



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

March 22, 2017

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

RE: PLUS review 2017-02-02; Town of Laurel Comprehensive Plan

Dear Jamie:

Thank you for meeting with State agency planners on February 22, 2017 to discuss Laurel's comprehensive plan. State agencies have reviewed the documents submitted and offer the following comments. 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.

Regarding your request for clarification of the maps

- The Existing Land Use Map is a map representing the results of a recent windshield survey or reliable parcel based building information. This map should show the existing land uses in the town and land which is currently vacant and developable should be identified.
- The Future Land Use Map is the result of an analyses to determine the most advantageous future land use classifications for all of the parcels in the community. The future land use should be tied in with the vision of the community and the results of the various other planning elements, such as community character, affordable housing, redevelopment potential, environment and open space, etc.
- The zoning map is a map which represents how each of the parcels within the town is currently zoned. This map is not required to be in the final comprehensive plan.

Regarding your question related to Force of Law, 22 Del Code §702(d) states “After a comprehensive plan or portion thereof has been adopted by the municipality in accordance to this chapter, the comprehensive plan shall have the force of law and no development shall be permitted except as consistent with the plan.”

Certification Comments: These comments must be addressed in order for our office to consider the plan update consistent with the requirements of Title 22, § 702 and Title 29, § 9103 of the Del. Code.

- The Future land use and annexation map must identify a future land use for all parcels considered for annexation.
- The Existing Land Use Map had a Marine Resources (MR) area depicted and the discussion of the Downtown Development District and the Ramble lists permitted uses within this district and the need to enhance the MR district. The properties in the MR district of the Existing Land Use Map are listed as Institutional on the Future Land Use Map. The map or the discussion should be changed to match the town’s intention regarding the MR district.

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: Dorothy Morris 739-3090

Congratulations to the Town of Laurel on a very well written plan which will guide the town through the upcoming years. Over the past few years, Laurel has made great strides in imagining how Laurel would like to grow and this is the first tool to making the hard work a reality. This plan, combined with the Downtown Dover Designation and the other projects Laurel is working on such as focusing on the rehabilitation of older homes and new home ownership has the potential to transform the town.

- Page 16, first paragraph lists that figure 2.7 is on the next page. It is on the same page. It is recommended that you take out the “on the next page”
- All maps should have the town boundaries clearly marked.
 - The boundary on the State Strategies map is difficult to follow. The color or the width of the boundary should be changed to make it clear.
 - The boundary on the source water protection map is hard to read and should be changed to a color or width that can be easily read.
- Page 98, IV (e) Make DNREC recommendations regarding DNREC’s Source Water Protection Ordinance. Should “make” be “incorporate”?
- Timeline for implementation of Laurel’s Comp Plan, 12 to 18 months after adoption. It is recommended that you include an implementation item that the town amend its official

zoning map to rezone all lands within the municipality in accordance with the uses of land provided for in the comprehensive development plan. This is a requirement pursuant to 22 Delaware Code §702(c) and will need to be completed regardless of its inclusion into the timeline.

- Per our discussion in the PLUS meeting regarding the rehabilitation of the park/playground, the link to the DNREC page with possible grants available for such rehabilitation is <http://www.dnrec.delaware.gov/parks/Services/Pages/Grants.aspx>

