



March 24, 2008

Ms. Sarah E. Keifer, AICP
Director of Planning Services
Kent County
555 Bay Road
Dover, DE 19901

RE: PLUS review – 2008-02-07; Kent County Comprehensive Plan

Dear Ms. Keifer:

Thank you for meeting with State agency planners on February 27, 2008 to discuss the proposed draft Kent County comprehensive plan. The State agencies reviewed the “Workshop Draft” of the plan, dated January 29, 2008, and all comments in this letter relate to that draft unless otherwise noted. We are aware that the County has recently published the “Public Hearing Draft” dated March 14, 2008. Our office understands that some of the comments in this letter may have already been addressed in the most recent draft.

General Comments:

On behalf of the State of Delaware and the State Agencies represented through the PLUS process, our office would like to commend Kent County for developing an excellent comprehensive plan. The plan provides a vision for the future of the County that should allow the County to retain its heritage and character, while encouraging and enabling growth in the appropriate locations where infrastructure and services are planned or available.

As described at the PLUS meeting, the process that went into developing this plan was open, inclusive, transparent, and extensive. Over the span of two years time the staff worked to educate the public, collect public input, draft plan chapters and maps, and respond to feedback from citizens. Good planning documents are not produced in

isolation, and it is clear that this planning effort was broadly based on a consensus of community values and goals. We would especially like to thank the County for working so closely with representatives of our State agencies in the preparation of the plan. This cooperative approach represents excellent intergovernmental coordination that is truly in the spirit of the language found in Title 9 of the Delaware Code.

The results of the process are apparent in the plan itself. The plan provides predictability in land use patterns that will be extremely beneficial to all citizens, developers, landowners, local governments, and the State government. Speaking for the State government, we consider the following aspects of this plan to be particularly important to allowing us to meet our goals of protecting the environment, encouraging economic development, protecting agriculture, and providing infrastructure and services to citizens:

- The land use concept is well done, and should function as intended to direct growth into the growth zone while protecting the integrity of agricultural uses and natural resources in the rural protection areas.
- The Transportation Improvement Districts and Sub-Regional Master Plan concepts embedded in the plan will provide an avenue for the County, State and local governments to plan for needed infrastructure and services in advance of development.
- The plan's use of an enhanced version of the Transfer of Development Rights program to provide another option for rural landowners to realize the equity in their land, while providing an incentive for land preservation in the rural protection areas.

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 5 year Capital Improvements Program (CIP) must be addressed in the plan. The Delaware Code obligates the County to regularly prepares a Capital Improvement Program, and that CIP must be consistent with the Comprehensive Plan.

- DNREC has identified one certification issue: the lack of an adopted source water protection ordinance. Because the Act, which passed in 2001, called for implementation of local source water protection standards by the end of 2007, Kent County is out of compliance with state law. DNREC understands that the county is on track to adopt such an ordinance before the end of April.

State Comments:

Please note that additional plan changes, other than those suggested in this letter, could result in additional comments from the State. Substantial changes to the plan may require further review through the PLUS process before the plan is forwarded to the Livable Delaware Advisory Council (LDAC). These comments reflect only issues that are the responsibility of the agencies represented at the meeting. Unless otherwise noted, these comments are based upon a review of the Workshop Draft dated January 29, 2008.

Larger Issues:

There are a number of larger issues related to the plan that we would like to County to consider before finalizing the plan. These issues tend to cut across the concerns of two or more agencies, and the commentary below reflects an overall recommendation on these topics:

- The State supports the mandatory TDR program as described in the Workshop Draft. We understand from your presentation at PLUS that this concept has changed due to public comment at the workshops. The program is now a voluntary program, and base densities are being revised both outside and inside of the growth zone. There is concern among the agencies and this office that the amendments to the TDR program will make it less effective, or worse, render it ineffective to perform as intended. We are aware of the current proposal that is published in the Public Hearing Draft, dated March 14, 2008. The Public Hearing Draft proposal is obviously a well thought out compromise that should still function as intended, thus enabling the implementation of the land use plan concept. We caution the County to be very careful with further amendments to this program. **Because the TDR program is so well integrated into the land use plan concept, further amendments may require the plan to go back through the PLUS process should they represent a substantial change or render the program ineffective in the opinion of this office.**
- It is our understanding that the proposal found in the Public Hearing Draft includes the use of the existing matrix for low density development found in the

County's subdivision ordinance for new subdivisions in the rural protection area of the plan. This matrix provides for lots ranging in size from 1 to 4 acres depending on the size and scale of the subdivision. The State does not support the use of "cluster design" in conjunction with this matrix. The matrix in itself allows for clusters of small lots in small subdivisions. If allowed to work as intended, it is our opinion that this matrix will allow a variety of options for rural land development while still discouraging large scale subdivisions which are inappropriate and unsustainable in rural areas.

- Many community wastewater systems recently reviewed and approved are as large or larger than municipal and county wastewater treatment facilities and can use many of the same technologies to treat wastewater. The placement of these systems can have broad impacts on development patterns, especially if placed in rural areas where growth is not anticipated. It is the position of DNREC that community wastewater systems are environmentally superior to individual wastewater systems. DNREC staff prides itself in managing the review and permitting process to ensure that new community wastewater systems use state of the art technology to protect the State's water resources to the maximum extent possible. DNREC's policy statements in this regard relate only to the engineering and scientific aspects of the systems, and do not address the land use implications that result from placing these systems in rural areas outside of growth zones. While acknowledging the viability of the current technology used in the design and construction of community wastewater systems, the State also acknowledges that the placement of these types of systems should only occur within appropriate growth zones where other infrastructure and services are planned in conjunction with a certified plan.

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

The following are a list of comments received by State agencies:

Office of State Planning Coordination – Contact: David Edgell 739-3090

1. It is recommended that on Map 10-1 that the National Register Districts be shown as polygons, not points.
2. It is recommended that on Map 4-1 that new school sites be shown as polygons, not points and that the distinction between elementary and high schools be removed. This will give the Districts and the State the guidance needed when looking for new school sites, but also provide needed flexibility when planning for facilities.

3. In Chapter 11 please consider adding language that encourages coordination with all agencies for the sub-regional master plans / transportation improvement districts.
4. It is recommended that the various sub-regional master plans and Transportation Improvement District plans be prioritized by the County.
5. It is recommended that an implementation section be added to the plan to prioritize work projects.
6. It is recommended that language be added to the plan which clarifies County policy regarding municipal annexations. How will the County respond to municipal annexations that may not exactly correspond to the Kent Comp Plan **but** are consistent with certified municipal comprehensive plans? Our current understanding and expectation is that the County will not object to annexations that are consistent with certified municipal plans, even if the annexation will change the land use and/or density as described in the County plan.

Division of Historical and Cultural Affairs – Contact: Terence Burns 736-7400

The Kent County Comprehensive Plan chapter for Historic Preservation was reviewed. This comp plan chapter was written as part of a grant from the Delaware State Historic Preservation Office and therefore reviewed and approved the contents of this chapter. If you or anyone else would like to discuss these comments in further detail, please contact Ms. Robin Krawitz either by telephone or email. Her contact information is as follows: (302) 736-7400 or Robin.Krawitz@state.de.us .

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- 1) In the fourth paragraph of the Overview, there is a sentence that begins “Going forward, the County: must first establish a schedule of improvements to achieve compliance with existing functional classification standards;” As written, we see two difficulties with this statement. First, the County cannot do this unilaterally. We would be willing to work with the County in this regard through the Metropolitan Planning Organization, but they cannot dictate the use of State resources. Second, as discussed in later comments, the term “functional classification” is misapplied. DelDOT recommends that the sentence be reworded as follows:

“Going forward, the County: must first work with DelDOT through the Dover/Kent County Metropolitan Planning Organization to establish a schedule for improving the road network to meet current design standards; then time the development of existing and future projects with infrastructure improvements;

and, once the roads are upgraded to meet current design standards, identify any improvements needed to serve additional development for implementation concurrent with that development.”

- 2) In the paragraph following Table 5-1, the third sentence misapplies the term “functional classification” and also is not grammatically correct. DelDOT recommends replacing the entire paragraph as follows:

As discussed above, functional classification is a method for classifying roads based on the degree to which they serve two functions, mobility and access. Classes range from principal arterial roads, which almost exclusively provide mobility between places on the road network, to local roads, which primarily provide access to the properties fronting on them. Roads classifications are updated based on population projections, which are in turn based on census data. The classification system is mandated by the Federal Highway Administration (FHWA), which uses it to determine funding for highway improvements and changes in classification require FHWA concurrence.

DelDOT has established design standards that vary based on functional classification. Those standards are partially described in the table below, which is based on the DelDOT Road Design Manual and current DelDOT practice. For detailed information on the standards, the reader may refer to the Manual. In Kent County, many of the collector roads and most of the local roads do not meet those standards. This is to be expected because most of these roads were built long before those standards were established. However, it means that most County residents live on roads that may not be as safe or efficient as they would be if those roads were being built today. Improving roads to meet these standards will in some instances improve their Level of Service (LOS). LOS is discussed in more detail under Transportation Demand and Traffic Conditions.”

- 3) Below the paragraph just mentioned there is a note “INSERT DESIGN GUIDELINES AND COMPARISON TO ACTUAL CONDITIONS (Waiting for information from DelDOT)”. We recommend that the following table be inserted there.

