future Land Use Element**

While it is true that Municipalities make their own decision on land use within their jurisdictional boundaries, when the County approves large subdivisions or planned communities near existing municipalities, it places a burden on their services and infrastructure. Therefore, it is imperative that the County coordinate and cooperate with municipalities.

#### **Page 11**

Given the tremendous number of residential lots recorded, but "unbuilt", the County should enact a sunset provision on approved building lots in subdivisions. The County should consider requiring developers to go through a subsequent approval process if they

have not met certain performance criteria within a specified period of time (e.g. 50 percent of the homes in a subdivision must be built within 5 years of subdivision plan approval). As it stands, developers are idling large tracts of land pre-approved for residential development, while more and more plans keep being approved by the County. It is impossible for the County and State to meaningfully plan for future infrastructure needs when no one knows when all these houses will be built, and when they will need services. In addition, these approved lots will be grandfathered from future regulations and standards that may be critical to the County and State.

### **Page 13**

The County's goal to "Conserve the County's agricultural economy by promoting farming and preserving agricultural land values" should be further defined. The County should also be clear in defining the "agricultural" value of land, versus the "development" value of land. Continued growth by sprawl will actually diminish the agricultural value of land in Sussex County, while increasing its value for development. Sprawl perpetuates and catalyzes more sprawl, and those farmers left behind will have fewer and fewer incentives to remain behind in agriculture. For example:

- 1) Farmers will be less likely to continue farming if they are assailed by nuisance complaints from new residents, unable to get to their land because of congested roads and irate drivers.
- 2) Farmers will be less likely to continue farming as private utility companies serving isolated development create large "overcapacity" regional infrastructure (sewer and water). This instantly increases nearby land values for development, and prevents farmers from acquiring or renting more land to stay in business.
- 3) The DDA urges the County to adopt strong protections for ground-water recharge potential areas, or farmers may find themselves competing for water with new residents in the future. The severe agricultural drought in Sussex County in 2007 showed how important irrigation will be to agriculture in the future.
- 4) The plan divides the County into two types of planning areas, growth and rural areas. The plan further states that rezoning will not be used to steer new residents to growth areas, not rural areas. If the County is determined not to use zoning as a tool for controlling land use, then the plan needs to be more specific on how it intends to keep rural areas predominantly agricultural and natural, while encouraging residential development in growth areas. The plan is not clear on what incentives or controls the County will use.

**Page 24**

In addition to the forested buffer ordinance, the County also needs to cite and commit to enforcing Ordinance 862, previously discussed.

The County need to strongly support and use TDRs, not “desire to explore” them.

**Page 25**

The County needs to commit to agricultural zoning districts, and replace the words “should consider” with “will.”

**Page 27**

Under the TDR discussion the plan states: “Under TDR, private market forces dictate the related cost. This helps landowners obtain full value for preserving their property and is an alternative to the below-market values offered to land owners under the State’s agricultural easement program.”

The County should remove these sentences. They are simply not based on fact. This is a needless comparison that could be easily be construed to undermine and criticize the Agricultural Lands Preservation Program. The state’s PDR program does not offer below market values to landowners. Rather, landowners decide the amount of money they will accept to preserve their land, based on their personal value system. And quite often, monetary compensation is not the only value associated with a parcel of land. In addition, there is no reason to believe that a developer would pay any more than the lowest price they can negotiate for TDR rights.

**Page 29**

Please update the plan with these latest figures:

As of December 2007 the state has acquired development rights to 174 farms encompassing 27,207 acres. A total of 381 farms containing 51,365 acres were enrolled as Agricultural Preservation Districts.

**Page 34**

There needs to be a discussion on the responsibility of HOAs to maintain all these open spaces. In addition, there should be a discussion and commitment by the County to assist these HOAs in finding resources to maintain and improve their open spaces.

**Page 44**

We appreciate the County's commitment to encourage more farmers to enroll in Agricultural Lands Preservation. We would be glad to work with the County to figure out how they can help, and make it a goal of the plan.

**Page 45**

Again, we would remind the County to vigorously enforce the existing forested buffer requirement and Ordinance 862.

