



**STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF STATE PLANNING COORDINATION**

November 18, 2010

Jamie Smith  
Town of Laurel  
201 Mechanic Street  
Laurel, DE 19956

**RE: PLUS 2010-10-04; Town of Laurel Comprehensive Plan**

Dear Ms. Smith:

Thank you for meeting with State agency planners on October 27, 2010 to discuss the proposed Town of Laurel draft comprehensive plan update.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting.

***Certification Comments:*** These comments must be addressed in order for our office to consider the plan amendment consistent with the terms of your certification and the requirements of Title 22, § 702 of the Del. Code.

- The Office of State Planning Coordination recognizes that at the time the proposed draft was under development, this office was revising the Strategies for State Policy and Spending and that a draft Strategies map was not included. This office would ask that a newly adopted Strategies map be included now that the State process is complete.
- There are several inconsistencies with the future land use maps for both those parcel within Town and those proposed for annexation. Please review these maps and correct these errors so these maps accurately reflect the Town's desired vision for these parcels.
- Please review and if necessary strengthen the section that describes the future land uses for lands intended to be annexed to make certain these accurately reflect the Town's vision.
- The Town should review and strengthen the environmental section to expand the discussion around the proposed Chesapeake Bay TMDL requirements.

- As stated by other PLUS reviewers, the document needs to be thoroughly reviewed for corrections, edits, etc. to lessen confusion and again to ensure the Town's vision is accurately reflected.

***Recommendations:*** Our office strongly recommends that the Town consider these recommendations from the various State agencies as you review your plan for final approval.

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

The Office of State Planning Coordination wishes to commend the Town and its staff for all the hard work it has put into this plan update. The work necessary to re-work the document from the current 2004 version to what was presented at the PLUS meeting was a monumental task and again you should be commended. I look forward to assisting the community with those items identified as certification issues and I would ask that you consider the recommendations presented in this report as additional means to further strengthen the document.

**State Historic Preservation Office (SHPO) – Contact: Terrence Burns 739-5685**

- The State Historic Preservation Office (SHPO) reviewed the 2010 Laurel comprehensive plan. It has a detailed and extensive history section and discusses the Laurel Historic District. They strongly encourage the goal to establish an Overlay District for the historic district that would incorporate the Secretary of the Interior's Standards in the Town's site plan review process. The plan makes a strong statement about the value of its historic housing stock as "its single greatest asset for the future" and encourages reinvestment in these areas. The Town may want to mention the existence of federal and state tax credits for rehabilitation of National Register-listed historic buildings to the Secretary's Standards, which can assist with affordability of such projects. Our staff will be happy to assist property owners in understanding and accessing these programs. The plan also encourages throughout compatible design and scale with its historic areas, including in redevelopment activities, Community Design standards, expansion of pedestrian and bicycle paths, and redevelopment of recreational areas. The SHPO supports these endeavors and would be happy to provide any technical advice needed.
- The SHPO would like to correct one misunderstanding in the plan, about the federal Section 106 process (see p. 33 and 40). The Section 106 process is triggered by Federal involvement in a project, through funding or permits, and not by the presence of a historic district. Any historic properties eligible for, not just listed in, the National Register of Historic Places are considered in the review. In fact, having an established historic district can significantly shorten the review, because the historic properties are already identified and evaluated, and those stages can be skipped in that area. The State does not have an analogous review process for state projects without any federal funds or permits.

- Although the state agency involved may ask for the State Historic Preservation Office (SHPO) opinion, it is not required to do so. Listing in the National Register does allow a property owner to use federal and state tax credits in rehabilitating that property. Such credits are transferrable, so even non-profits can benefit from rehabilitating their properties. Expanding Laurel's historic district could benefit more property owners in the town. The SHPO would be happy to work with the Laurel Historical Society or others interested in nominating properties or districts in and around Laurel, but the SHPO does not currently have the staff to produce National Register nominations in-house. If you have any questions or would to discuss these issues further, please contact Alice Guerrant at 302-736-7412.

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

- On page 9, in the last paragraph, the Plan says that it addresses the Greater Laurel Area and then defines that area as “the area included within a two and one-half mile radius around the crossing of Central Avenue and Broad Creek.” DelDOT recommends that the Town revisit this definition. Recent annexations have placed the northern limits of the town outside that radius, while at the same time, the southern, eastern and western limits are well within a two-mile radius. Whether it is better to expand the radius, to shift the center point farther north, or to abandon the radial approach to defining the area, is the Town's prerogative, but the definition of the area needs to be updated.

DelDOT has categorized this item as a suggestion because the Town did not strictly adhere to the defined area in developing the Plan and did, in fact, prepare a plan that addresses the entire incorporated area.