	Lane Width (feet)	Shoulder Width (feet)	Minimum Right-of-Way Width* (feet)
Principal Arterial	12	10	100
Minor Arterial	12	10	80
Collector	12	8	80
Local	11	5	60

*Assumes level terrain and a straight, level roadway with no median

- 4) The paragraph beginning “Before additional development is permitted,” should be expanded for clarity. We suggest that the paragraph be revised to read as follows:

Before additional development is permitted, the County in conjunction with DelDOT and the Dover/Kent Metropolitan Planning Organization (MPO) must develop a plan, including a time-line and funding plan, for upgrading these roads to meet the design standards associated with their functional classification. This should be done in the context of the MPO’s Long Range Transportation Program. Preliminary Plan phasing schedules linking building permits to the completion of specific road improvements are essential.

- 5) The paragraph beginning “The County, DelDOT and the MPO” suggests that Route 15 should at some point be reclassified from a minor arterial road to a principal arterial road. Principal arterial roads carry vehicles on long trips, often with both ends outside the county. There may be some drivers using Route 15 to reach beach destinations on summer weekends, but we do not expect Route 15 to pick up non-seasonal traffic, especially truck traffic, between counties or states. Upon consideration, DelDOT believes the current functional classification map is adequate for the purposes of this plan. Beyond that, DelDOT can envision future collector roads emerging as development spreads beyond the growth areas, but we would not presume to say now which roads those would be.

- 6) In the first paragraph under Public Transportation, recognizing that that service is available everywhere in Delaware, we would delete the words “in other parts of the County” from the sentence regarding paratransit.

- 7) DeIDOT recommends that the second paragraph under Public Transportation, be reworded as follows for clarity

“While public transportation is likely to always ~~be subsidized~~ require subsidy by the state, its relative success is dependent upon people living close enough to support it and must be considered when contemplating future development patterns. Densities to support fixed route public transportation are most likely to be achieved in the Town Areas although limited service might prove cost effective in the Village Areas.”

- 8) There appear to be some missing words in the first sentence of the first paragraph under Bicycle and Pedestrian facilities. DeIDOT suggests that it be expanded to read “Several facilities accommodate the use of bicycling and walking as a travel mode behind the curb or off the road such as the path along Scarborough Road.” In the second sentence of that paragraph, five types of bicycle facility are described as being “on separate rights-of-way” but that is obviously not correct for the first four types.

- 9) In the second paragraph on under Bicycle and Pedestrian facilities, we recommend that the second and third sentences be reworded as follows: “These thresholds are the average distance that people consider when deciding to use a particular mode for recreation, work, or school. Walking and biking are becoming more important to people for physical health as well as ~~economical~~ economic reasons.”

- 10) In the first paragraph under Railroads, we recommend that the last sentence be expanded as follows: “Consequently, the Future Land Use Plan designates areas along the rail line for industrial uses and aesthetic, noise, and safety buffers should be employed in cases where residential development is contemplated in close proximity to the rail line.”

- 11) The first paragraph under Transportation Demand and Traffic Conditions mixes two concerns. First, many roads are substandard. Second, many roads are congested during peak hours, meaning they lack capacity, operate at poor levels of service, or both. For examples of the difference, Route 8 through Marydel meets the design standards for its functional classification but most of the roads leading to it do not. None of those roads are congested. Route 13 through Camden also meets the design standards for its functional classification but is quite congested. Having already addressed the issue of substandard roads, in the discussion of the existing system, we recommend that the County focus on

capacity and level of service in this section and revise this first paragraph to read as follows:

“As stated above, in the discussion of the Existing System, many of Kent County’s roads are not currently improved to the design standards associated with their functional classification. The County has identified a need to have the roads improved to meet those standards and to phase development to the completion of that work. Related, but separate from that need is the need to provide adequate levels of service, that is relief from congestion, both now and in the future. In this regard, the County in cooperation with DelDOT and in the context of the MPO’s Long Range Transportation Plan, must plan for development in the Town and Village areas and concentrate investments in infrastructure within these areas such that the combination of public and private investment provides road improvements that will meet the increasing demand.”

- 12) The section on Travel Forecasting does not reflect DelDOT’s current practices. DelDOT recommends that it be revised to read as follows:

Travel forecasting is a process that estimates future traffic levels and resulting traffic conditions in order to assess how continuing growth will affect mobility and identify where transportation improvements are needed. DelDOT has developed a travel forecasting model that includes Delaware's three counties and the nine counties of Maryland's Eastern Shore. The modeling process for Kent County (as well as the other counties) is used to estimate current and future (year-2030) traffic volumes and project travel conditions. The computer application CUBE is the framework for this model.

The DelDOT model generates travel forecasts based on estimated population, employment and socio-economic data. Trips are assigned to the roadway network by the model based on estimated travel times, which are iteratively calculated by the model based on roadway characteristics and projected traffic levels. The resulting forecasts may be compared to estimated capacity to evaluate projected travel conditions in terms of volume-to-capacity ratios and level of service (LOS). The DelDOT model uses a five-step process to estimate traffic conditions. These steps are as follows:

- Determine the number of trips expected based on forecast population, employment and socio-economic conditions (“Trip Generation”). Trip generation estimates are developed at a zone level for small areas called Traffic Analysis Zones (TAZs). The greater Dover/Kent County MPO planning area is divided into 166 TAZs in the current DelDOT model.

There are no "external stations" in the Kent County TAZ structure. There are 2136 TAZ in DelDOT's model with about 1000 reserved for future model refinements. Trips are generated for seven trip purposes.

- Trips are distributed between TAZs ("Trip Distribution") based on the degree of connectivity between the zones (measured as estimated travel times) and the amount of population and employment forecast for each zone. For example, the number of trips forecast between a TAZ with a large population and a nearby TAZ with a large employment base would be far greater than the number of trips forecast to occur between two distant TAZs with small population bases.
- Trips are allocated to the different travel modes using a "mode choice model" that includes automobiles, express bus routes, line-haul bus routes, and passenger rail routes based on "walk access" and "drive access" to all available transit services as well as relative travel time ratios between auto and non-auto modes (bus and rail), and between toll and non-toll route choices.
- Traffic is routed to the transportation network ("Trip Assignment") using peak hour capacities and a capacity-constrained equilibrium path choice model. Up to twenty assignments are performed for morning, mid-day, afternoon, and off-peak travel periods and then summed together to estimate 24-hour "daily" traffic volumes for the particular scenario requested.
- Feedback occurs. The process summarized above is repeated up to four times based on expected travel times given the projected traffic volumes forecasted for each link in the network. This "feedback" allows the modeling process to account for differences between peak and off-peak traffic conditions in the estimation of where trips will be made to and from in the trip distribution phase.

The model process also includes a number of post-processing mechanisms to facilitate a variety of transportation planning functions, including estimation of vehicle emissions, a process to visually display where trips are projected to be made to and from, and a process for modeling evacuation scenarios.

- 13) DelDOT recommends that Figure 5-2 be re-titled "Traffic Volume Differential". Also, the legibility of the Legend would be improved by using the word "to" instead of a dash to indicate ranges.

- 14) The first paragraph under Level of Service could be misleading to a reader starting without knowledge of the concept of level of service. DeIDOT suggests that it be revised to read as follows.

“Level of Service (LOS) is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience. Levels range from A (most desirable to the traveler) to F (least desirable to the traveler). For the purposes of long-range planning, is generally measured in terms of volume-to-capacity ratios. For purposes of design and traffic impact studies, various other measures are used depending on the types of facilities being evaluated. The reader may consult the Highway Capacity Manual (Transportation Research Board, 2000) for more specific information.”

- 15) In the second paragraph under Level of Service, the term “functional classifications” is misapplied. DeIDOT suggests that the word “roads” be substituted for it there.
- 16) In the third paragraph under Level of Service, we recommend that the second sentence be reworded for clarity as follows “In establishing a single level of service for the entire County, one difficulty is that in more urban or suburban areas LOS ‘C’ cannot be achieved during peak periods. Thus development is pushed farther from designated growth areas toward more rural areas where the required level of service can initially be maintained.”
- 17) In the last paragraph under Level of Service, there is a statement that “Developing roadway capacity to this degree [enough to maintain LOS C] is costly and requires additional land for right-of-way.” In our opinion, it is more than costly; it is unrealistic because, in the more developed areas of the county, drivers find LOS D acceptable. For that reason, they will change their mode, their route or their start time, to take advantage of any added roadway capacity up to a point where the LOS is D, approaching E. This change was clearly observable when the portion of Delaware Route 1 around Dover and Smyrna first opened for use. On the bypassed parts of US Route 13, peak hour volumes dropped and LOS improved, but only for a few weeks.
- 18) In the section on Transportation Improvement Districts, the discussion of current practices in the first paragraph is incomplete in important ways. Specifically, in the sentence beginning “In addition,” the text omits the fact that DeIDOT did not relieve the developer from making necessary safety improvements to the road

- serving the proposed subdivision. DelDOT recommends that the sentence beginning “In addition,” be removed as unnecessary and inflammatory.
- 19) In the second paragraph of the section on Transportation Improvement Districts, DelDOT recommends that the first sentence be expanded by the addition of the clause “addressing a larger area” after the word “plan”.
- 20) In the third paragraph of the section on Transportation Improvement Districts, DelDOT recommends that the words “will be” be replaced with the words “should be” unless the County intends to mandate use of the master plans in all cases within the proposed TIDs.
- 21) DelDOT appreciates and supports the intent of the fourth recommendation under the Policy Emphasis, that is to revise the Adequate Public Facilities – Roads Ordinance. However, it may need some adjustment. Specifically, because level of service is a step function there are is a significant range of operation within each level and only a very small change, conceptually an infinitesimal change, from one level to the next. The text of the ordinance may require more precise language but for the purposes of the Plan we suggest the following changes:
- “Revise the Adequate Public Facilities – Roads Ordinance to permit Level of Service D within areas designated for growth (Town, Village, and Village Conservation) and further permit that delays at intersections functioning below the established Level of Service be maintained at their pre-development values ~~level of service~~ as development is constructed ~~but not reduced;~~”
- 22) In the tenth recommendation under the Policy Emphasis, the reference to “a new yard” is not clear. Is it a rail yard for freight service, for passenger service, for both, or is it some other type of yard? Our belief is that the intent is to create a “new inter-modal freight yard”.
- 23) DelDOT recommends that the section on Transportation Improvement Districts (TIDs) be expanded to explain the basis for the TIDS shown on Map 5-2. How were they established? How were the boundaries determined? Short of a plan amendment, is there a way to amend the boundaries? If this map is a placeholder and the TIDs will be established after the Plan is approved, that should be clearly indicated on the map.