In closing, the Department hopes the County views its comprehensive plan as an opportunity, not a burden. The plan is correct to point out that agriculture is still the number one industry in the County, and the engine that drives its economy and sustains many of its residents. However, despite that fact, there is not a great deal of attention and detail on how to ensure agriculture remains strong far into the future. Consequently, the Department of Agriculture cannot support the plan as it is currently written.

**Delaware Economic Development Office – Contact: Jeff Stone 672-6849**

- The Economic Development Element needs to outline how to diversify and fortify Sussex County's economy. The Sussex County Action Plan from the CEDS addresses many of the important issues such as:
  - Maintain agriculture but diversify within the sector toward more value added products to cushion against potential disruptions in the dominate poultry segment
  - Maintain and enhance where possible the resort/visitor industry in the Beaches.
    - Market natural resources and quality of life and unique culture

- Identify and plan for future growth industries. It should:
  - Focus on less land use intensive industries.
  - Promote and foster entrepreneurship through education and entrepreneurial ventures that tap into and capitalize on the intellectual capacity of executive retiree population.
  - Focus on industries conducting research and development and other high value, knowledge based business activities.
- Provide for the development of the necessary infrastructure to provide a competitive business environment.
  - Ensure accessibility to and expansion of transportation, utility and information-technology services serving businesses.
  - Provide for the development of affordable workforce housing and live near your work approaches.
  - Emphasize infrastructure holistically and not focus solely on business parks.
- Identify regional strengths and opportunities with Kent County, the Maryland Eastern Shore and Virginia.
- Provide for the development of a sustainable, high quality workforce.

### **Economic Development Agencies**

- The draft plan refers to the Sussex County Economic Development office but since the retirement of the last Director some months ago, the position has been vacant.
  - Sussex County needs an active office of economic development to drive the needed diversification efforts noted previously. It is unlikely they will happen without a champion.
  - The office should focus on business retention and expansion and laying the groundwork for diversification. The traditional strategy of industrial recruitment will not be effective in expanding the County's economy.
  - It is important that the major economic interests in Sussex have a central place to have their concerns recognized and responded to. Without an active economic development office their issues may not be recognized in the best manner for both the county and the industry.

- The ability of Sussex County to tap the resources of the many other economic development entities listed in the draft is significantly diluted by not having an effective central point of coordination.
- Consider the CEDS recommendations for the recruitment function and the creation of business consortium representing Sussex County.

### **Sussex County Airpark**

- The Airpark is a good economic generator but it has not realized its potential.
  - Too much land has been allocated to basic or service industries, not aviation or technology related.
  - Remaining land is very limited and much is already committed to a non-aviation firm.
  - The focus on the Airpark may be diverting attention and financial resources from other economic development efforts with a higher long term return on investment.
  - PATS is a tremendous contributor whose growth is welcomed. But they are one company in an extremely competitive industry, virtually landlocked on the airport.
  - The comprehensive plan should seek to take long term advantage of PATS to broaden and diversify the aviation segment of the economy. This must be done in a careful manner designed to enhance, not hamper, PATS growth.

### **Business Parks**

- The draft plan notes that the County is virtually devoid of significant industrial or business park space but does not propose any efforts to correct that.
  - Land Use - If the County is to expand and diversify its economy and attract new business, it must have somewhere to put them. Currently there is a severe shortage of appropriately zoned, shovel ready sites much less available modern buildings. The plan should provide for the County to work with its communities, land owners and developers to identify and zone land for planned business parks. Because of the high value of residential zoning in Sussex, the County may have to consider ways to provide incentives for land owners and developers to develop land for business park use.

- These locations must be on major transportation corridors and have appropriate infrastructure; sewer, water, and communications available. Most importantly, they must be aligned with the future economy and provide for flexible spaces for smaller businesses rather than traditional large lot industrial parks suited for traditional manufacturing firms.