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- On page 77, regarding the first paragraph of the Transportation chapter, DelDOT has three suggestions:
 - The road referred to as “Alternate 13” is named Central Avenue and DelDOT recommends that it be referred to as such. While DelDOT acknowledges that it is often called Alternate 13 or something similar, that name is not, to our knowledge, an official designation.
 - The road referred to as “Del. 28-A” is actually Sussex Road 28A; the number and letter refer to an inventory number rather than a route designation. The road is named Poplar Street and DelDOT recommends that it be referred to as such.
 - The statement “Laurel does not follow a grid-like layout” is perhaps misleading. Generally, the neighborhoods within Laurel do follow grid-like layouts, but the grid is interrupted by Broad Creek and a radial pattern of streets that pre-date the grid. It is a common pattern in towns and cities that originated as crossroads communities and later developed in a series of subdivisions before World War II.
- On page 81, there is discussion of creating a truck route to take heavy trucks using Delaware Route 24 off of Market Street. DelDOT recommends that the Town work with Joshua Thomas, a planner in our Regional System Planning Section, to develop this concept further. Mr. Thomas can be reached at (302) 760-4834 or Joshua.Thomas@state.de.us.
- Again on page 81, the text under Figure 8-2 appears to suggest that the recent channelization work at the intersection of US Routes 9 and 13 was based on a Traffic Impact Study. In fact, it was one of a series of DelDOT intersection improvement projects along US Route 13 through Laurel.
- Finally on page 81, because the Laurel Airport is mentioned there only in the context of the truck route, DelDOT recommends that the Plan include a separate discussion of the airport. While it is outside the Town limits, it is a locally important facility and could readily be tied into the Town’s interest attracting tourism.

- On page 83, in the discussion of the Salisbury/Wicomico MPO, the name of organization is incorrect. The correct name is the Salisbury/Wicomico Metropolitan Planning Organization.
- Again on page 83, one of the MPO Council seats is described as belonging to Seaford. While that seat is currently held by the City of Seaford, it rotates on a two-year cycle with the Town of Laurel and the Town of Blades.

State Historic Preservation Office – Contact: Terrence Burns 302-736-7404

- The State Historic Preservation Office thanks you for considering their comments and suggestions, pertaining to previous and current comprehensive plans. Thanks for supporting the protection of historic properties, and the implementation of proposed preservation efforts. SHPO would be glad to provide technical assistance to the Town, as well as further guidance, pertaining to these matters. If you have any questions or concerns, please contact Alice Guerrant at 302-736-7412.

State Housing Authority – Contact: Karen Horton 739-4263

- DSHA has reviewed the Town of Laurel’s draft 2017 Comprehensive Plan and strongly supports its guiding principles and recommendations as they relate to housing. The Town critically examined the breadth of housing challenges facing their community and developed strategic and integrated strategies to: balance and stabilize the housing composition; revitalize the downtown core; and, engage and connect the ‘invisible’ population. The implementation of this plan will serve the town and its residents well in terms of economic growth, social cohesion, as well as enhanced community well-being.

Department of Agriculture – Contact: Scott Blaier 698-4532

The Department of Agriculture would like to compliment the town on a well-written Comprehensive plan update. Please consider the comments below.

- Page 69 of the plan discusses the tree canopy goal and urban forestry for the town. If you have not already contacted her, Keshia Braunskill (302- 698- 4578) of the Department’s Forestry section manages an urban forestry grant that may be able to help the town meet its goals.
- Page 61, Fig. 7-1, shows permanent easement to the southwest bordering town and another property in district program to the west bordering town. Permanent easements are permanently preserved as farmland forever. Please keep in mind when planning future development adjacent to this property.
- Land and Annexation 10, Figure 10-1, Page 91

- Figure 10-1 shows parcel 432-8.00-3.00 and 432.8.00-2.00 as future annexation areas for the town. On Figure 7-1, page 61, these parcels are correctly identified as Agricultural Expansions in the State's Agricultural Lands Preservation Program.

Although these parcels are not permanently preserved yet, the landowner is still actively participating on the "easement sale" portion of the program, and has given no indication that they will withdraw the properties from the program.

Therefore, until the property becomes permanently preserved, or is withdrawn from the program completely, the Department of Agriculture request that the town please not show this property as part of future annexation plans. In the past, such designations have confused landowners in our program who thought they were preserving their farm, only to find that they were eventually going to be annexed for development by an adjoining city or town.