Comments on Other Parts of the Plan

- 24) Why was a section not included on the public participation process? DelDOT suggests adding brief section documenting things such as the number of meetings of each type that were held and the average attendance at them, as well as information regarding the extensive effort made to gather and share information. Adding such a section would provide a ready answer to any claim that the public was not consulted.
- 25) In Chapter 2, there is an apparent conflict in the description of the proposed Village Conservation Areas. How does the County reconcile the purpose of these areas being “to preserve open space and the County’s rural character among the medium and high density designations” and “to protect environmentally sensitive areas...while also providing habitat to Kent County’s wildlife,” with residential densities of 2 to 4 units per acre? The proposed densities and locations of these areas make sense in that they would provide transitions between other areas, but they do not seem to achieve their announced purposes.
- 26) One of the Goals for the Future in Chapter 2 is to “Encouraging mixed uses where appropriate.” DelDOT agrees that mixed uses are supportive of efficient transportation and that they should be encouraged where appropriate. Further, they suggest that they should be transit ready.
- 27) Sub-area Plans are discussed in the Implementation section of Chapter 2. DelDOT agrees that these plans will be an important tool in implementing the Plan and we look forward to working with the County in this regard.
- 28) The Transfer of Development Rights illustration at the end of Chapter 2 should be very helpful to the reader. It is perhaps the clearest explanation they have seen of how such a process works. However, it is listed as a single figure. Because there are three pages involved, we recommend that each page be assigned a separate figure number. It would also be helpful to place the figure number and a title on each page.
- 29) In the Design Characteristics Section of Chapter 3, the third bullet point under Residential development addresses grid street designs and connectivity. DelDOT strongly agrees with the importance of these elements.
- 30) DelDOT recommends that the County consider adding a map of existing and planned parks and recreation facilities to Chapter 4. To provide a complete

- picture, local, state and federal facilities should be shown as well as County facilities.
- 31) In Chapter 4, the section on water service does not mention the role of the Public Service Commission and for that reason may not adequately characterize the regulatory situation. DelDOT recommends that the County coordinate with them if they have not done so.
 - 32) Map 4-2, showing the various water systems in Kent County seems unnecessarily complex. While the Town of Smyrna and the City of Milford may have two water systems each, for the purposes of this map, it would seem adequate to use a single color for each town. Indeed, it for the purposes of this document it would seem to be adequate detail to use a single color for all of the municipal systems. Using fewer and more distinct colors makes a map easier to read.
 - 33) In Chapter 6, Under Existing and Required Resources, parts of the section on Transportation should be clarified:
 - a) In the first paragraph, there is a statement that “DART provides countywide routes and intercounty routes with convenient stops at an increasing frequency.” Does “an increasing frequency” refer to the addition of new routes, the headways of the buses or the spacing of the stops?
 - b) In the second paragraph, there is a statement that “The County and the State should do more to promote public transportation, carpooling, ‘work from home’, etc.” What “more” should we do? This may be an appropriate place to mention the Transportation Management Association of Delaware (TMA Delaware).

Finally, in the third paragraph, there is a statement that “If such a connection [a limited access alternative to US 113 through Sussex County] is made, Kent County will have greater commercial pressure as SR 1 becomes more regionally significant as a transportation corridor.” What is meant by “greater commercial pressure”? DelDOT is not certain that they agree with this statement.

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

Introduction

From DNREC's perspective, Kent County's Workshop Draft (#2) represents an ambitious and comprehensive attempt to direct growth and protect resources. By providing detailed comments and recommendations, It is the intent of the Department of Natural Resources and Environmental Control to offer their expertise and assistance to improve on the document.

DNREC also commends Kent County for including State Resource Area maps and the suggested eight ecological guidelines for protecting SRAs in its document. They offer technical assistance to the county to design ordinances that would allow these parcels to be developed while protecting key ecological resources such as wetlands, forest blocks, streams and wildlife habitat.

DNREC understands and supports the concept of creating new communities with a sense of place, mixed uses and higher density to curtail the consumption of land. In many cases the Town, Village and Village Conservation areas include Green Infrastructure Areas, SRAs, and excellent recharge areas. The County should recognize that Town, Village, Village Conservation, and Rural Protection areas were delineated based on land-use planning and not necessarily delineated based on the ecological value they possess. Environmentally sensitive features such as old growth forest, forested wetlands, areas where rare species occur, and forested riparian areas may be found in all classified areas (Town, Village, Village Conservation, Rural) and should obtain protection regardless of what planning area type they reside in. DNREC encourages the County to ensure that even though development is permitted and encouraged at higher densities in these areas that the environmental resources present will be protected through the site design process.

DNREC applauds your characterization of surface water management (stormwater, drainage, and flooding) as a community "facility" and your introduction of the concept of a stormwater utility. A stormwater utility is used in hundreds of jurisdictions across the country to identify surface-water management issues within a watershed and develop, finance and maintain solutions that prevent or remediate those problems. DNREC has provided technical assistance to New Castle County and would welcome the opportunity to help Kent County develop such a utility.

The following are comments and recommendations from DNREC's regulatory and non-regulatory programs:

Chapter 2 – Land Use

Page 2-2, Existing Conditions: The County discusses an anticipated need for an additional 8,894 housing units in the next 7 years to accommodate population projections. The Air Quality Management (AQM) Section calculated that the number of new homes would increase emissions each year in the following pollutant categories:

Pollutant	Tons Per Year
Volatile Organic Compounds	958
Nitrogen Dioxides	705
Sulfur Dioxides	822
Fine Particulate Matter	70
Carbon Dioxide	114,192

AQM acknowledges the effort that the Plan has made to address reducing auto emissions through land use measures, specifically, mandatory transfer of development rights and proposing higher density town and village zoning areas. However, with every natural resource there needs to be a cost associated with it to preserve its health quality. The Plan needs to propose specific policies for developing site plan review procedures that require developers include mitigation measures that would offset air emissions. Site plans already must have measures that would mitigate any water quality issues the developments may pose. It seems appropriate that site plans should address air quality impacts as well.

Since 2004 AQM has calculated the air emissions for residential developments through the PLUS process. The calculations are based on 2002 activity for Delaware. A per household or residential unit emission factor was developed. There are three components to the per household estimate: direct residential area source emissions, electrical power generation emissions, and mobile or vehicle emissions. The emissions in the above table considered these three components:

Mobile or vehicle emissions - per household emissions based on statewide 2002 MOBILE6.2 average emissions for Light-Duty Gasoline Vehicles; average of 9 trips per day per household and 11 miles per trip from WILMAPCO's long range transportation plan based on 1998 Travel Demand Model Outputs from DelDOT Demographics Data - from Delaware Population Consortium (2003).

Electrical power generation - These are emissions that take place at the various electricity generating units throughout our region due to residential electricity usage. Emission factors are based on the average base load emissions for all PJM grid units. The PJM grid includes units in Pennsylvania, New Jersey, Maryland and Delaware. Due to nuclear and other possible non-fossil fuel units within the grid outside of Delaware, the factors chosen are lower than if Delaware-only factors were selected.

Area Sources -Direct Residential Emissions - These are emissions that take place at a typical residence in Delaware. Estimates for this component were derived from the 2002 statewide annual emission estimates recently calculated for submission to EPA's national database. Categories include fuel combustion, wood combustion, architectural coatings, consumer products that contain VOCs, lawn and garden equipment (engine emissions and evaporation), and portable fuel containers. For source categories where emission factors include contributions from both residential and commercial usage, a fraction was applied to account for residential only.

The criteria for additional density bonuses are not specified in detail. At minimum, the Density/TDR section should contain a recommendation that criteria for additional density bonuses be drafted and adopted.

Page 2-4, Protection of rural character: Tax ditch organizations provide proper drainage management that is vital to agriculture within the County. Protection of tax ditch rights-of-way is a necessity as the county continues to expand development, however few units, into the rural area.

Page 2-6, Discourage sprawl development: More improvements in Land Use practices are needed to improve water quality in Kent County. As quoted below from “The State of Delaware 2006 Combined Watershed Assessment Report (305(b)) and Determination for the Clean Water Act Section 303(d) List of Waters Needing Total Maximum Daily Loads (TMDLs):”

“The need for additional cleanup and pollution prevention continues. The focus of water quality management has shifted from point source discharges (end-of-pipe) to decreased stream flows and non-point source problems, such as urban and agricultural runoff, erosion, and sedimentation. Unaddressed, these problems lead to poor habitat conditions for fish and other aquatic life, decreased enjoyment of our surface waters for recreation, and unhealthy conditions for those surface waters upon which we rely for drinking water supply and other domestic uses.”