### **Critical Economic Development Issues**

- Workforce
  - A prepared, educated workforce is critical to firms engaged in the “new” economy. The Economic Development Element should outline steps the County will take to better prepare its workforce for the jobs of the future. The difficulty that firms such as PATS have had in recruiting workers are testimony to this problem. Difficulty in recruiting and retaining workers is a significant cause for existing firms to consider relocating to another place outside of the county.
  - 2006 statistics show Sussex to have the least educated population in Delaware with 55% having a high school diploma or less as well as the oldest population with 19% above 50 years of age. Significantly, only 59% of the population participates in the labor force versus almost 65% statewide. It is a difficult chicken and egg situation: How do you attract higher paying jobs if the workforce to fill them is not there? Also, how do you interest the workforce in getting more education if the higher paying jobs are not there? In-commuting of a workforce is not a good option for Sussex County.
  - The good news is that many of the growing, older population are recent immigrants to Sussex who bring significant wealth and experience. The Economic Development element of the comprehensive plan should address how the County can seek benefits from this resource.
- Entrepreneurial Development
  - Rural communities across the county have embraced entrepreneurship and small business development as an economic development focus. It would seem to fit well with Sussex’s growing 50+ population. Such efforts diversify the economy, create sustainable employment and require less land and infrastructure.
  - A critical issue for this strategy is the availability of Wi-Fi/broadband capacity throughout the county. Even the smallest business operating

from someone's home today is competing worldwide. Without the availability of reasonably priced broadband service, a small business/entrepreneurship strategy cannot succeed. Good broadband infrastructure can overcome many of the actual and perceived transportation challenges facing economic development in Sussex County.

**Procedures for Plan Certification:**

1. The jurisdiction will reply to the state comments in writing and submit a revised plan, if necessary, to the Office of State Planning Coordination for review.
2. Within 20 working days, the State will reply to the revised plan and send a letter either accepting changes or noting discussion items.
3. The Office of State Planning Coordination shall submit a final comprehensive plan report and recommendation to the Advisory Council on Planning Coordination for its consideration;
4. Within 45 days of the receipt of the report the Council shall issue its findings and recommendations and shall submit the plan or amendment to the Governor or designee for certification.
  - a. Within this timeframe, the Council, at its discretion, may conduct a public hearing on the proposed plan or amendment, except that no hearing shall be held if the proposed plan or amendment is found to be consistent with state goals, policies and strategies and not in conflict with plans of other jurisdictions;
5. Within 20 days of receipt of the findings and recommendations from the Council, the Governor shall certify the plan or return it to the local jurisdiction for revision. The local jurisdiction shall have the right to accept or reject any or all of the recommendations as the final decision on the adoption of the plan is up to the local jurisdiction. According to 9 Del Code §6958 (b) The State shall not be obligated to provide state financial assistance or infrastructure improvements to support land use or development actions by the county where the county's adopted comprehensive plan or portions thereof are determined to be substantially inconsistent with State development policies.
6. The jurisdiction shall adopt the plan as final following certification.
  - a. The jurisdiction shall send a copy of the adopted plan to the Office of State Planning Coordination.

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in cursive script that reads "Constance C. Holland". The signature is written in black ink and is positioned above the printed name and title.

Constance C. Holland, AICP  
Director, State Planning Coordination

# DRAFT

## Stormwater Impact Study (SIS) Findings Report

Project: \_\_\_\_\_

Owner/Developer: \_\_\_\_\_

Consultant: \_\_\_\_\_

<b>Impact Item</b>	<b>Impact Rating</b>		
	<i>Minor</i>	<i>Moderate</i>	<i>Significant</i>
1. Soils - On-site soils have low permeability, high water table, or other limitations that could adversely affect adequate stormwater management for the proposed project.	1	2	3
2. Runoff Potential - Change in land cover due to removal of trees, increases in impervious cover, etc. could adversely affect adequate stormwater management for the proposed project.	1	2	3
3. Water Quality - Pollutant loadings associated with proposed project could adversely affect adequate stormwater management.	1	2	3
4. Sump Conditions - Existing topography of site creates sump areas where runoff tends to collect without direct discharge.	1	2	3
5. Discharge Points - Areas where stormwater runoff leaves the site have limitations due to existing grade, backwater effects, lack of a defined channel or other physical site limitations.	1	2	3
6. Off-Site Drainage - Areas draining into the site could adversely affect adequate stormwater management for the proposed project.	1	2	3
7. Conveyance - Downstream conditions such as inadequate pipe or channel capacity could limit adequate drainage from the site.	1	2	3