- In several places, beginning on page 10, Trap Pond is referred to as “Trappe Pond.”
- On page 23, the last sentence of Section 3.0, US Route 13 is described as being “less than a mile to the east of the Town.” Recent annexations, mentioned above, have added significant amounts of acreage east of Route 13. To be factually correct, the sentence just quoted should be changed to reflect that Route 13 is on the east side of Town, rather than beyond the Town limits. However, as lands abutting the west side of Route 13 have been within the Town limits for some time, we recommend that the Town expand this section, to address the Town's growth into this area.
- On page 24, DelDOT recommends that the Section 5.0, on Public Participation, be expanded slightly, to say how many written questionnaires were sent out. If Laurel has about 2,000 households, then 61 responses is about three percent. That is a reasonably good response rate, but readers of the Plan should be able to see what that rate was. The plan mentions that the results were tabulated. Consideration should be given to including the questionnaire and the tabulated results as an appendix to the plan. Similarly, if possible, the Plan should mention how many people attended the 2010 Public

Community Meeting and how many people commented on the Plan. Such information can be useful in addressing future concerns regarding the Plan adoption process.

- The Existing Land Use map on page 81 actually appears to be an Existing Zoning map. Given the recent annexations mentioned above, DelDOT recommends that it be supplemented with a map showing current land uses. For example, the wedge of land between US Route 13 and Discount Land Road is shown on page 81 as a Town Center Use district, but presently it is undeveloped. Having separate land use and zoning maps tells the reader more about the current state of the Town and highlights the difference between what is permitted and what presently exists.
- The maps used in the Plan are appropriately scaled to include the whole town on a single page. However, most detailed discussion of locations in the town focus on the historic town center. DelDOT recommends that a larger-scale inset of the downtown area be provided just below the legend box on some or all of the maps. It would also be helpful to improve the size and resolution of the street names on the current maps.
- On page 34, there is mention of working with DelDOT to develop proposed “gateway parks” at various entrances to the Town. To the extent that State funding is desired, such projects would seem to be an appropriate use of Transportation Enhancement (TE) funds. If the Town would be interested in applying for such funds, they may contact the manager of the DelDOT TE program, Mr. Jeff Niezgoda, at (302) 760-2178. TE funds could also be used to assist with the bike paths and multi-use trails mentioned at the top of page 39.
- On page 37, there are references to two types of land use areas, Residential / Commercial and Commercial / Industrial, being shown on Potential Growth and Annexation Maps. In fact, they are shown on a single untitled map on page 84. DelDOT recommends that the map on page 84 be titled and that that title be cited on page 37.
- On page 38, there is mention of expanding “the Planning & Zoning Commission to allow for greater comment on design to assist in reviewing of future development plans.” The review of designs for individual properties is somewhat different from broader planning concerns such as comprehensive planning and zoning. DelDOT suggests that the Plan should provide for the option of creating a separate Design Review Committee.
- Again on page 38, there is a reference to the Town’s “Gateways” being identified on a Framework for Future Land Use Map. This map is not included in the Plan. How is one to know where the Gateways are?
- On page 39, the Plan recommends new street tree and flower plantings along Business Route 13. DelDOT asks that the Town work with our Roadside Environmental Administrator, Mr. Eugene “Chip” Rosan in the selection of plant materials and location of plantings. Mr. Rosan may be reached at (302) 760-2185.

