



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

December 23, 2015

Jamie Smith
Town of Laurel
201 Mechanic St.
Laurel, DE 19956

RE: PLUS review 2015-11-04; Town of Laurel Pre-update Review

Dear Jamie:

Thank you for meeting with State agency planners on November 25, 2015 to discuss the update of Laurel's comprehensive plan. State agencies have reviewed the documents submitted and have asked that the following be considered when you update your plan for certification.

Office of State Planning Coordination – Contact: Dorothy Morris 739-3090

Our office is pleased to have the opportunity to work with the Town of Laurel as you prepare to your certified comprehensive plan in 2016. The Town of Laurel currently certified plan is dated 2011 which puts you at the 5-year mark. At the 5-year mark the town is not required to update the plan; however, it is my understanding that the town is updating their plan at this time to incorporate the projects currently in progress within the town and to make the implementation section more strategically focused and actionable.

As reported by the town, there has been little implementation of the current plan due to the town's small staff and limited financial resources. With that said, the town has partnered with several agencies including the University of Delaware and the Department of Natural Resources to work on several key issues that are important to the town such as a 'mini-WIP' which includes strategies and actions for meeting water quality goals and a water-wastewater upgrade funded by USDA for a new water tower, a regional pump station, and the connection of 138 septic systems. In addition, the Office of State Planning has attended several meetings with the Town regarding the Ramble, which is a green infrastructure development along the Broad Creek.

We offer Kudos to the town for finding these funding partnerships which has enabled the town to begin these important environmental projects that are vital to the sustainability of the town.

Our office is looking forward to assisting the Town with the plan update process, so do not hesitate to contact Dorothy Morris if you have any questions or need information about who to contact in the various State agencies.

Below is a list of State agency comments relating to the update of your plan. These comments should provide a starting point to determine which agencies will require further coordination as you update your plan.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- In March of 2015, DelDOT updated its Development Coordination Manual (<http://www.deldot.gov/information/business/subdivisions/changes/index.shtml>). This update included expanded regulations (Sections 2.2.2.4 and 2.4) on Transportation Improvement Districts (TID). Briefly, creation of a TID is an alternative to requiring multiple Traffic Impact Studies (TIS) in an area where several land developments are proposed at the same time. If the Town wants to work with DelDOT to create a TID, it must include language to that effect in the Plan, along with a map indicating the general location of the proposed district.
- Page 41 of the Plan includes a figure titled “Existing and Forecast Average Annual Daily Traffic Count Data for Major Roads” and cites “DelDOT” as the source. If the Town wants to use a similar figure in the new Plan, we recommend removing the word “count” from the title as forecast traffic necessarily cannot be counted. Also, because DelDOT is a large organization, it might be helpful to readers to cite a more specific source. It appears that the counted volumes came from DelDOT’s 2009 Traffic Summary (now the Vehicle Volume Summary, http://www.deldot.gov/information/pubs_forms/manuals/traffic_counts/index.shtml) and the forecast volumes were provided by our Regional System Planning Section.
- Page 42 of the Plan includes a list of four intersections along US Route 13 where “Continued Safety Improvements” are needed. DelDOT improved all four of these intersections in 2008 as parts of Contract 22-124-06. Does the Town want more work done at these locations? If so, please elaborate on what concerns remain. Also, note that County Seat Highway is US Route 9.
- DelDOT recommends that Laurel adopt the Delmarva Freight Plan. Two freight corridors (Lewes and Coastal) run through Laurel. Any future transportation improvements would then be consistent with Laurel’s Comprehensive Plan and the freight plan. Further information on the freight plan is available from Mr. Joshua Thomas in DelDOT’s Regional System Planning Section. Mr. Thomas can be reached at (302) 760-4834.

- DelDOT recommends that Laurel describe and possibly adopt the Corridor Management Plan for the Nanticoke Heritage Byway. Transportation improvements within the byway limits must be consistent with this Plan. There is currently no mention of the byway in their Plan. More information on the Byway is available at http://www.deldot.gov/information/community_programs_and_services/byways/sussex.shtml#byways_page.
- DelDOT encourages Laurel to be actively involved in the Salisbury-Wicomico Metropolitan Planning Organization (MPO). The MPO is a resource to the town and could aid in the development of transportation strategies. More information is available at www.swmpo.org.

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

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 requests an opportunity to meet with the Town in a collaborative manner to discuss these recommendations and possible future ordinances.