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

DNREC envisions a Delaware that offers a healthy environment where people embrace a commitment to the protection, enhancement and enjoyment of the environment in their daily lives; where Delawareans' stewardship of natural resources ensures the sustainability of these resources for the appreciation and enjoyment of future generations; and where people recognize that a healthy environment and a strong economy support one another.

DNREC commends the Town for a user-friendly Plan that provides a thoughtful assessment of present conditions and outlines a realistic path forward to achieving a "reimagined" Laurel.

DNREC's intent is to offer recommendations to improve conservation and protection of the City's resources and 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

Total Maximum Daily Loads (TMDLs)

- Please remove the following sentence in the third paragraph on page 60, Environmental Sustainability: "Those established pollution limits are referred to as a Total Maximum Daily Load, or TMDL, and are expected to be achieved by 2015." The TMDL for the greater Chesapeake Basin watershed was not achieved in 2015 (or any year to date).

Source Water Protection

- The Town proposes to amend its source water protection ordinance to allow for “more leeway for redevelopment in blighted areas.” DNREC requests an opportunity to review and comment on the draft proposal prior to adoption.

Water Allocation

- DNREC has some questions about the Town’s capacity to serve the projected population.

Population (2014): 3,842

Projected population: 11,532 (without further annexation)

Current water use: 295,900 gallons per day (78 gpd per capita)

Projected water use: 1,275,997 gpd (111 gpd per capita)

Current well capacity: 792,000 gpd maximum (may not be sustainable year round)

Projected capacity: 1,275,997 gpd

Questions:

1. Why the dramatic increase in per capita water consumption?
2. Where will the new water come from?
3. How will this production rate be made sustainable?

DNREC has no information about the new well drilled in 2016. Lacking a water allocation permit application that includes the new well, DNREC has no way to answer these questions.

Recommendation: Laurel should work with DNREC to answer the above questions and, if necessary, apply for a new allocation permit that includes the new well.

The following comments were provided to the Town as part of the Town of Laurel Comprehensive Plan Pre-Update Review (2015-11-04). DNREC is including them again for your consideration.