Page 2-12, Implementation: Lands around the towns of Smyrna, Dover, Camden, Wyoming, Woodside, Viola, Felton, and Harrington have existing tax ditch organizations. The Drainage Program recommends the development of a master drainage plan, to include Tax Ditch locations, for sub-area planning of the Town and Village Areas.

Page 2-12, Ordinance Revisions: The Plan proposes making the Transfer of Development Rights ordinance mandatory for development in the growth zone. It also proposes a significant downzoning of areas outside the growth zone which AQM supports. Encouraging higher density development in the county while discouraging “sprawl” reduces vehicle miles traveled and wasteful energy use. The AQM Section approves of the mandatory TDR ordinance. However, it would have a greater benefit for bringing about development in-filling if the municipalities were included as one of the participating “receiving areas” for higher density development. Most of the municipalities of Kent County have better transit service coverage and other community services than non-incorporated County areas. Incorporating the municipalities into the TDR program promotes the proper direction of growth from central high density areas to lower density areas which maintains a manageable handle on infrastructure costs over time.

Page 2-12, Ordinance Revisions: As stated in the Plan, the entirety of the Zoning and Subdivision Plan and the Land Development Chapters must be reviewed and revised. The Drainage Program requests the opportunity to work with the County in the review and revision of ordinances to ensure proper drainage, along with drainage maintenance, for the residents of the County.

Chapter 3 – Community Design

Page 3-4, Design Characteristics: The Drainage Program recommends protection of sensitive and critical resource areas and further recommends incorporating natural drainage features into the design as an amenity.

Page 3-9, Implementation Item 6: The Drainage Program agrees with the intent and requests the opportunity to assist with the language used to achieve the goal.

Chapter 4 – Community Facilities

General Comment: Please consider incorporating language regarding Tax Ditches as follows:

Tax Ditches

Adequate drainage and the proper maintenance of drainage systems countywide is vital to agriculture, existing and proposed development, and the overall quality of life within Kent County. Along with tax ditches, that have an established right-of-way, are a network of private ditches within the Tax Ditch Organizations without right-of-way that convey surface water to existing tax ditches. Well-organized and maintained tax ditches provide the drainage conveyance framework that enables the area to have productive farmland and desirable residences. The drainage within the proposed growth zone is primarily private drainage, maintained by the landowner, along with drainage under the management of homeowners associations. The drainage of approximately 124,800 acres within the county is provided through 751 miles of tax ditches managed by 78 Tax Ditch Organizations. Tax ditches are prevalent in western Kent County with the vast majority located outside of the growth zone.

Pages 4-5 through 4-9, Parks and Recreation: As part of this section, please add the following information:

The Division of Parks and Recreation provides matching grant assistance through the Delaware Land and Water Conservation Trust Fund (DTF) to municipalities and counties for park land acquisition and for park development. Lands that have received DTF assistance must remain as open space for conservation or recreation purposes in perpetuity. The following sites have received DTF funds and are protected open spaces/parks managed by Kent County.

<u>NAME</u>	<u>Acres</u>
Browns Branch	78
Brecknock Park	75
Big Oak Park	88
Hunn Property	131
Lebanon Landing	1
Isaacs Branch Greenway Trail	3

Similarly, the Federal Land and Water Conservation Fund (LWCF), administered by the Division of Parks & Recreation for the National Park Service, provides matching funds for land acquisition and development. Lands receiving LWCF assistance must remain

intact for recreation or conservation purposes in perpetuity. The following sites are protected by the LWCF Program.

<u>NAME</u>	<u>Managed By</u>	<u>Acres</u>
Woodland Beach Wildlife Area	DNREC, Fish & Wildlife	413
Blackiston Wildlife Area	DNREC, Fish & Wildlife	919
Milford Neck Wildlife Area	DNREC, Fish & Wildlife	1,392
Fish & Wildlife Additions (east of Frederica)	DNREC, Fish & Wildlife	786
Little Creek Wildlife Area	DNREC, Fish & Wildlife	1,032
Norman G. Wilder Wildlife Area	DNREC, Fish & Wildlife	697
McGinnis Pond	DNREC, Fish & Wildlife	138
Andrews Lake Access	DNREC, Fish & Wildlife	10
Haven Lake & Access	DNREC, Fish & Wildlife	9
Killens Pond State Park	DNREC, Parks & Recreation	770

Page 4-9, Parks and Recreation: The University of Delaware was incorrectly identified as the source of the 2003 Statewide Comprehensive Outdoor Recreation Plan survey. Information should be changed to the following: “The Division of Parks and Recreation, DNREC, conducted the telephone survey through Responsive Management, Inc. as part of the development. . .”

Page 4-10, Water: The first paragraph’s use of the phrase “underground reservoirs” is an inappropriate substitute for “aquifer.” Aquifers recharge through infiltration. Aquifers do not “release” water; they “discharge” water to streams and “supply” water to pumping wells.

Page 4-11, Water: There are Federal and State laws and regulations that protect resources within the County’s jurisdiction, and it should be acknowledged in the plan that the

County intends to coordinate and collaborate with these agencies to implement land use controls and environmental protection.

Page 4-11, Drinking Water: Please add: Aquifers that are categorized as “confined” in the southern portion of the County are not confined in the northern section of the County where they outcrop. Outcrop means there is no confining layer between them and the surficial aquifer. This is where they recharge and are as susceptible to contamination as an unconfined aquifer.

Page 4-12, Source Water: The Source Water Protection Law of 2001 should be cited as Title 7, Delaware Code, Chapter 60, Subchapter 6, Source Water Protection.

Page 4-12, Excellent Recharge Areas: The Plan should cite Delaware Geological Survey Report of Investigations No. 66 in its discussion of excellent ground-water recharge potential areas. These areas are not “designated;” rather, they are delineated using a complex mathematical model. Also, Map 8-5 needs to cite this report as reference material.

Page 4-12, Water Service: The Plan states that multiple private drinking water utilities are located in areas that the County has observed may be more economically served by one utility. The Public Service Commission is the entity responsible for regulating the areas that private utilities can serve. These service areas are established under the Certificate of Public Convenience and Necessity (CPCN) process.

The Plan expresses a concern that some aquifers may be stressed by an increase in water demand. The Plan does not contain any analytical data projecting water use and what that demand will be.

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

A preliminary review found that the Water Allocation Program currently has permits for several municipal utilities in the county, including Dover, Smyrna, Felton, Harrington, Frederica, Camden-Wyoming and various districts of other private utilities. According to the Plan, these utilities together account for 28,221 out of approximately 150,000 residents or 19 percent of the County. The County issues building permits for the remaining 81 percent of water users, and the Water Supply Section is obliged to issue water well permits.

There are areas in the County where new wells may be impacted by nearby septic systems, other water users, agricultural or industrial facilities. Before approving developments and issuing building permits in these areas, the County should coordinate with DNREC to determine potential impacts and mitigation options for these areas. This coordination may be accomplished through the PLUS process, or through direct discussions between County planners and the DNREC Division of Water Resources.

Page 4-13, Wastewater: Future wastewater needs do not appear thoroughly analyzed and documented to show the need for future treatment facilities or how spray irrigation might be used for disposal/ground water recharge. We believe the County has taken steps to acquire land for spray irrigation but it is not indicated in the Plan. A countywide area wastewater plan is a logical background study or an integral component of the Plan. The Water and Sewer Element is to be “developed in consultation with and reviewed by” the Department of Natural Resources and Environmental Control. This consultation and review needs to be documented in the Comprehensive Plan.

Pages 4-15 - 16 – Stormwater:

Encourage the use of Green Technology best management practices for stormwater management particularly in denser areas of the county or areas proposed for dense development.

5th paragraph (4-15) – Stormwater management is regulated by the Delaware Department of Natural Resources and Environmental Control with responsibility delegated to the Kent Conservation District.

Top of page 4-16 – It is recommended that the County strike statement regarding row crop agriculture. The Agriculture community implements many conservation practices across the county to reduce flooding and erosion. Agriculture lands also allow for infiltration of stormwater and groundwater recharge, whereas impervious surfaces from extensive development can increase runoff substantially.

Page 4-17 – Policy emphasis #7 – It is recommended that the County add stormwater to list of adequate public facility ordinances necessary to support new developments.

Page 4-18, Parks, Recommendation 1: The development of a master drainage plan could also serve as a guide to link future development open space as greenways. The County should identify existing open channels within the County boundary, especially within the growth zone, as these channels may require maintenance in the future. The riparian buffers along the channels provide a multitude of benefits to water quality and wildlife along with recreational opportunities.

Page 4-18, Parks, Recommendation 4: Explore the use of drainage ways and other open space set aside for drainage maintenance for bicycle and pedestrian interconnections in new developments. For developments on waterways that are of sufficient size to kayak, consider an unimproved launch area in the recreation open space plan. This would allow more residents to access the waterways, in a non-mechanized manner, while keeping the cost of operations and maintenance down.

Page 4-19, Parks Recommendation #8–There was no discussion in the comp plan text regarding fee in lieu option for open space, nor discussion about existing issues with community open space management. More data and information is needed before embracing the fee in lieu concept as this may reduce availability of pocket parks and trails at the neighborhood level.

Page 4-19, Water, Recommendation 3: The Ground-Water Protection Branch recommends that infiltration practices need to be expanded to assure an adequate supply of clean drinking water. In addition to limits on impervious cover and improved stormwater management practices, the County needs to consider alternatives to the daily discharging of 12.5 million gallons of treated wastewater into the Murderkill River.

The County would be advised to consider County-owned and operated regional spray irrigation facilities to infiltrate treated wastewater. This would assist the County in meeting their TMDL requirements and recharge the aquifer systems.