Reporting Agency: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Date of Pre-Application Meeting: \_\_\_\_\_

# ***RECOMMENDED LANGUAGE FOR COUNTY COMPREHENSIVE PLANS***

## **Surface Water Management**

### **1. Responsibilities and Challenges**

Land use activities can substantially alter the quality and quantity of stormwater that is produced by a parcel of land. As woodlands are cleared and land is converted to impervious surfaces (i.e. roads, buildings, sidewalks), less water is able to recharge into the ground, and the water is directed to surface water systems (i.e. ditches, creeks, rivers, ponds). As the amount of stormwater directed to surface water increases, so does the potential for downstream flooding, erosion/sedimentation of streams, drainage problems, clogged storm sewers, and water pollution.

Stormwater management is the process and technology that is used to engineer land development to safely convey stormwater without detrimental impacts. Sussex Conservation District is responsible for ensuring that all land development plans and their associated stormwater management concepts and practices comply with the Environmental Protection Agency's (EPA's) Clean Water Act, the State of Delaware Sediment & Stormwater Regulations, and Sussex County codes and ordinances. The Sussex Conservation District also verifies that completed development remains in compliance with these regulations by means of construction and post-construction inspections. In addition, Sussex Conservation District and the DNREC Drainage Program perform select maintenance to keep major streams open and free flowing.

The State Department of Natural Resources and Environmental Control (DNREC) and the EPA have delegated the Sussex Conservation District with the responsibility to review Sediment and Stormwater Plans, conduct site work inspections to monitor and enforce the implementation of the practices detailed on the plans and to perform routine, long term inspections to ensure those practices continue to function as designed. Representatives of DNREC's Division of Soil and Water Conservation meet monthly and perform an annual review of the performance of the county to verify that responsibilities are adequately met. The delegation was granted to Sussex Conservation District in 1991 and is reviewed and renewed every three years. The Division of Soil and Water Conservation also serves as a technical resource by disseminating information regarding current "best management practices" that are available to meet the requirements of these regulations.

Most of the statewide and local stormwater management regulations to date have focused on regulating new development. However, many stormwater runoff problems within Sussex County are associated with existing older developments that were built prior to the adoption of stormwater management regulations. In addition, there is a growing awareness that other land use activities such as row crop agriculture can also contribute to both water quality degradation and increased flooding. Awareness of these issues and the requirements of the Clean Water Act, particularly TMDLs, have prompted us to explore

methods for addressing stormwater quality and quantity controls in areas subject to new development. Comprehensive and integrated processes are important components of this effort.

## **2. Goal, Objectives and Strategies**

- **GOAL: Facilitate the provision and maintenance of an efficient and effective stormwater management system.**

Past growth in Sussex County and surrounding areas has resulted in increased runoff that has had a detrimental impact on private properties and natural resources in terms of flooding, stream degradation and water pollution. Stormwater management does not fall under any one agency's area of responsibility – in one way or another Sussex Conservation District, Sussex County, local municipalities, DNREC, and DelDOT all have responsibilities with respect to one or more component. In addition, community maintenance associations and tax ditch districts also handle components of stormwater management and drainage.

Past practices of controlling stormwater via rate of flow with no regard for volume of flow have helped to contribute to increased runoff. Today's techniques focus more on volume control, resulting in less water running off a site compared to previous stormwater management techniques. Incorporating these methods requires a systematic approach to stormwater management, rather than piecemeal projects and facilities.

- **Objectives**

### **Objective 1: Assess and mitigate stormwater runoff from a watershed perspective.**

Sussex County should encourage stormwater management practices designed to meet the objectives of a watershed model, where available, to address stormwater runoff impacts within the watershed. Stormwater management measures for land development are most effective when designed to accommodate off-site conveyance constraints and other drainage problems that affect downstream property owners.