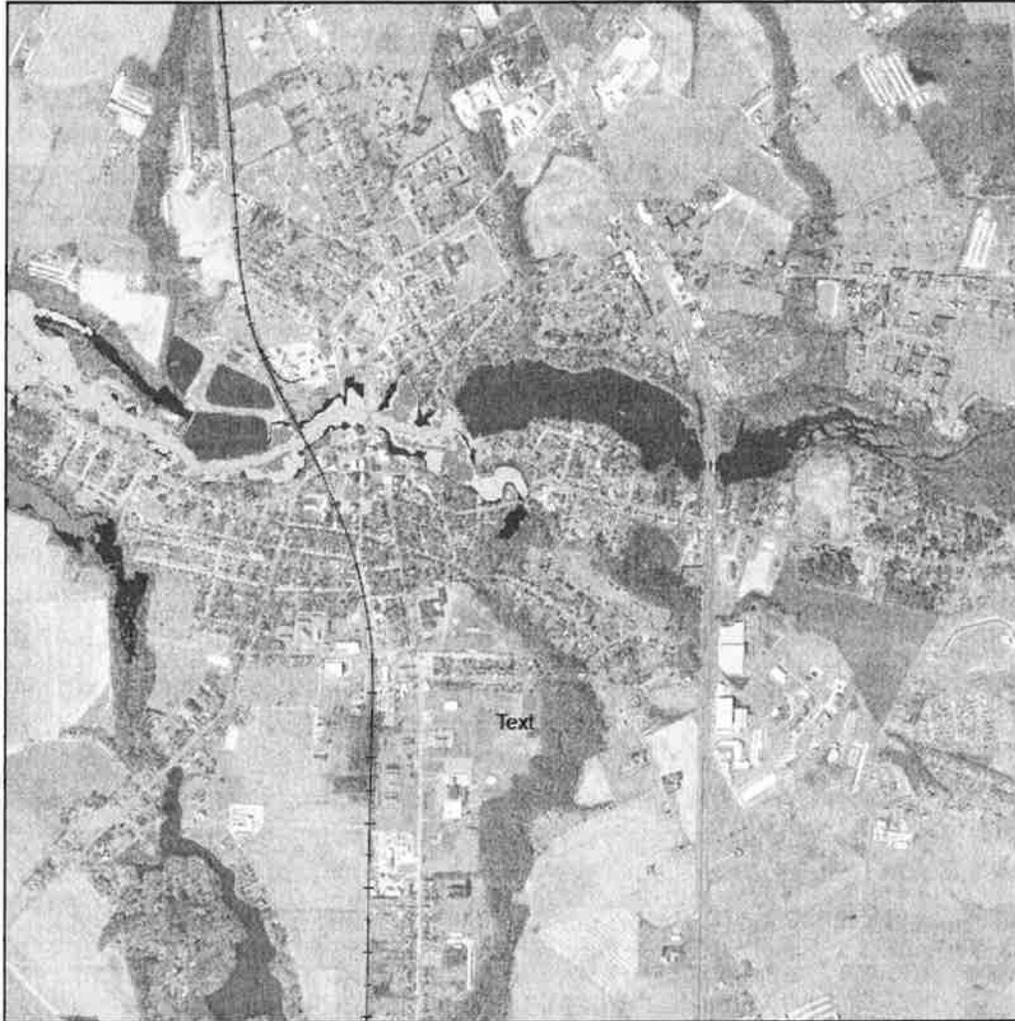
Flooding and Sea Level Rise

- Portions of the Town 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](http://www.dnrec.delaware.gov/pages/slrmmaps.aspx)).

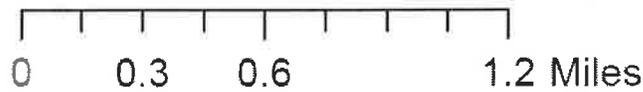
Sea levels in Delaware have risen by about a foot over the past century (NOAA, 2014). This rate of sea level rise is likely to accelerate in the coming decades as a result of global climate change and local subsidence. Accelerated sea level rise will result in permanent flooding of low-lying coastal areas, increased risk of flood damage during storms and increased frequency of nuisance flooding (DNREC, 2012). Changes in sea level extremes are most important in the center of Laurel. Extreme events have the capacity to destroy development in the flood plain and new flood plains may develop in areas that

are subject to sea level rise. The rate of change in sea level rise may accelerate in the future so the State has projected three scenarios for giving local decision makers more information.

The Delaware Geological Survey will review recent scientific literature and assessments of sea-level change in Delaware and identify appropriate scenarios to use for planning purposes throughout the state. The release of the International Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) in 2013 and the NOAA National Climate Assessment indicates that the rate of sea level rise is likely to increase. This project will also develop new inundation maps along Delaware's coast that correspond to the identified projections. It should be helpful for the Town of Laurel to have the information when it is available. <http://www.dgs.udel.edu/projects/determination-future-sea-level-rise-planning-scenarios-delaware>



2017-02-02 Laurel Comprehensive Plan



Legend

-  Current MHHW
-  0.5 meters SLR
-  1.0 meters SLR
-  1.5 meters SLR

This map produced by the Delaware Coastal Programs.
This map is not intended to be a depiction of Regulatory Authority,
Jurisdiction, or Territorial Claims. Its use is intended for planning
purposes related to effective coastal management

Recommendations:

1. **The Town should consider additional land use controls for the areas subject to 1.5 meter of sea level rise.**
2. **To reduce the costs of providing infrastructure the Town should consider not permitting roads, sewer or water to be extended into areas subject to 1.5 meter of sea level rise.**
3. **The Town 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. **The Delaware Coastal Programs may have Community Grants available for Coastal Resiliency and Sea Level Rise Adaptation. The grant requires matching of federal funds or in-kind services of at least one to one. 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://www.dnrec.delaware.gov/coastal/Pages/DESLRAdvisoryCommittee.aspx>.