Pages 4-20 through 4-23, Stormwater: DNREC applauds the County's recognition of stormwater management as a community facility and supports the County's interest in promoting a stormwater utility.

It is recommended that the County incorporate the need for drainage management plans and periodic reconstruction of drainage ways.

Be careful of mixing stormwater quantity issues with stormwater quality/TMDL issues. These are two separate stormwater management policy topics. The State's Sediment and Stormwater Regulations, which are in the process of being revised, address both of these issues. The Sediment and Stormwater Program would be pleased to assist the County in developing any ordinance, code, or plan language related to surface water management issues to help reduce confusion. It would be helpful to all stakeholders to have a clear, coordinated, and concise framework for surface water management in the County.

Page 4-21, Stormwater, Recommendations: In the absence of a stormwater utility, drainage easements should be for the County and recorded as such. This gives the County the ability to hire a contractor for maintenance of the drainage conveyance.

#2 a – In order for a utility to operate equitably, fees would need to be assessed to all residents. An impact fee would be an option if the County is interested in limiting participation.

Page 4-21 Recommendation 2(d): Streams, tax ditches, and private ditches will require periodic reconstruction at intervals dependent upon the sedimentation load from upstream. Periodic reconstruction involves the removal of sediment from the ditch bottom to establish or re-establish a design grade. The removed sediment, referred to as spoil, is typically disposed of by spreading or piling alongside the ditch. On a tax ditch this is done within the tax ditch right-of-way which is why Tax Ditch rights-of-way need to be unobstructed. For private ditches a Drainage Management Plan would include a maintenance plan for drainage conveyances and include points of access for maintenance equipment and designate spoil disposal areas.

Page 4-22, 3 (c), The current draft outline of the revisions to the Delaware Sediment and Stormwater Regulations does include an item for providing fee-in-lieu of stormwater management; however, it should be noted that the fee-in-lieu is intended to be an option of last resort when stormwater management cannot be effectively provided on a site being developed. It is not intended to be a “free pass” for stormwater management if the developer chooses to contribute to a watershed project. In addition, a utility or similar structure must be in place to handle the fees collected prior to a fee-in-lieu option for stormwater management.

Chapter 5 – Transportation

The Air Quality section discusses the non-attainment status for meeting the National Ambient Air Quality Standards for ozone. While AQM acknowledges that auto and truck emissions are predicted to go down in the foreseeable future, we suggest that this section include the on-road emission budget established according to the Clean Air Act by the State for the County, including all the municipalities. The Table below should be included in the Plan.

**2009 Projected On-road Vehicle Mobile Emissions for Delaware
(Emission in tons per day, VMT in miles per day)**

Pollutant	Kent	New Castle	Sussex	Sussex*	DE Total**
VOC	3.95	9.89	7.05	(6.30)	20.89
NOx	9.04	19.23	11.93	(11.10)	40.2
VMT	5,703,033	17,122,179	8,541,828		31,367,040

VOC – volatile organic compounds

NOx - nitrogen oxides

Cleaner cars have provided emission offsets for the increasing vehicle miles traveled (VMT) that would otherwise cause a worsening of the air pollution problem in the County. Nevertheless, until a zero emission vehicle becomes the predominant vehicle of choice for people in the County, the existing cleaner cars will have diminishing returns of reducing air pollutions if VMT is not curtailed. Current trends show that VMT growth is predicted to be at a pace of 2% per year.

It should also be noted in the Plan that the vehicle emissions out to the year 2030 cannot exceed the limits listed in the above table, specifically 3.95 tons per day of volatile organic compounds and 9.04 tons per day of nitrogen oxides. Otherwise, federal funding of important regionally significant projects may be withheld. These two air pollutants are the main components for producing ground level ozone. Ground-level ozone is a real threat to Kent County resident's health because it reacts with sensitive lung tissue, causing harmful changes in breathing passages.

Chapter 6 – Economic Development

Pages 6-11 and 6-12, in the discussion of ecotourism: Please address the Route 9 Coastal Heritage Scenic Byway as a tourism resource. The County should address its participation in the development of the Route 9 corridor management plan in the chapter's Specific Recommendations.

Chapter 8 – Natural Resources

Pages 8-2 through 8-10, Environmental Elements: Please add the following:

State-owned Ponds

We are especially concerned about the impact development has on the water quality and usefulness of State-owned ponds throughout the State. 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 manage.

There should be no less than a required 100-foot buffer between any new development and the edge of State ponds. 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. Tributaries that flow into state-owned ponds should also be protected with at least a 100-foot buffer.

State Wildlife Areas

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.

Rare Species

DNREC has not surveyed many of the parcels in Kent County that may be slated for current or future development. Therefore, it is unknown if State-rare, or federally listed plants, animals or natural communities will be impacted by development of these parcels.

DNREC recommends that the County require developers (or applicants of development projects), to contact the Natural Heritage and Endangered Species Program (NHESP) to determine if their project activities will impact a State-rare or federally listed species. In some cases a site visit may be requested in order to provide the necessary information. The County should then consider requiring implementation of recommendations provided by the NHESP before approving site plans.

Contact information:

Environmental Review Coordinator
Natural Heritage and Endangered Species Program
DNREC-Division of Fish and Wildlife
4876 Hay Point Landing Rd
Smyrna, DE 19977

Page 8-2, Wetlands: The Plan narrative should mention specific Federal and State wetland regulatory programs for protecting nontidal and tidal wetlands. Consider the following:

“Regulatory Protection of wetlands is mandated under Section 404 provisions of the Federal Clean Water Act. Certain other wetlands such as tidally influenced wetlands and wetlands associated with streams/ditches are accorded additional regulatory protection under Title 7 Chapter 66 and Title 7 Chapter 72 provisions of the State of Delaware’s Code, respectively. Compliance with these statutes may require an Army Corps of Engineers approved field wetlands delineation and/or an official DNREC wetland jurisdictional determination.”

Designate all wetland buffers as un-subdivided open space. No portion of any building lot should be within the buffers. During prolonged wet periods, the wetland buffers may become too wet for normal residential use. Designation as open space will aid in the prevention of decks, sheds, fences, kennels, and backyards being placed within the buffers thereby reducing nuisance drainage complaints. Grasses, forbs and sedges planted within these buffers should be native species, selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Remove invasive vegetation prior to the planting of native species.

Page 8-2, Woodlands and Wildlife Habitat

Existing woodland provides valuable wildlife habitat as well as soil erosion protection and water quality filtering. Preserve existing woodland within proposed growth zones. Do not allow the clearing of woodland to create stormwater management areas.

There is emphasis on maintaining or creating a network of interconnected green spaces which will provide habitat connections for wildlife travel and benefit species that occur along water courses. These interconnected spaces will benefit wildlife in many ways; however, it should be noted that interconnected areas of forest that are relatively narrow (less than 20 acres in width) and surrounded by development will not serve as habitat for some rare forest-dependent bird species. These species require unbroken, large expanses of forest with an undisturbed interior. The fragmentation of forested areas by development has contributed to the decline of many of these species.

Water bodies, ponds, intermittent and perennial streams and tax ditches should be buffered from development. Please see our detailed recommendations under our comments for Recommendation 7 on page 8-12, found later in this letter.

Page 8-4 and 8-5, Waterways: Please replace the existing narrative and table on TMDLs with the following:

“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 narrative and numerical 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. In simplistic terms, 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.”

Kent County is located within the greater Delaware River and Bay drainage and Chesapeake Bay drainage. Within the combined area of the two drainages are 10 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 lists these nutrient and bacteria reduction requirements.

The table found in the draft plan has been updated to specifically identify Delaware Bay and Chesapeake Bay drainage areas. It is strongly recommended that the following table of the watershed nutrient reduction requirements be used in lieu of the draft-version table in the Plan:

Table 1: TMDL Nutrient and Bacteria reduction requirements for Kent County, Delaware watersheds

Delaware River and Bay Drainage	N- reduction requirements	P-reduction requirements	Bacteria-reduction requirements
Misphillion River	57%, 88% in Kings Causeway Branch	57%, 88% in Kings Causeway Branch	87%
Smyrna River	40%	40%	75%
Leipsic River	40%	40%	75%
Little Creek	40%	40%	75%
St. Jones River	40%	40%	90%
Murderkill	30%	50%	32% Fresh 65% Marine
Chesapeake Bay Drainage	N-reduction requirements	P-reduction requirements	Bacteria-reduction requirements
Chester	0%	40%	35%
Choptank	0%	40%	28%
Marshyhope	20%	25%	21%
Nanticoke	30%	50%	2%

Moreover, the County should also be aware that a more stringent TMDL nitrogen-reduction level of 47% has been prescribed through the Chesapeake Bay program to meet the water quality goals for the affected watersheds (e.g., Chester, Choptank, Marshyhope, and Nanticoke) which empty into the greater Chesapeake Bay drainage. Since the State is likely to adopt this nitrogen-reduction goal in lieu of the currently prescribed nitrogen-reduction goals (Table 1), it is advised that the County be proactive and adopt this TMDL

nitrogen reduction level as a requirement for all projects within the above-stated watersheds.

Page 8-5, Source Water Protection: The Source Water Protection Law of 2001 (signed into law on June 27, 2001) should be cited as Title 7, Delaware Code, Chapter 60, Subchapter 6, Source Water Protection.

The Source Water Assessment and Protection Program (SWAPP) was created by Congress as part of the Safe Drinking Water Act Amendments of 1996. The goal of the SWAPP is to better protect public drinking water resources by providing local and state governments, and the public more information about those resources. The susceptibility of each source of public drinking water to various types of contamination will be determined and published. Congress has provided funding through the U.S. EPA to the states to support their efforts in conducting these assessments.