### **Objective 2: Utilize Green Technology Best Management Practices (GTBMPs) to address stormwater management.**

GTBMPs naturally filter stormwater runoff and enhance on-site infiltration to minimize the volume of stormwater runoff and reduce pollution in area waterways. This includes identifying practices that reduce our dependence on stormwater basins, while replicating the predevelopment rate of infiltration. It is also important that, wherever possible, the natural soil profile and vegetated filters be used to reduce the runoff of pollutants into our watercourses. We should also utilize conservation design concepts to minimize the volume of stormwater runoff generated on a site, through disconnection of impervious surfaces to naturally filter and disperse stormwater runoff as well as enhance on-site

infiltration. Stormwater practices should mimic pre-development hydrology to the maximum extent practicable, in regards to the velocity, volume and duration of surface runoff by maximizing the infiltration of stormwater runoff and integrating open space into the stormwater management design.

**Objective 3: Ensure that regulations and procedures governing drainage and water management are comprehensive and reflect the latest information and technology.**

A comprehensive water management code streamlines the technical process of day-to-day business with the county by embedding administrative processes in the Code, establishing consistent authority and procedures. Also, a permitting process for land grading, similar to the building permit process, enables efficient and effective inspection and enforcement action. A water management code also establishes the authority to require post construction monitoring.

A watershed approach that assesses design in context of broader stormwater conveyance limitations within the watershed, better identifies and addresses the effect land development has on the community by making provisions for incorporating future watershed studies and/or TMDL requirements. Stormwater conveyance features should be recognized as infrastructure requiring rights of access for operation and maintenance. Required management of hydrology (stormwater runoff and infiltration of groundwater) of a developing site to volumes consistent with or improved upon pre-development volumes is an important component.

Sussex County must ensure that development provides completed, fully operational stormwater facilities for community ownership through the open space inspection and acceptance procedures outlined in the Code and continue to annually inspect stormwater management facilities, notifying owners of inspection results. The county would continue to make major repairs as new problems arise, and ensure that owners of residential stormwater facilities are completing and documenting required minor maintenance. An Open Space Management Plan for individual communities, as provided for in the Code, details routine upkeep and maintenance procedures to assist individual communities.

A substantial investment in stormwater infrastructure has already been made and will continue to be. Consequently it becomes very important to maintain knowledge of current and developing stormwater management technology. In particular, knowledge related to the performance and effectiveness of best management practices (BMPs) is very important to ensure that the investment provides the intended controls and improvements in flood protection, stream health, and water quality. As the technology develops and improves, the new knowledge will be incorporated in updates and revisions to the Sussex County Code.

**Objective 4: Provide for economical maintenance of stormwater management facilities.**

Routine maintenance of stormwater management systems ensures that they continue to work as designed and may result in less damage from major rain events. Historically there has not been a dedicated funding stream for this maintenance, with inadequate funds available on a year-to-year basis for the clean out of streams, basins and other conveyance systems.

Many jurisdictions have turned to stormwater utilities as a way to provide a dedicated source of revenue to address flooding and drainage issues, improve water quality and minimize future problems. Through the stormwater utility, governmental response to customers with drainage, stormwater and flood control issues is streamlined and centralized. Additionally, as environmental requirements continue to become more restrictive, funding helps to ensure that our watersheds are in compliance with the latest requirements of the DNREC and the EPA.

A stormwater utility typically facilitates the maintenance processes (both routine and substantial) on stormwater management systems including collection, conveyance, detention facilities and retention facilities and coordinates a response to identified needs. A stormwater utility will characteristically initiate watershed-specific, cross-jurisdictional stormwater management studies and strategies and, as a result, pursue regional approaches to stormwater management. This is most effective in reducing the hazard of localized flooding from systems in disrepair, as well as removing pollutants from those systems.

- **Implementation Strategies**

- Strategy 1: Develop a state-of-the-art stormwater management Code.
- Strategy 2: Explore implementation of a stormwater utility or another solution to make management of stormwater more effective and efficient.
- Strategy 3: Assist community maintenance associations with understanding their stormwater maintenance obligations.
- Strategy 4: Investigate the feasibility of developing floodplain maps based on the projected build out.
- Strategy 5: Continue to provide limited financial support to, and participate in partnerships with, the Sussex Conservation District for flood mitigation initiatives.