DNREC notes and supports the Town's efforts to address the following issues in the Plan update:

1. The Chesapeake/Nanticoke TMDL and the "mini-WIP" (Watershed Implementation Plan)
2. The Ramble, a green infrastructure redevelopment plan along Broad Creek
3. The Town's stormwater retrofit project
4. The Town's water-wastewater upgrade
5. The new Phase II Municipal Separate Storm Sewer Systems (MS4) permit
6. Nature tourism and the Downtown Development District

Recommendations for Comprehensive Plan Revisions

Soils Assessment

- On page 48 of the current Plan, we suggest that the applicant reference the NRCS soil survey update rather than the outdated 1971 USDA Soil Survey of Sussex County. The updated soil survey information can also be retrieved from the web soil survey at the following web link: <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.

TMDLs

- Please replace the existing TMDL narrative on page 54 of the current Plan with this updated TMDL (including WIP) narrative:

In December 2008, the Total Maximum Daily Load reduction (TMDL) for nutrients (e.g., nitrogen & phosphorus) and bacteria was established for the Nanticoke River watershed. In 2009, a Pollution Control Strategy (PCS) was adopted to establish strategies that meet the TMDL nutrient load reductions. However, a subsequent EPA assessment of these TMDL reduction requirements and PCS deemed them “insufficiently protective enough” to meet the water quality goals and strategies in the Nanticoke PCS. Consequently, EPA developed a “more stringent” TMDL reduction requirement for nitrogen and phosphorus; this TMDL now requires a 60 percent reduction in nitrogen and phosphorus (previously was 30 and 50 percent for N & P) from baseline conditions. The TMDL reduction requirement for bacteria, however, remains unchanged and still requires a 2 percent reduction in bacteria from baseline conditions.

As part of the TMDL, each jurisdiction is required to develop a Watershed Implementation Plan (WIP) that details how load goals will be achieved and maintained into the future. The WIP identifies specific pollution reduction practices (i.e., BMPs) and programs to reduce nitrogen, phosphorus, and sediment from a variety of sources that discharge to waters in the greater Chesapeake Basin. Thus the WIP is an essential component for attainment of Delaware’s Water Quality Standards, ultimately leading to the restoration of a particular waterbody’s (or watersheds) designated beneficial use(s). The WIP is a multiphase process consisting of three phases. The first two phases have been completed, with the third phase scheduled for completion in 2017.

The WIP will include both regulatory and non-regulatory components. Additional information about the WIP can be obtained from the following website:
http://www.wr.dnrec.delaware.gov/Information/Pages/Chesapeake_WIP.aspx.

Flood Management

- Please ensure that the Plan maps reflect the new Flood Insurance Rate Maps (FIRMs) for the Town, which became effective on March 2, 2015.

Source Water Protection

1. The population data in the 2011 Draft Comprehensive Plan does not show the data from the 2010 Census.
2. “Section 14.0 Soil Conditions, Hydrology & Topography” does not contain text referring to hydrology or topography.

Recommendation: The contents of a section should contain text about the section title.

3. “Section 15.0 Water Facilities” is outdated and does not discuss the improvements the Town has made nor does it discuss the new supply wells and water storage the Town has in place.

Recommendation: This topic should be discussed in detail.

4. The Maps do not show wellhead protection areas (see below). An updated map is required by in 7 Del. C., §6082(f).
5. Though the last paragraph of Section 15.0 Water Facilities mentions the Town’s Source Water Protection Ordinance, it must be discussed in detail as described below.

The Comprehensive Plan for Municipalities Over 2,000 Population (as reported in the most recent decennial Census), must contain the following elements per the Memorandum of Understanding between the Office of State Planning and Division of Water, dated July 2011:

- Text of the comprehensive plan must include a description of source water requirements in 7 Del. C., §6082(b), and include goals and objectives related to the protection of the resource. This text shall be placed within the water and sewer element of the local government’s comprehensive plan, as prescribed by Title 9 or Title 22 of the Delaware Code.
- A map of source water resources (excellent recharge areas, wellhead protection areas) shall be included in the plan. This map must be derived from the most current source water protection datasets¹ provided by the Department of Natural Resources and Environmental Control (DNREC).
- The map and plan text must clearly include the note that the regulatory provisions of any source water ordinance will refer to the most current source water protection datasets¹.

¹ <http://www.nav.dnrec.delaware.gov/DEN3/DataDownload.aspx>

Stormwater Management.

- The State of Delaware has developed a National Pollutant Discharge Elimination System (NPDES) General Permit for storm water discharges from Small Municipal Separate Storm Sewer Systems (MS4s). This permit addresses the federal requirements under the Clean Water Act (CWA) to reduce polluted storm water runoff that is contributed by the MS4 and which ultimately discharges to local rivers and streams without treatment.