The Delaware Department of Natural Resources and Environmental Control (DNREC) has the lead role in the development and implementation of the Delaware SWAPP. The Delaware Division of Public Health and the Water Resources Agency, Institute for Public Administration at the University of Delaware, closely supports its work. A SWAPP Citizen and Technical Advisory Committee (CTAC), of which the County is a member, was formed at the start of this program in 1998 and continues to assist in developing and implementing Delaware's SWAPP and ensuring public involvement.

Pages 8-4 and 8-5, Water Resources: The Plan should incorporate Wetlands as a “stand-alone” subsection. The Plan should mention specific federal and State wetland regulatory programs for protecting nontidal and tidal wetlands. It is recommended that the following text be added to the plan:

Regulatory Protection of wetlands is mandated under Section 404 provisions of the Federal Clean Water Act. Certain other wetlands (mainly in tidal areas) are accorded additional regulatory protection under Title 7, Chapter 66 provisions of the Delaware Code. Compliance with these statutes may require a U.S. Army Corps of Engineers approved field wetlands delineation and/or an official DNREC wetland jurisdictional determination.

Both tidal and non-tidal wetlands have extensive resource values. Adequate wetland protections, including significant buffer areas, will be a key component of strategies to prepare for sea level rise. As sea level rises, erosion and subsidence will occur, not just along coastal areas, but within tributaries. Ensuring significant buffer areas between wetlands and infrastructure will allow natural processes to occur while preventing loss of property. The scientific community largely agrees that some amount of sea level rise is

likely in the next century. The best strategy is to become as risk adverse as possible and ensure consideration for sea level rise in development decisions.

The location of wetland 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. For example, the State of Delaware Subaqueous Lands Act, Delaware Wetlands Act, Water Quality Certification and Coastal Zone Consistency and federal programs including but not limited to:

- 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.

Page 8-6, Floodplains: Should state that “In 2003, FEMA issued updated FIRM **panels** for Kent County.”

Page 8-6, Coastal Zone: The first paragraph should read as follows: “and significant natural areas *initially* identified by the Delaware Nature Society *and are now a part of Delaware’s Natural Areas Inventory*.”

Page 8-7, Beaches and Shoreline: What are the County’s plans and/or goals for beach nourishment and shoreline protection?

Page 8-8, State Resource Areas: The second paragraph discusses the remaining 11,885 acres that need some level of protection, indicating that upland forest areas would benefit from the forest-clearing limitations already established through County ordinances. It is recommended that the County apply a higher level of protection to forested areas inside SRAs, no matter if it is inside or outside the growth zone. It is unclear what the County intends with respect to establishing environmental performance standards, guidelines, design criteria, or overlay zoning options for SRAs.

The County does not acknowledge Delaware's Natural Areas Inventory, a subset of SRAs. The County should strongly consider passing an ordinance that would recognize Delaware's Natural Areas Inventory and require a higher level of resource protection within Natural Areas.

Page 8-11, Recommendation 1: The County should be cautious when allowing woodland clearing of 50% for Village Conservation areas (and to a lesser extent 60% for Town Areas) as noted under General Comments above because these land-use planning areas can contain environmentally valuable habitat as well as rare species.

In addition, the current ordinance has a "loophole" because it allows the placement of lot lines within the percentage of forest to be preserved. This allows fragmentation and future clearing of a 'preserved' forested area. Wooded lots are lots, not preserved forest. Not only are trees cleared for the home and driveway, but subsequently for sheds, play areas, dog kennels, swimming pools, etc. From a wildlife habitat perspective, "wooded lots" are small, fragmented, disturbed, disconnected areas of habitat in which many species, especially rare species, can not thrive. In addition, forest fragmentation separates wildlife populations, increases road mortality, and increases "edge effects" that leave many forest dwelling species vulnerable to predation and allows the infiltration of invasive species.

Recommendations:

1) We recommend that forest blocks which are considered to be valuable wildlife habitat, which contain wetlands, or which harbor rare species be protected to the fullest extent possible regardless of the land-use planning area.

2) We recommend that the County change the current ordinance so that the amount of forest preserved has to be in a contiguous block (if physically possible) and not contain lot lines or infrastructure (stormwater ponds, wastewater facilities, roadways, etc.). Also, it is better to preserve the forest in the first place than try and place deed restrictions on clearing of wooded lots. Residents will want certain amenities and monitoring and enforcing these restrictions are not usually as effective as preservation.

3) The County should be aware of options for preservation provided by incentive-based programs available to private landowners through DNREC. Please contact Shelly Tovell, Landowner Incentive Program, at (302) 735-3600 for more information.

4) The County should consider enhancing existing forest protection efforts. A forest conservation initiative could be drafted that would provide a higher level of protection. A useful document for drafting language 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”. This document includes 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.

Possible components:

1) The County could set a goal for the number 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, requirement that every reasonable effort to minimize cutting or clearing of trees first be exhausted prior to allowing clearing to occur, 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 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.

Page 8-11, Recommendation 2: What is the basis for these tree planting recommendations, and why are the tree-planting density recommendations so low? How do these recommendations “dovetail” with the recommendations given for woodland

protection in recommendation #1? Will these increased tree-planting recommendations be required outside of the protected woodland areas for the various land-use types discussed under recommendation #1? Please clarify.

DNREC is aware that the County is in the process of developing a sourcewater protection ordinance as required by the Delaware Code. In fact, a number of DNREC staff have been involved to provide technical assistance to the County in this effort. We understand that the County intends to have their ordinance adopted before the end of April. Please consider the following information as you finalize your ordinance:

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 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.

It is strongly recommended that the County enact an ordinance creating an impervious cover mitigation plan for all residential and commercial development exceeding 20% imperviousness. The impervious surface mitigation plan should demonstrate that the impervious cover in excess of 20% will not impact ground water recharge, surface water hydrology, and/or water quality of the site and/or adjacent properties. If impacts to groundwater recharge or surface water hydrology will occur, the plan should then demonstrate mitigation of said impacts and/or if impacts cannot be mitigated, the site plan will be modified to reduce the impact of impervious cover. Additionally, it is further recommended the pervious paving materials be required. In commercial areas, it is strongly recommended that pervious paving materials be required on at least 50% of the total paved surface area(s) where practicable.

Page 8-11, Recommendation 6: The Sediment and Stormwater Program fully supports this recommendation, as this is reflective of proposed methodology for stormwater management in the draft outline of revisions to the Sediment and Stormwater Regulations; however, any ordinance to this effect must consider the possibility that all sites do not have the capacity to infiltrate their stormwater runoff.

Page 8-12, Recommendation 7: In general, this would be a significant improvement from the current Kent County buffer ordinance. Please consider the following information as you work on implementing this recommendation:

- The second sentence of this recommendation should be revised for greater clarity. Consider the following: “Where the slope along a water body exceeds 15%, the buffer measurement should commence from the top of bank.”
- **Recommendations for Buffering Water Bodies, wetlands, Ponds, Intermittent and Perennial Streams:** new buffers should be planted to obtain 100-foot buffers on each side of the existing wetland, water feature or conveyance. A minimum 50-foot tree and shrub planting on buffers with the tallest trees planted on the south and west side of the water conveyance will maximize shading of water. Trees and shrubs should be native species, spaced to allow for mechanized drainage maintenance at maturity. Tree and shrub planting in this manner will provide a shading effect promoting water quality while allowing future drainage maintenance. Do not plant trees closer than 5 feet from the top of the bank to avoid future blockages from tree roots. Plant the balance of the 100-foot buffer, as well as stream and ditch banks, with herbaceous vegetation to aid in the reduction of sediment and nutrients entering into water conveyance. Grasses, forbs and sedges planted within these buffers should be native species, selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Remove invasive vegetation prior to the planting of native species. The construction of pedestrian and bicycle paths within the outer 50 feet of the buffer should be encouraged.
- **Recommendations for Buffering Tax Ditches:** Tax ditch rights-of-way are unobstructed areas that have been established by court order. Any change to the rights-of-way would require a change to the court order of the particular tax ditch. Periodic tax ditch reconstruction involves the removal of sediment from the ditch bottom to reestablish the original design grade. The replanting of tax ditch rights-of-way would be an obstruction. Although trees are not a permanent obstruction, they would cause an obstruction to routine maintenance and periodic tax ditch reconstruction. An intensely planted riparian tree buffer would have from 15 to 30 years of growth before needing to be removed for ditch reconstruction at the expense of the County. An environmentally friendly way would be to give incentives to the tax ditch organizations to plant native grasses, sedges, and forbs, selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Any remaining buffer area, outside of tax ditch rights-of-way, could be planted with native trees and shrubs with the tallest mature height planted on the south and west side of the ditch to maximize shading.

- The planting of riparian buffers should consider drainage maintenance. On private ditches, where practical, the buffers should be planted on the south and west side of the ditch to maximize shading. Trees and shrubs should be native species, spaced to allow for mechanized drainage maintenance at maturity. Tree and shrub planting in this manner will provide a shading effect promoting water quality while allowing future drainage maintenance. Trees should not be planted within 5 feet of the top of the bank to avoid future blockages from roots. The buffers as well as the channel banks should be planted with herbaceous vegetation to aid in the reduction of sediment and nutrients entering into the conveyance. Grasses, forbs and sedges planted within this buffer should be native species, selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities.
- Designate all wetland buffers as un-subdivided open space. No portion of any building lot should be within the buffers. During prolonged wet periods, the wetland buffers may become too wet for normal residential use. Designation as open space will aid in the prevention of decks, sheds, fences, kennels, and backyards being placed within the buffers thereby reducing nuisance drainage complaints.