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

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.

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, 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.

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 DNREC 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.

The following comments were not provided to the Town as part of the Town of Laurel Comprehensive Plan Pre-Update Review (2015-11-04). DNREC presents them here for your consideration.

Air Quality

- With the acknowledgment of the largest age demographic in Laurel, with “14.5% of the Town’s population being 5 years of age or younger” it is imperative that Laurel take action to reduce negative air quality impacts in the area (page 13). Children, the elderly and those with pre-existing conditions such as those with cardiac and respiratory conditions are most susceptible to the effects of air emissions.
- It was also noted in the plan that “the east-west through traffic volume is greater because Delaware 24 is a principal route to Cambridge, MD, and other points on the Eastern shore farther west” and that truck traffic on this route has remained an ongoing problem (page 81). Up 90% of emissions can be attributed to the transportation sector and trucks in particular emit as much pollution into the air as up to 150 cars. The Town of Laurel’s proposal for an alternative truck route south of the Town of Laurel (Salt Barn Road from U.S. west 13 to Alternate 13, then north to Dickerson Road to intersect near the airport on the west side of Town) would provide a more feasible alternative for truck traffic moving through the area. The problem of truck traffic through Laurel is not only a matter of traffic flow and structural damage but also one with a detriment to human health.
- This being considered, the Town of Laurel is encouraged to implement transportation alternatives and land use measures that will substantially enhance air quality and reduce air emissions. Among these transportation alternatives are efforts to provide increased connectivity to the nearest bicycle, pedestrian and sidewalk networks as well as “links” to any nearby mass transport systems including parks, public and cultural facilities and residential neighborhoods. A walkability study of the Town would be beneficial if one has not been conducted already in order to ensure that the needs of all Laurel residents from all socioeconomic backgrounds have access to a walkable, bikeable and sustainable community. DNREC supports the inclusion of public transit as a transportation opportunity in Laurel and was pleased to hear that the Bus Route 212 is an active transit route amassing an average weekday ridership total of 73 people (page 83).
- Lastly, DNREC supports efforts to beautify the Town of Laurel through the maintenance and planting of urban trees and shrubbery that would aid in both cleaning the air of pollutants and replenishing oxygen into the air. DNREC commend the Town’s efforts to both implement and maintain a tree canopy of 21.18% (page 69) Urban trees provide shade for parking areas, help to reduce heat island impacts, and, by extension, help to

minimize the potential for localized ground-level ozone formation. Such measures can also have the additional benefit of channeling or infiltrating storm water. Also related to the beautification of the Town is to provide a context-sensitive design (low-impact development scenarios) that blends in well with surrounding land uses.

- There are additional measures that can be implemented to reduce the impact of growth and development on air quality in Laurel. Should the developer have any more questions or concerns, the Division of Air Quality (DAQ) point of contact is Lauren DeVore, and she may be reached at (302) 739-9437 or lauren.devore@state.de.us.

Recommendations for Ordinances and Plan Implementation

The following recommendations were provided to the Town as part of the Town of Laurel Comprehensive Plan Pre-Update Review (2015-11-04). DNREC are including them again for your consideration.

Open Space

- DNREC noted 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, DNREC 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.

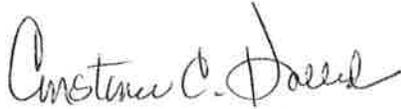
Approval Procedures:

- 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. Substantial changes to this draft could warrant another PLUS review.
- Our office will require a maximum of 20 working days to complete this review.
 - If our review determines that the revisions have adequately addressed all certification items (if applicable), we will forward you a letter to this effect.
 - 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.
- Once you receive our letter stating that all certification items (if applicable) 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.
- 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.
- At his discretion, the Governor will issue a certification letter to your Town.

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

Sincerely,

A handwritten signature in cursive script that reads "Constance C. Holland".

Constance C. Holland, AICP

Director, Office of State Planning Coordination