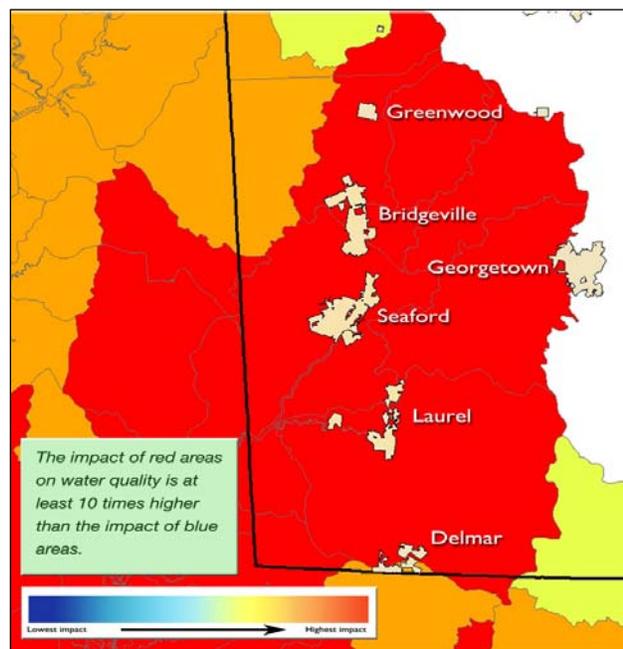
- On page 41, in discussing economic development, the “Town commits itself to directing development to existing close-in areas with adequate public facilities and services.” We would like to commend the Town for this commitment, which is so thoroughly consistent with the *Strategies for State Policies and Spending* and sound planning in general.
- On page 42, and again on the subject of economic development, there is a discussion of development and redevelopment in the Route 13 corridor. We support economic development and ask that the Town work with us closely, and early, on the issue of access. In planning for the corridor, key contacts will be Mr. Charles Altevogt, who manages the DelDOT Corridor Capacity Preservation Program, and Mr. Leonard Massotti, who manages development plan reviews in Sussex County. Regarding specific entrance applications, the Town should contact Mr. Derek Sapp, who reviews such applications in western Sussex County. Mr. Altevogt, Mr. Massotti and Mr. Sapp may be reached at (302) 760-2124, (302) 760-2151 and (302) 760-4803, respectively.
- On page 43, there is a table comparing Existing 2002 and Forecast 2005, 2015 and 2025 Annual Average Daily Traffic volumes on arterial and collector roads in the Laurel area, DelDOT has four comments regarding this table:
  - The Table should be updated to reflect 2009 existing volumes and current forecast volumes for three future years.
  - The generally accepted meaning of AADT is Annual Average Daily Traffic.
  - It would help the reader to add a measure of capacity, such as the maximum volume each road segment can accommodate at Level of Service D, to put the volumes in perspective.
  - As necessary, Mr. Michael DuRoss, a Planning Supervisor in our Statewide and Regional Planning Section, can help the Town with the preparation of a revised table. Mr. DuRoss may be reached at (302) 760-2110.
- On page 44, there is a list of four intersections which, according to the Plan, the Town recommends for future safety improvements. These intersections are mentioned again on page 45 in the discussion of the Corridor Capacity Preservation Program. Between 2005 and 2008, DelDOT made safety improvements at all four intersections. Some further improvements are planned for the west side of the Route 9 intersection as part of the access needed for the new Rite Aid and Royal Farms stores. Does the Town want further improvements at these locations, or are these references just left over from the previous Plan?
- Incidentally, where the Plan mentions “Delaware Route 9” on page 44, it should say “US Route 9.”

- On page 46, there is a statement that begins “When the airport is annexed into the Town of Laurel, the Town will adopt the Airport Overlay District (AOD) as adopted by Sussex County...” DelDOT has two comments regarding this statement:
  - Sections 115-144 through 115-155 in the Sussex County Code refer to an Airport Hazard Zoning District. If this is what is meant by the AOD, it would be clearer to use that term.
  - Because this sort of district normally extends well beyond the limits of the subject airport, it would be prudent to establish the theoretical limits of the district before the Town annexes any land to which it should apply. DelDOT reminds the Town that the purpose of such districts is as much for the protection of the land owners around the airport as it is to protect the airport.

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

**Laurel’s Critical Location in the Chesapeake Watershed**

With the imminent Chesapeake TMDL and scrutiny from the US Environmental Protection Agency, DNREC believes it is important for Laurel to add a specific section (perhaps in or near the Strategy section) on its critical location in the Chesapeake watershed, the challenges the town faces with respect to wastewater treatment, and the plan implementation steps it is considering that will address water quality. Many of those steps are outlined in your proposed plan – e.g., a tree canopy ordinance, riparian buffers, land conservation, and limiting floodplain development. Additionally, DNREC



recommends considering limitations on impervious cover, protection of natural areas and habitat, wetlands protections, carefully defining open space, and avoiding development on poorly drained soils.

Laurel and its neighboring towns are in a section of the Chesapeake watershed that is considered a highly “effective” contributor of pollutants to the Bay and its waterways. Sandy soils, flat topography, proximity to the main stem of the Bay, ditching and other agricultural practices contribute to this effectiveness. Such characteristics also mean that efforts to improve water

quality in areas such as Laurel will have a quicker, more dramatic impact on the entire watershed.

Relatively higher density development within a municipality that is served by central sewer is preferable to low-density, large-lot development on individual septic systems for many reasons – but especially for the benefit to water quality. Per household, the pollutant load from new development on well and septic is almost five times as much as new loads from sewered areas. DNREC has and will support Laurel’s efforts to grow in this manner because such growth will have a quantifiable effect on water quality.

DNREC offers several comments and suggestions to improve conservation and protection of the Town’s resources. While the cumulative impact of various program suggestions and concerns may sound negative, the intent is to improve the plan elements related to environmental protection, open space, recreation and water quality and supply. DNREC would welcome the opportunity to meet with the Town in a collaborative manner to discuss these recommendations and possible future ordinances.