The permit is organized around the six minimum control measures– public education, public involvement, illicit discharge detection and elimination, construction, new

development, and good housekeeping. For the purposes of this permit, the public education and involvement requirements have been combined into one permit provision. To provide additional protection to the impaired waterbodies of Delaware, the permit also includes measures to involve the permittee in the industrial storm water permitting process and to more directly address the impairment status of those waterbodies to which their MS4 discharges.

The permittee must develop and implement a comprehensive storm water management program designed to control the quality of the storm water discharged from its MS4. The Storm Water Pollution Prevention and Management Program (SWPP&MP) shall contain measurable goals and shall describe the controls necessary to effectively prohibit the discharge into the MS4 of any materials other than storm water. The SWPP&MP must also outline measures that will reduce the discharge of pollutants from the MS4 and include a schedule for implementation.

Please contact Jennifer Roushey at Jennifer.Roushey@state.de.us or 302-739-9946 for additional information.

Preparing for a Changing Climate

- Sea level rise is one of several climate change impacts that can affect communities, the others being variable precipitation and increasing temperatures. Together, precipitation and accelerated sea level rise contribute to increased flooding. The Climate Framework for Delaware recommends that DNREC, through the Division of Energy and Climate, provide technical support to local governments, in coordination with the Office of State Planning Coordination (OSPC), to enhance focus on climate impacts (including the reduction of greenhouse gas emissions) and long-term sustainability (through adaptation and mitigation) in the comprehensive plan and in implementing ordinances. With that in mind, DNREC requests the opportunity to work with the Town and their consultants to develop language for the comprehensive plan that addresses climate change impacts, as well as adaptation and mitigation strategies for the Town to pursue through implementing ordinances.

Sea Level Rise

- Portions of Laurel and its surroundings will be subject to direct and permanent inundation from sea level rise (<http://www.dnrec.delaware.gov/Pages/SLRMaps.aspx>). Sea levels in Delaware have risen by about a foot over the past century (NOAA, 2014). This rate of sea level rise is likely to accelerate in the coming decades as a result of global climate change and local subsidence. Accelerated sea level rise will result in permanent flooding of low-lying coastal areas, increased risk of flood damage during storms and increased frequency of nuisance flooding (DNREC, 2012).

Recommendations:

1. The City should consider additional land use controls for the areas subject to 1.5 meters of sea level rise.

2. To reduce the costs of providing infrastructure the City should consider not permitting roads, sewer or water to be extended into areas subject to 1.5 meters of sea level rise.
3. The City should consider avoiding new structures within a mapped Sea Level Rise Area. Where such development cannot be avoided, new structures should be built with an additional 18 inches of freeboard to protect the health, safety and general welfare of people occupying and using the structures.
4. If you would like any additional information please contact Delaware Coastal Programs at (302) 739-9283.

References:

NOAA (National Oceanic and Atmospheric Administration). (2014). Mean Sea Level Trend, Lewes, DE. Retrieved from http://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8557380.

DNREC Delaware Coastal Programs. (2012). Preparing for Tomorrow's High Tide: Sea Level Rise Vulnerability Assessment for the State of Delaware. Dover, DE: Department of Natural Resources and Environmental Control. Retrieved from <http://de.gov/slrva>.

Natural Areas

- The Town of Laurel lies between two Natural Areas: the James Branch and the Nanticoke River. In the current Plan, portions of the short term planned growth plan incorporate portions of the Nanticoke River Natural Area and the James Branch Natural Area; the long term planned growth plan incorporates the James Branch Natural Area as well.

Recommendation: Both Natural Areas should be identified in the 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, prohibiting development in floodplains, and limiting forest removal would go far in protecting the Natural Areas proposed for future incorporation in the Town of Laurel.

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. Note that the Delmarva Fox Squirrel (*Sciurus niger cinereus*) is still listed as state-endangered, but has been recently removed from the Federal Endangered Species list. Additionally, the federally endangered Atlantic sturgeon (*Acipenser oxyrinchus*) has been documented in Broad Creek. As more life history information on their habitat use is determined, their presence may have permitting implications for projects proposed in Broad Creek and along its shoreline.

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 Need¹ (SGCN) associated with Broad Creek, its tributaries and riparian buffer areas.

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 Plan² (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.

Recommendation: The Town should consider requiring applicants of development projects to contact the Species Conservation and Research Program (known as the Natural Heritage and Endangered Species Program in 2010) 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.

Contact information:

c/o Environmental Review Coordinator
Species Conservation and Research Program
DNREC-Division of Fish and Wildlife
4876 Hay Point Landing Rd
Smyrna, DE 1997
(302) 735-8658
Kate.Fleming@state.de.us

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

¹ 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).

² 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.

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, discouraging 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.

Also of concern are several other State-owned ponds (Trap, Trussum, and Chipman Ponds), that are located 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 61-66).