Page 8-12, Recommendation 8: The Delaware Coastal Programs has worked with homeowners associations in all three counties on issues related to passive open space management and would welcome the opportunity to assist with the County's revisions to its regulations pertaining to this issue.

Page 8-12, Recommendation 9: The Division of Soil and Water Conservation supports this language as written, and suggests that the County consider using this language in Chapter 4 as well.

Page 8-12, Recommendation 13: How will the ordinances be reviewed (what criteria will the County use), and what specific actions will the County require for meeting the federally required Total Maximum Daily Loads (TMDLs)? Will the County require additional Best Management Practices (BMPs) to meet the required TMDL reductions? If so, what kind of BMPs will be required? This statement as currently written is vague and should be revised to offer proactive recommendations for the implementation of specific BMPs to meet the required TMDL reductions.

Page 8-12, Recommendation 17: The Implementation section discusses exploring code revisions and incentives such as density bonuses to promote construction of environmentally friendly "green" buildings and the construction and renovation of buildings to incorporate Energy Star efficiencies recognizing not only the environmental

benefits but also the economic benefits to residents. Air Quality Management suggests that the Plan develop specific code revisions that would require residential and commercial builders to incorporate a reasonable number of “Energy Star” efficient building products in their construction. Every one percent of increase energy efficiency built into construction projects provides an equal amount of air emission reductions. The Plan does not adequately address specific recommendations for code revisions in energy efficient building in the County.

Page 8-12, Recommendation 17: The Division of Soil and Water Conservation notes that the current stormwater management regulations require the use of Green Technology BMPs and practices that promote recharge for stormwater quality management as a first priority. It is expected that the revised regulations will have the same requirement.

Pages 8-11 and 8-12: The Plan should incorporate the following as specific recommendations:

- a) An ordinance requiring all applicants to submit to the County a copy of the development site plan showing the extent of State-regulated wetlands (as depicted by the State Wetland Regulatory Maps), and a United States Army Corps of Engineers (USACE) approved wetlands delineation as conditional approval for any new commercial and/or residential development. Additionally, the site plan should depict all streams and ditches which are jurisdictional pursuant to the Subaqueous Act (7 Del. C., Chapter 72), as determined by DNREC.
- b) It is strongly recommended that the County develop their own wetland ordinance to help protect freshwater wetlands where regulatory gaps exist between federal and State jurisdictions (e.g., isolated wetlands and headwater wetlands).
- c) An ordinance requiring an impervious cover mitigation plan for all residential developments exceeding 20% imperviousness. In commercial developments, it is strongly recommended that pervious paving materials be required for at least 50% of the total paved surface area(s) where practicable. Please follow the suggestions made in the aforementioned narrative regarding “recommendations for reducing surface imperviousness” as guidelines for developing this ordinance.
- d) An ordinance requiring the calculation for surface imperviousness for all commercial and residential development to include all constructed forms of surface imperviousness, including all paved surfaces (roads, parking lots, and sidewalks), rooftops, and lined open-water stormwater management structures. The County should discontinue their current policy allowing developers to exclude roads and lined open-water stormwater structures from the calculation for surface

imperviousness. Moreover, this ordinance should also require the calculation of impervious cover on a combined-parcel(s) land area basis, not calculated on a single-lot basis as currently allowed.

- e) It is strongly recommended that the County adopt an “open-space” ordinance which specifically excludes structural Best Management Practices (BMPs) such as community wastewater treatment areas, open-water stormwater treatment structures and wetlands from consideration as open space.
- f) An ordinance requiring the applicant/developer to assess their project’s TMDL nutrient loading through use of the Department’s nutrient budget protocol.
- g) An ordinance that prohibits development on hydric soil mapping units (using the NRCS soil survey or a licensed soil scientist as determinants).

Literature Cited: Castelle, A. J., A. W. Johnson and C. Conolly. 1994. *Wetland and Stream Buffer Requirements – A Review*. J. Environ. Qual. 23: 878-882.

Chapter 11 - Intergovernmental Coordination

Page 11-3, Specific Recommendations: Consider adding:

1. Coordinate with municipalities within their areas of concern for annexation on the locations of tax ditches, drainage ditches, sensitive and critical habitat, wetlands, and greenways.
2. Coordinate with DelDOT and the Sediment and Stormwater Program to relax curbing standards where appropriate in the growth zones to allow Green Technology BMPs to function in higher density development styles. Green Technology stormwater practices often require a sheet flow of stormwater, which can be inhibited by the universal application of upright curb and gutter on DelDOT streets. A creative approach to the use of curbing in higher density development patterns can help meet the goals of traffic control, maintenance, and stormwater quality and quantity management.

State Fire Marshal’s Office – Contact: Duane Fox 739-4394

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal’s Office.

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 County of Kent. The State Fire Marshal's Office would be issuing approvals much like DelDOT, DNREC, etc. This Agency's approvals are based on the Delaware State Fire Prevention Regulations only.

Department of Agriculture - Contact: Scott Blaier 698-4500

The Department would like to commend the County on a well-written comprehensive plan that is considerate of agriculture. DDA is especially pleased to see that the County intends to use their transfer of development (TDR) program to steer future growth into designated growth zones and preserve farmland. As you are aware, Department of Agriculture staff attended all of the workgroup meetings, and was able to provide comments and information to the County as the plan was being updated. As a result, the Department offers only a few additional comments here for the County's consideration.

1. DDA requests the County adopt an ordinance that gives all Kent County farms the same protections given to farms enrolled in the Agricultural Lands Preservation program. Sussex County has already adopted such an ordinance. An example of Sussex County's ordinance is provided below:

Section 1. Chapter 99, Code of Sussex Section 99-6 states:

G. Agricultural Use Protections.

- (1) Normal agricultural uses and activities conducted in a lawful manner are preferred. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land uses adjacent to land used primarily for agricultural purposes shall be subject to the following restrictions:
 - (a) For any new subdivision development located in whole or in part within three hundred (300) feet of the boundary of land used primarily for agricultural purposes, the owner of the development shall provide in the

deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

“This property is located in the vicinity of land used primarily for agricultural purposes on which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities.”

(b) For any new subdivision development located in whole or in part within fifty (50) feet of the boundary of land used primarily for agricultural purposes no improvement requiring and occupancy approval for a residential type use shall be constructed within fifty (50) feet of the boundary of land used primarily for agricultural purposes.

2. Please include a paragraph in the Economic Development section about developing and promoting farm markets and other agribusiness opportunities in the County. The Department of Agriculture has a fully-staffed marketing section that would be glad to work with the County to achieve these goals. Please feel free to contact them at 698-4535.
3. As more and more developments are built in the county, and more farmland becomes community open space in these developments, noxious weeds are becoming a problem. Unlike farmers, most homeowners do not recognize they have a noxious weed problem. The state has a noxious weed law that is enforced by the Department of Agriculture, and we would encourage the County to contact the noxious weed program at 698-4500 to discuss how to better control noxious weeds in the county. <http://dda.delaware.gov/plantind/noxious.shtml>

The state also has a nuisance plant law (Title 3, Chapter 27 Delaware Code), and a list of invasive plants as well. Information on the nuisance plant law can be found at: <http://dda.delaware.gov/plantind/rulreg.shtml> . There is also a non-regulatory list of invasive plants developed by the Delaware Invasive Species Council. A list of those plants can be found at: <http://www.delawareinvasives.org/>

4. A large number of new residential developments will be built in the County over the coming years. Most of these developments have large areas of community

open space, often with storm-water retention ponds. This land ultimately becomes the responsibility of a Homeowner's Association (HOA) or Maintenance Corporation. We urge the County to establish a community liason to reach out to these new HOAs and make them aware of the responsibilities they have, and the various resources available to help them.

5. Delaware Forest Service

The county has expressed interest in increasing the utilization of low value timber to the Delaware Forest Service (DFS). The DFS has a Wood Utilization and Marketing Program in place to help utilize this resource. Additional income from wood products adds to the rural economy and emphasizes the value of forest resources.

The county has successfully worked with the Delaware Urban and Community Forestry (U&CF) program in the past to address tree conservation. We are pleased to see those efforts mentioned in the plan, and hope to continue to cooperate with the county in this effort. Wooded areas provide a myriad of benefits such as: reduced storm-water runoff and erosion protection, aesthetical value, carbon sequestration, energy savings, and wood products.

The Delaware Forest Service Urban and Community Forestry Program would like to continue to partner with the county to achieve its tree and forestry goals (302) 698-4500.

Public Service Commission - Contact: Andrea Maucher 739-4247

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

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

The Delaware Economic Development Office (DEDO) has reviewed Chapter 6 Economic Development element of the draft Kent County Comprehensive Plan and commends Kent County for its forthright recognition of the issues facing the County regarding economic development and the comprehensive recommendations contained in the draft.

As a general observation there is a limited focus on the strengths and attributes of Kent County's current economy. Specifically, there is no mention of the significant manufacturing capital investment that has taken place over the last several years. Dover

is ranked 23rd overall among all United States cities as a Boomtown for business. Conversely, the agricultural industry, making up less than 7% of all industries, receives special attention as a significant contributor to Kent County's economy. Mention of other industries that make up a far larger percentage of Kent County's economy are ignored or referenced as declining industries. It is not clear why agriculture is the only industry that receives special attention in the Economic Perspective section.

DEDO does have some recommendations for the County to consider including in their final draft.