### **Recommendations for Comprehensive Plan Revisions**

#### **Soil Conditions, Hydrology & Topography, Page 50:**

- *Recommendation:* Please revise the soils information in the narrative using the revised soil survey update. The soil survey update is available via web (Web Soil Survey) at the following web link: <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>

#### **Total Maximum Daily Loads (TMDLs), Page 56:**

- *Recommendation:* Please replace the existing narrative in the third paragraph under the heading of *The Broad Creek, Nanticoke and Chesapeake Bay 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 (e.g., swimming, fishing, drinking water, and shellfish harvesting). A TMDL defines the amount a given pollutant (i.e., or the pollutant loading rate reduction for a given pollutant) that may be discharged to a water body from all point, nonpoint, and natural background sources; thus enabling that water body to meet or attain all applicable narrative and numerical water quality criterion (e.g., nutrient/bacteria concentrations, dissolved oxygen, and temperature) specified in the State of Delaware’s Water Quality Standards. A TMDL may also 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 that pollutant without adverse impact. The Town of Laurel is located within the greater Chesapeake drainage, specifically within the Broad Creek and

Nanticoke watersheds. The Broad Creek and Nanticoke watersheds have been assigned specific nutrient (nitrogen and phosphorus) and bacterial TMDL load reductions requirements (See table 1).

<b>Chesapeake Bay Drainage</b>	<b>N</b>	<b>P</b>	<b>Bacteria</b>
Broad Creek & Nanticoke watersheds	30%	50%	2%

Table 1: TMDL reduction requirements for the Broad Creek and Nanticoke watersheds

The realization of these TMDL pollutant load reductions will be through completion of an EPA required Watershed Implementation Plan (WIP). Under EPA guidance, the State of Delaware is charged with developing a WIP and 2-year progress milestones that accelerate efforts to improve and restore waters of the Chesapeake Bay. The WIP and milestones will identify specific pollution reduction programs and practices necessary for ensuring compliance with the obligatory TMDL nutrient and sediment pollutant reduction requirements. Development of the WIP will be through an Interagency Workgroup comprised of representatives from DNREC, the Department of Agriculture, DeIDOT, Office of State Planning Coordination, and other local, state, and federal partners and stakeholder groups. Delaware's Draft Phase 1 WIP is currently available for review at: [http://www.wr.dnrec.delaware.gov/Information/Pages/Chesapeake\\_WIP.aspx](http://www.wr.dnrec.delaware.gov/Information/Pages/Chesapeake_WIP.aspx).

The Final Phase I WIP will be provided to EPA by November 29, 2010, so that they may finalize the Chesapeake basin-wide TMDL by December 31, 2010. More detailed actions and strategies will be produced in the Phase 2 WIP, which will be completed in 2011. DNREC and the Chesapeake Interagency Workgroup are eager to work with local governments to gather their input into this plan and determine a path forward for the most effective and efficient implementation of the WIP.

Thus a WIP will be a regulatory directive requiring all jurisdictions develop and identify what specific actions (e.g., best management practices) are necessary for reducing pollutants (e.g., nutrients and bacteria) loads in each water body or watershed within the greater Chesapeake Bay drainage; thus achieving the pollutant loading limits specified by the water quality criterion in the State's water quality standards – and, ultimately leading to the restoration of all beneficial use(s) designated for all of the drainage's water body's or watersheds.

#### **Stormwater Management and Drainage in Annexation Areas:**

- *Recommendation:* The Drainage and Stormwater Section recommends dividing the future annexation areas into sub watershed planning areas. By utilizing the natural drainage pattern, the Town may be able to combine habitat protection, recreation, and storm water management. The Town would need to partner with Sussex County as the watersheds extend out of the potential expansion area identified by the Town.

### **Delaware Land and Water Conservation Trust Fund (DTF).**

The Division of Parks and Recreation provides matching grants assistance through the Delaware Land and Water Conservation Trust Fund (DTF) to local governments for 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 parks in Laurel have received funding through the DTF Program:

Market Street Square Park- Along Market Street between Central Avenue and Delaware Avenue

Big Mills Run Park- 7<sup>th</sup> and Green Avenue

Harvey Williams Tract- 7<sup>th</sup> and Webb Street

Laurel River Park

Laurel/Broad Creek Greenway

- *Recommendation:* It is recommended that the Town of Laurel show these parks as protected on the 'Existing Land Use' and 'Planned Future Land Use' maps. To clarify the protection of these parks, it is recommended that Laurel develop a 'Park/Open Space' or 'Protected' land use zoning designation for these parcels. For more information on the Delaware Land and Water Conservation Trust Fund, please contact: Robert Ehemann @ 302.739.9235.

### **Natural Areas.**

The Town of Laurel lies between two Natural Areas; the James Branch and the Nanticoke River. The short term planned growth will incorporate the Nanticoke River Natural Area and the long term planned growth plan incorporates the James Branch Natural Area.

- *Recommendation:* Both Natural Areas should be identified in the Comprehensive Plan and the Town of Laurel should address how it plans to protect the forest, wetland and floodplain resources within said Natural Areas. Requiring wetland buffers, no development in floodplains, and limitations on forest removal would go far in protecting the Natural Areas proposed for future incorporation in the Town of Laurel.