- The Town continues to recognize 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 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, including the federally endangered Atlantic sturgeon (*Acipenser oxyrinchus*). 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. Moreover, dead trees and woody debris along the shoreline provide important habitat for many fish species and we would recommend leaving this habitat in place where possible.

There are bald cypress (*Taxodium distichum*) communities along Broad Creek within the 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 a 300-foot) undeveloped upland buffer.

Parks and Recreation

- In August of 2011, the Delaware Division of Parks and Recreation conducted a telephone survey of Delaware residents to gather information and trends on outdoor recreation patterns and preferences as well as other information on their landscape perception. These findings are the foundation of the 2013-2018 Statewide Comprehensive Outdoor Recreation Plan (SCORP) providing guidance for investments in needed outdoor recreation facilities and needs within county and municipal comprehensive plans. For the purpose of refining data and research findings, Delaware was divided into five planning regions. The Town of Laurel is located within SCORP Planning Region 4.

When looking at the findings from the 2011 telephone survey, it is apparent that Delawareans place a high importance on outdoor recreation. Statewide, 93% of Delaware residents indicated that outdoor recreation had some importance in their lives, while 67% said it was very important to them personally. These findings are very close to the results of the same question asked in the 2008 public opinion telephone survey, indicating a continued demand for outdoor recreation opportunities throughout the State.

Placing high importance on outdoor recreation resonates throughout the five SCORP regions. In Region 4 (Western Sussex County), 66% said it was very important to them personally.

Outdoor Recreation Needs/Priorities

Based on the public opinion survey, the most needed outdoor recreation facilities in Laurel include:

High facility needs:

- Walking and Jogging Paths
- Public Swimming Pools
- Hiking Trails
- Fishing Areas
- Community Gardens
- Playgrounds
- Bicycle Paths
- Basketball Courts
- Picnic Areas

- Off-Leash Dog Areas

Moderate facility needs:

- Camping Areas
- Football Fields
- Ball Fields
- Boat Access
- Soccer Fields
- Canoe/Kayak Launches
- Skateboarding Areas
- Public Golf Courses
- Tennis Courts

Recommendation: The Town of Laurel is encouraged to work toward incorporating and/or continuing to offer some of these opportunities in the development of their Comprehensive Plan.

Recommendations for Ordinances and Plan Implementation

Open Space

- DNREC notes that it might be helpful to have a consistent definition of “open space” in your 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 should 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(or uses), 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 to address those concerns. 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 Sussex Conservation District, Sussex County, 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 are 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 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 requires a project application meeting for all proposed land disturbing activities that require a detailed Sediment & Stormwater Plan. 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 requirement 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 Section (SIRs) 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, SIRS 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, SIRS should be contacted as soon as possible at 302-395-2600 for further instructions.

State Historic Preservation Office – Contact: Terence Burns 736-7404

- Among the objectives for the Historical and Cultural section of the 2011 plan were recommendations for an Overlay District to provide protections for the Laurel Historic District through application of the Secretary of the Interior's Standards for Treatment. Have these recommendations been implemented? There was also mention of an expansion of the historic district to West Laurel. This has not been accomplished. The SHPO is, however, currently working with members of the New Zion United Methodist Church on research towards a National Register nomination for that property.

The revised document should mention the availability of federal and state tax credits to assist property owners in maintaining their historic buildings.

Department of Agriculture – Contact: Scott Blaier 698-4532

- Page 40 of the plan mentions developing an attractive Farmers Market on Broad Creek. If the town has not yet developed a market, and is still interested, it can contact the Department's Marketing Section for assistance at (302) 698-4500.

Page 55 of the plan discusses tree canopy and urban forestry. The Department's Forest Service has resources available to assist the town with meeting its goals. Feel free to contact Kesha Braunskill at the Department to learn more (302) 698-4500.

Page 60 of the current plan discusses the state's agricultural lands preservation program and the town's support. The department would appreciate the town's continued support in this endeavor in its revised plan.

When the town updates its existing land use map for the plan please note that several parcels to the southwest of town are now enrolled in the Agricultural Lands Preservation program (parcels 432-8.00-3.00 and 432-8.00-107.00). The latest GIS layer showing the parcels in the program can be provided by Jimmy Kroon of the Department of Agriculture at jimmy.kroon@state.de.us.

Since this was a Pre-update meeting for your plan update, we will need to see the completed document at a regular PLUS meeting once your Planning Commission has approved the draft plan for public review. Thank you for the opportunity to review this update. If you have any questions, please contact me at 302-739-3090.

Sincerely,



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

CC: Sussex County
Lee Ann Walling, AICP – Cedar Creek Sustainable Planning Services