From a policy emphasis perspective, Page 6 of the draft plan states: "The county must pursue a balanced economic development strategy that includes attracting new technology and other knowledge-based companies to provide an influx of higher paying jobs that will keep the community competitive and help retain its young professionals." DEDO recommends that this statement and initiative be added to the Policy Emphasis section beginning on page 6 – 13. DEDO also recommends that although the County recently prepared an economic development strategy that the Specific Recommendations section include a review of that strategy with an emphasis on ensuring it includes the attraction of new technology and knowledge-based companies.. Currently, the only recommendation to attract new technology is in the form of incentives (Recommendation Number 10.)

The balance of DEDO's recommendations are all focused on the recommendations made on pages 6 – 14 and 6 – 15 of the draft as reproduced below.

Specific Recommendations:

- 1. Create economic centers of business and commerce around existing infrastructure and identify areas designated for industrial and business parks, large scale commercial uses, and neighborhood commercial uses. (see Map 6-2)**
 - DEDO comment: This recommendation should provide that the County, in conjunction with Recommendation #4, will zone or rezone those areas designated for industrial and business parks, large scale commercial uses, and neighborhood commercial uses within a specific time frame. This recommendation should also ensure that the County will provide for the development or extension of the necessary infrastructure to areas designated for industrial or business uses. Critical infrastructure includes transportation, utility and information-technology services serving businesses.

- 2. Understanding that successful municipalities are imperative to the success of Kent County, support the economic development and re-development efforts of the towns including downtown revitalization efforts as well as redevelopment of existing underutilized shopping centers and hotels.**
 - DEDO comment: At both its northern and southern ends, Kent County has municipalities either contiguous with or actually crossing the county border into New Castle and Sussex Counties. The County should seek to coordinate its efforts to support the municipalities' economic development to ensure that impacts of such development do not cause problems in the neighboring jurisdiction and to maximize the use of resources.

- 3. Revise Chapter 205 (Zoning) to promote development of mixed-use centers in targeted locations.**
 - DEDO comment: This recommendation should include a time frame for completing this revision process and developing an implementation strategy including the process for identifying and prioritizing these centers.

- 4. Review Chapter 205 (Zoning) with respect to existing industrial, commercial, and office uses in each zoning district and revise as warranted to update permitted uses.**
 - DEDO comment: The results of the review in this recommendation must be conducted with recommendations #1 and #10 as primary considerations.

- 5. Revise Chapter 205 (Zoning) to provide density incentives within targeted locations within the Growth Zone, specifically Town and Village Areas, and provide a provision for affordable/workforce housing.**
 - DEDO comment: [Providing for the development of affordable workforce housing and live near your work approaches is extremely important.](#)

- 6. Promote infill and redevelopment to optimize existing infrastructure, creating transit corridors with a mix of housing and relieve the pressure of "Greenfield Development."**

- 7. Continue the positive working relationship between the County and the Dover Air Force Base and maintain zoning requirements that protect the base from incompatible land uses.**

- 8. Evaluate the costs and benefits of adding an Economic Development position to the County staff.**
- 9. Continue to protect and promote agriculture within Kent County as discussed in Chapter 9: Agriculture.**
 - DEDO Comment: The Agriculture industry will remain an extremely important component of the County's economy for the foreseeable future. This recommendation should also provide for efforts on the part of Kent County to diversify the agricultural industry in the County. The recommendation for an agriculture industrial/commercial zoning category in Chapter 9 is important to this effort.
- 10. Encourage and offer incentives such as tax abatement for the retention and growth of high wage manufacturing and technology jobs as well as for the agricultural industry.**
 - DEDO comment: Consider revising this recommendation to developing a comprehensive business retention, expansion and attraction incentive program that would include financial, regulatory, review and zoning incentives that target "high wage manufacturing and technology jobs as well as for the agricultural industry."
- 11. Encourage collaboration with public and private sector partners to advance strategies for job retention and creation.**
- 12. Seek assistance in the form of grants, loans and tax incentives or other subsidies provided at the state or federal level that support business retention and attraction.**
- 13. Develop a marketing strategy in cooperation with the Delaware Economic Development Office, Chamber of Commerce, and Central Delaware Economic Development Council to reach the small business community and provide information about the Land Development Process and the ways in which we can provide information and assistance as they start new enterprises or seek to expand.**
 - DEDO comment: This should be a comprehensive business attraction strategy including but not limited to small business.

- 14. Focus economic development as a whole toward areas where infrastructure is existing or is planned for the immediate future.**
- 15. Promote existing cities and towns in an effort to support the economic viability of the incorporated areas within the County that have access to existing infrastructure.**
- 16. Create ordinances that prohibit “big box” development without planning for the adaptive reuse of the proposed development project including the land and buildings thereon in order to avoid “dark” stores and promote community vitality.**
- 17. Coordinate with the CDEDC, Delaware Economic Development Office, and municipalities to implement the recommendations included in the Kent County, Delaware Economic Development Strategy Initiative and Kent County action plan within the State Comprehensive Economic Development Strategy.**

A final DEDO comment: The draft plan states that “Low education levels and low unemployment make the area less attractive to new employers seeking high quantities of labor and college educated labor” yet there is no recommendation regarding upgrading the education attainment of the Kent County 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.

Delaware State Housing Authority – Contact Vicki Powers 739-4263

DSHA has reviewed the Kent County Comprehensive 2008 Land Use Plan to determine how the County has incorporated the State’s goals, policies, and strategies as they relate to affordable housing. DSHA supports the Plan and we applaud Kent County for aggressively responding to the needs of affordable housing. The following are examples of proactive strategies the County is using to create new affordable housing opportunities:

Increase Density

DSHA is encouraged that this Plan identifies strategies to increase densities, where appropriate, to ensure housing for all income ranges. The DSHA supports the following implementation strategies:

- Transfer of Development Rights (TDR) for receiving sites within the developed area or future growth areas to encourage density in designated areas;
- Promotion of infill and redevelopment to optimize existing infrastructure, focusing on transit corridors with a mix of housing;
- Identifying areas that can be rezoned to provide density incentives along transit corridors, in mixed-use centers, and for the provision of affordable housing; and
- Revising ordinances to allow mixed-uses, villages to promote development of mixed-use centers in targeted locations.

Removing Barriers to Affordable Housing

Excessive regulations can stifle the ability of the private housing industry to meet the increasing demand for affordable housing in Delaware. DSHA is encouraged that Kent County is identifying the barriers that impact housing affordability. The DSHA supports the following implementation strategies:

- Identify regulatory barriers to affordable housing and amend as needed. In addition, revising regulations relating to affordability and diversity of housing;
- Removing limitations for well-designed accessory dwelling units in both new construction and existing residential neighborhoods; and
- Adopting a rehabilitation building subcode to allow more flexibility in the rehabilitation for older buildings.

New Initiatives

DSHA strongly supports the following implementation strategies that encourage the creation of affordable housing.

- Accessory Dwelling Units (ADUs) can help increase the supply of affordable housing, without the necessity of local government expenditures or subsidies. ADUs make it possible for adult children to provide care and support to an elderly parent in a semi-independent living arrangement and can help older homeowners maintain their independence by providing additional income to offset property taxes and the cost of home maintenance and/or repair.
- Inclusionary Zoning (IZ) allows the development of affordable housing to become an integral part of other developments taking place in a community. Across the country, IZ programs are being adopted to help create more affordable housing. Generally speaking the two most powerful incentives are density bonuses and faster review/approval process.

- Diamond State CLT will ensure the long-term affordable homeownership opportunities and preserve that the units remain affordable in perpetuity.

In summary, the County has outlined excellent steps to preserve and maintain the existing housing, encourage infill and redevelopment, and create land use environments that encourage affordable housing opportunities. The DSHA encourages the County to fully implement this Plan to ensure that affordable housing opportunities for all income ranges become a reality. They are very excited about the 2008 Comprehensive Plan and offer DSHA as a resource to Kent County to help achieve their housing goals. Furthermore, they would welcome the opportunity to be a part of the committee, referenced in the last housing recommendation, that will advise and assist in implementing the Plan's housing recommendations.

If you have questions or would like to meet to discuss specific housing issues, please do not hesitate to contact Victoria L. Powers at 739-4263, ext. 219, or via e-mail at vicky@destatehousing.com. Thank you.

Department of Education – Contact: John Marinucci 735-4055

1. 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.
2. 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.

3. 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.
4. 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.
5. The DOE offers its support to assist and participate by coordinating with this municipality, 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.
6. The DOE congratulates Kent County and appreciates its consideration of potential future school sites in its Comprehensive planning. The potential future school sites identified on map 4-1 of the draft Comprehensive Plan are generally aligned with student population growth projections developed by the DOE. The DOE offers the following specific suggestions regarding the identification of potential future school sites:
 - Recommend the County discontinue the use “flag markers” as site identifiers and consider the use of bubbles or polygon shapes to eliminate potential confusion created by expectations of preference to specific parcels. Flags indicate a specific parcel, however bubbles or polygons indicate general areas.
 - Recommend the County discontinue the identification of specific school types. Map 4-1 indicates several elementary school and high school potential locations, but no potential middle school sites. To eliminate confusion, recommend that polygons or bubbles only identify a potential future school site without reference to grade levels.
7. The identification of potential future school sites by the County in its Comprehensive planning does not commit the DOE or local school districts to specific locations for future school site planning. Further, all land acquisition for school construction purposes shall be in accordance with 29 Del C. § 7525, and approved through the State’s PLUS process.

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 plan. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in black ink that reads "Constance C. Holland". The signature is written in a cursive style with a large initial 'C'.

Constance C. Holland, AICP
Director