### **State-owned Ponds**

Horsey Pond and Records Pond are both public ponds, owned by the State and managed by the Division of Fish and Wildlife. The State is concerned that the water quality and fish habitats in the ponds might be negatively affected by development activities, or by permanent land use changes, on properties that border the ponds or on properties that contribute run-off into the tributaries that empty into the pond(s). Both of these ponds support plant and animal species of conservation concern. They also have a history of aquatic vegetation problems that have required funding and staff time to address.

- *Recommendation:* Adequate riparian buffers, discouragement of large numbers of geese, vegetated buffer strips along the ponds, and nonpoint-source pollution reduction devices are important for protecting the water quality of these ponds.

In addition, shoreline residents should be encouraged not to introduce non-native plants and animals into these public waters. For example, 5 acres of Records Pond had to be treated with aquatic herbicide to eliminate water hyacinth which occurred in over 74 sites in the pond. This plant does not naturally occur in Delaware. Non-native plants tend to overgrow and become a nuisance to boat operators and anglers and out-compete native plant species, some of which are rare in the state. Animal species that have evolved with native plant species are sometimes unable to adapt to these non-native plants. These ponds are heavily utilized by anglers with most recent angler data indicating that Horsey Pond supported nearly 4,000 angler trips and Records Pond nearly 6,000. Maintaining or improving water quality will be important for ensuring the continued use of these ponds for recreation.

Also of concern are several other State-owned ponds (Trap, Trussum, and Chipman Ponds), that occur outside Town boundaries but could be impacted by land-use practices that occur upstream or that contribute run-off into the stream systems that empty into these ponds.

### **Community Forest Canopy Project (pages 57-62)**

The Town recognizes the value of trees and woodlands with this project and it will be essential to have a mechanism in place in which to implement these goals and strategies.

- *Recommendation:* The Town should plan to incorporate this concept into future growth areas which also have forest blocks in need of protection.

### **Waterfront Development**

Waterfront development should balance the needs of the Town with habitat preservation and water quality protection. As described in the plan, residents expressed a desire for the area around Broad Creek to be protected as natural open space. Undeveloped, upland buffers along the water are important not only for water quality protection but also for providing habitat for wildlife. Activities on one segment of stream can also impact downstream water quality and this should be recognized in any waterfront planning effort.

Broad Creek supports several migratory fish species of conservation concern. The Nanticoke/Broad Creek complex is also the most heavily fished stream in Delaware by licensed anglers and is heavily utilized by both resident and non-resident anglers. Cumulative impacts from waterfront development should be considered in planning. Removal of trees along the shoreline can reduce the effects of shading which is important for maintaining water temperatures conducive to spawning, alteration of shoreline habitat can affect the distribution of

benthic and macro-invertebrates which serve as the forage base for many fish species, and replacing natural habitat with man-made materials (i.e. bulkheads, rip-rap, docks/piers) along the shoreline can directly impact important nursery habitat.

There are bald cypress (*Taxodium distichum*) communities along Broad Creek within town as well as areas designated for future growth. This unique wetland community is especially important in terms of defining Delaware's natural heritage as it is a southern species at the extreme northern limit of its range. It is important to preserve species that are at the edge of their range because they are adapted to living in a different environment than those in the center. This helps maintain the genetic diversity of the species.

- *Recommendation:* Bald cypress communities should be protected with at least a 100-foot (preferably 300 feet) undeveloped upland buffer.

### **Recommendations for Ordinances and Plan Implementation**

#### **Rare, Threatened and Endangered Species and Species of Greatest Conservation Need (SGCN)**

The ecological importance of the Nanticoke watershed in supporting a diverse assemblage of species of conservation concern is recognized in the plan. Most of the areas within current town boundaries and designated as future development have **not** been surveyed for the presence of species of conservation concern. There are numerous rare, threatened and endangered species and Species of Greatest Conservation Need<sup>1</sup> (SGCN) associated with Broad Creek, its tributaries and riparian buffer areas. There are also two Bald Eagle nests in proximity to Horsey Pond that are within areas designated for future growth.

Because many species of concern (and wildlife in general) are associated with forest and wetland areas, these types of habitat should be a priority for preservation in areas being considered for current or future development. Some of these habitats are mapped as Key Wildlife Habitat (KWH) in the Delaware Wildlife Action Plan<sup>2</sup> (DEWAP). KWH can support the full array of species across the landscape and the maps in DEWAP show areas of the state where conservation efforts can be focused. Although designation as KWH is non-regulatory, these maps are intended to help guide site-specific conservation planning efforts.

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<sup>1</sup> Species of greatest conservation need (SGCN) are indicative of the overall diversity and health of the State's wildlife resources. Some may be rare or declining, others may be vital components of certain habitats, and still others may have a significant portion of their population in Delaware. SGCN are identified in the Delaware Wildlife Action Plan (DEWAP).

<sup>2</sup> The Delaware Wildlife Action Plan (DEWAP) is a comprehensive strategy for conserving the full array of native wildlife and habitats-common and uncommon- as vital components of the state's natural resources. This document can be viewed via our program website at <http://www.fw.delaware.gov/dwap/Pages/default.aspx> This document also contains a list of species of greatest conservation need, Key Wildlife Habitat maps, and species-habitat associations.

- *Recommendation:* The Town should consider requiring applicants of development projects to contact the Natural Heritage and Endangered Species Program to determine if their project activities will impact species of conservation concern. In some cases a site visit may be requested in order to provide the necessary information. The Town should then carefully consider implementation of those recommendations prior to approval of site plans.

## **Open Space**

DNREC notes that it might be helpful to have a consistent definition of “open space” in your comprehensive plan and/or Town ordinances. In a guidance document that DNREC is developing for the PLUS and other local technical review processes, we have defined open space as: those areas with public value in a predominantly natural state and undeveloped condition. Such areas may contain, but are not limited to, wildlife and native plant habitat, forest, farmland, meadows, wetlands, floodplains, shorelines, stream corridors, steep slopes, and other areas that have species or habitats of conservation concern.

Open Space may be preserved, enhanced and restored in order to maintain or improve the natural, ecological, hydrological, or geological values. An important design element to consider when incorporating Open Space in a development is to take maximum advantage of adjoining Open Space areas. This will advance the goal of an interconnected network of habitat corridors for wildlife and provide for future potential linkages.

### **Open Space is not:**

- impervious surfaces (e.g., roads, parking lots, sidewalks, buildings)
- swimming pools or ponds that are lined or contain an impervious substrate
- stormwater management structures
- wastewater treatment systems

### **Types of Recreational Open Space:**

*Passive*-Passive recreation areas include only low-impact activities having little or no disturbance on natural features.

*Active*-Active recreation areas (e.g., ball fields, playgrounds) should be placed only in Open Space areas that do not already contain natural habitat.

### **Wetlands Delineations:**

- *Recommendation:* Require all applicants to submit to the Town 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.

- *Recommendation:* Include wetlands setbacks as part of the ordinances to protect environmental resources. Wetlands should be protected and setbacks, of un-subdivided open space, surround them. No portion of any building lot should be within the setback. During prolonged wet periods, the area within the wetland setback 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 setback thereby reducing nuisance drainage complaints.

### **Freshwater Wetlands Protections:**

- *Recommendation:* Implement regulations to protect freshwater wetlands where regulatory gaps exist (i.e., isolated wetlands and headwater wetlands).

### **100 Foot Upland Buffer**

Based on a review of existing buffer research by Castelle et al. (Castelle, A. J., A. W. Johnson and C. Conolly. 1994. *Wetland and Stream Buffer Requirements – A Review*. J. Environ. Qual. 23: 878-882.), an adequately-sized buffer that effectively protects water quality in wetlands and streams, in most circumstances, is about 100 feet in width. In recognition of this research and the need to protect water quality, the Watershed Assessment Section recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from all water bodies (including ditches) and wetlands.

- *Recommendation:* Require a 100-foot upland buffer width from all delineated wetlands (approved by the USACE and DNREC) or water bodies (including ditches).

### **Total Maximum Daily Loads (TMDLs)**

All open space land uses should be designed and managed in a manner that mitigates or reduces nutrient pollutant loading and its damaging impacts to water quality. Since changes in land use often increase runoff of nutrient pollutants into nearby waterways (including wetlands) draining to a common watershed, these nutrient pollutant loading impacts should be assessed at the preliminary project design phase. To this end, the Watershed Assessment Section has developed a methodology known as the “Nutrient Load Assessment Protocol” to assess such impacts. The protocol, which is currently being updated to be more accurate and user-friendly, is a tool used to assess changes in nutrient loading that result from the conversion of individual or combined land parcels to a different land use(s), and serves as a “benchmark indicator” of that project’s likely impacts to water quality. It is the intention of this protocol to inform those relevant governmental entities (i.e., State, county, and municipal) how a given project will affect water

quality in their jurisdictions, while informing/encouraging developers of the need to incorporate better conservation practices (i.e., BMPs) in their project designs to help improve water quality.

- *Recommendation:* Require completion of a Nutrient Budget protocol before granting preliminary approval for any proposed projects/developments.
- *Recommendation:* Require the applicant use any combination of approved Best Management Practices (BMPs) to meet the required TMDLs for the affected watershed(s) in question, so as to reduce or mitigate nutrient loading impacts on water quality.

### **Impervious Surface Mitigation Plan**

- *Recommendation:* Require the calculation for surface imperviousness (for both commercial and residential development) take in to account all constructed forms of surface imperviousness - including all paved surfaces (roads, parking lots, and sidewalks), rooftops, and open-water storm water management structures.
- *Recommendation:* To encourage compact development and redevelopment in the Town's central business area, require an impervious surface mitigation plan for all residential and commercial developments exceeding 20% imperviousness outside that area, or at least in excellent recharge areas outside that area. 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, surface water hydrology will occur, the plan should then demonstrate how these impacts will be mitigated. If the impacts cannot be mitigated, the site plan should then be modified to reduce the impacts from impervious cover.

### **Poorly Drained (Hydric) Soils**

- *Recommendation:* Prohibit development in poorly or very poorly-drained (hydric) soil mapping units. Building in such areas predictably leads to flooding and drainage concerns from homeowners, as well as significant expense for them and, often, taxpayers. Proof or evidence of hydric soil mapping units should be provided through the submission of the most recent NRCS soil survey mapping of the parcel, or through the submission of a field soil survey of the parcel by a licensed soil scientist.

### **Green Technology Stormwater Management**

- *Recommendation:* Require the applicant to use "green-technology" storm water management in lieu of "open-water" storm water management ponds whenever practicable.

### **Stormwater Utility**

- *Recommendation:* Explore the feasibility of a stormwater utility to fund upgrades to existing stormwater infrastructure. Upgrades to the stormwater system may reduce pollutant loads and help reach the established total maximum daily load for nitrogen, phosphorus, and bacteria. Reach out to the New Castle Conservation District, New Castle County, Kent County, Kent Conservation District and the Delaware Clean Water Advisory Council as partners in funding stormwater retrofits.

### **Drainage Easements**

- *Recommendation:* The Town should pursue drainage easements along waterways and storm drains where currently there is none.

### **Tax Ditches**

There are currently three Tax Ditch Organizations within the Town boundary or mapped growth area (Holly Branch Ditch Tax Ditch, Mirey Branch Tax Ditch, and Mt. Zion Tax Ditch). During rain events the Town and surrounding areas rely on the conveyance of stormwater through these tax ditches (Page 50, Natural Environment). The Drainage and Stormwater Section recommends addressing the following items within the comprehensive plan and/or within a land development code.

- *Recommendation:* Existing tax ditch rights-of-way should be protected from development encroachment to allow for routine maintenance and periodic reconstruction. Routine maintenance primarily consists of mowing ditch bank vegetation and the removal of small blockages. Periodic tax ditch reconstruction involves the removal of sediment from the ditch bottom to reestablish the original design grade. The removed sediment, referred to as spoil, is typically disposed of by spreading within the tax ditch right-of-way. The placement of permanent obstructions within tax ditch rights-of-way is prohibited. Any change to the location of the tax ditch, or the existing tax ditch rights-of-way, will require a change to the tax ditch court order.
- *Recommendation:* The Drainage Program recommends each parcel have a tax ditch right-of-way review conducted on the parcel prior to annexation by the Town. Please contact our Georgetown office at (302) 855-1930 to request a review tax ditch rights-of-way on a parcel. When a development project involves a tax ditch, or tax ditch right-of-way, include the Drainage Program in the pre-application meeting with the Sussex Conservation District to discuss drainage, stormwater management, tax ditch maintenance, and the release of stormwater into the tax ditch.

## **Stormwater Management, Overall**

The Drainage and Stormwater Section would like the Town to consider the following, to the extent that Town ordinances do not already do so. Please be advised that the Sediment and Stormwater Program is currently revising the Delaware sediment and stormwater regulations. It is unclear at this time when the new regulations will be promulgated.

- The Division of Watershed Stewardship is requesting that the Town incorporate a requirement for a stormwater and drainage review in the Town's pre-approval requirements for new development requests. Proposed development projects should hold a project application meeting with the delegated agency, the Sussex Conservation District, to discuss stormwater and drainage prior to the town reviewing and/or approving plans or issuing building permits. The Sediment and Stormwater Program is set to begin requiring a project application meeting for all proposed land disturbing activities that require a detailed Sediment & Stormwater Plan within the coming year. These meetings are structured to assist developers in the design process and for early notification of approval requirements. In order to schedule a project application meeting, the applicant must forward a completed Stormwater Assessment Report (SAR) to the appropriate Delegated Agency. Please contact Elaine Webb with the DNREC Sediment and Stormwater Program if you have any questions regarding this new process. Please note that this process does not replace the State's PLUS process. The Stormwater Assessment Report will also be provided through that process.
- As the Town of Laurel updates any land use or subdivision codes, the Sediment and Stormwater Program requests that the Town make a note of the Sediment and Stormwater requirements on any construction-related project application checklists, etc.
- Lines and grades: If the Town does not have a lines and grades requirements for new construction, the Division recommends this be considered to help resolve drainage issues arising from new construction, during and post-construction. County/municipal building inspectors would be able to use approved lines and grades requirement to field-verify prior to issuance of Certificate of Occupancy or building permit, as appropriate.
- Consider adding upgrades to stormwater infrastructure when developing a Capital Improvements Program.
- Consider addressing stormwater when developing an adequate public facilities ordinance. Ensure adequate stormwater outlets, easements, and infrastructure is available at time of subdivision.
- Evaluate the existing drainage patterns within the future annexation area to ensure adequate drainage for the cumulative stormwater impact upon full build out of the annexation area. The Town should be mindful of potential stormwater impacts from the Town onto county residents.

## **Redevelopment of Brownfield Sites**

DNREC's Site Investigation and Restoration Branch (SIRB) encourages the development of Brownfields and can provide assistance when investigating and remediating Brownfield sites.

- *Recommendation:* If any future development occurs on sites with previous manufacturing, industrial, or agricultural use, SIRB recommends that a Phase I Environmental Site Assessment be conducted prior to development, due to the potential for a release of hazardous substances. If a release or imminent threat of a release of hazardous substances is discovered during the course of future development (e.g., contaminated water or soil); construction activities should be discontinued immediately, and DNREC should be notified at the 24-hour emergency number (800-662-8802). In addition, SIRB should be contacted as soon as possible at 302-395-2600 for further instructions.

### **State Fire Marshal's Office – Contact: Duane Fox 856-5298**

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 be maintained between the Delaware State Fire Marshal's Office and the Town of Laurel. The State Fire Marshal's Office would be issuing approvals much like DelDOT and DNREC. This Agency's approvals are based on the Delaware State Fire Prevention Regulations only.

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans in accordance with the Delaware State Fire Prevention Regulation.

### **Department of Agriculture - Contact: Scott Blaier 739-4811**

The Department would like to congratulate the town on a well conceived and written comprehensive plan update. The Department is encouraged to see the town's plan include supporting agricultural business (page 40) and a farmer's market on the bank of Broad Creek (page 42). The Department is also pleased to see that the town is working on its tree canopy (page 59), and would encourage it to continue to work with the department's Urban Forestry Section.

- Page 83 shows a map of the town's future growth area and boundary. There are several parcels in the southern portion of the expansion area slated for development in 10 to 20 years. These parcels are currently enrolled in the Delaware Agricultural Lands Preservation Program (parcels 432-8.00-107.00, 432-8.00-108.00, and 432-8.00-106.00). It is the understanding of the Department of Agriculture at this time is that the owner of these parcels intends to permanently preserve this land as agricultural land. Therefore, they ask that you remove the designation (color-coding) on your map suggesting these parcels will be developed in the next 10 to 20 years.

- The DDA also requests that the town modify the map's legend to indicate these properties are in the Delaware Agricultural Lands Preservation Program. The town can download a GIS layer with all the properties in the program at the link below. This list changes frequently, as parcels are added to the program.  
<http://66.173.241.168/dda/downloads.html>

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

- DSHA has no objections and supports this plan. The Housing Section provides a good analysis of Laurel's housing stock to identify relevant housing needs and issues of the town, and contains appropriate goals and objectives in response.
- DSHA offers technical assistance to the Town in implementing any of the recommendations outlined in the Plan.
- Additionally, DSHA has developed a website, **Affordable Housing Resource Center**, to learn about resources and tools to help create housing for households earning 100% of median income or below. Our website can be found at: [www.destatehousing.com](http://www.destatehousing.com) "Affordable Housing Resource Center" under our new initiatives.

### **Department of Education – Contact: John Marinucci 735-4055**

The Department of Education has no comments regarding the Draft Comprehensive Plan update under consideration.

### **Approval Procedures:**

1. *Once all edits, changes and corrections have been made to the plan, please submit the completed document (text and maps) to our office for review. **Your PLUS response letter should accompany this submission.** Also include documentation about the public review process. In addition, please include documentation that the plan has been sent to other jurisdictions for review and comment, and include any comments received and your response to them.*
2. *Our office will require a maximum of 20 working days to complete this review.*
  - a. *If our review determines that the revisions have adequately addressed all certification items, we will forward you a letter to this effect.*
  - b. *If there are outstanding items we will document them in a letter, and ask the town to resubmit the plan once the items are addressed. Once all items are addressed, we will send you the letter as described above.*

3. *Once you receive our letter stating that all certification items have been addressed, the Planning Commission and Council should adopt the plan pending State certification. We strongly recommend that your Council adopt the plan by ordinance. The ordinance should be written so that the plan will go into effect upon receipt of the certification letter from the Governor.*
4. *Send our office a copy of the adopted plan along with the ordinance (or other documentation) that formally adopts your plan. We will forward these materials to the Governor for his consideration.*
5. *At his discretion, the Governor will issue a certification letter to your City.*
6. *Once you receive your certification letter, please forward two (2) bound paper copies and one electronic copy of your plan to our office for our records.*

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

Sincerely,

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

Constance C. Holland, AICP  
Director, Office of State Planning Coordination