



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

July 23, 2014

Jay Goodfellow
Town of Leipsic
207 Main Street
Leipsic, DE 19901

RE: PLUS review 2015-06-01; Town of Leipsic Pre-update Review

Dear Jay:

Thank you for meeting with State agency planners on June 24, 2015 to discuss the update of Leipsic'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: David Edgell 739-3090

Our office is pleased to have the opportunity to work with the Town of Leipsic as the Town prepares the required 10 year update of the comprehensive plan. The plan has served the Town well for the last 10 years.

The plan update is getting started a bit early, but it does appear that there are a lot of projects going on right now in and around Leipsic that make this effort very timely. Those efforts include, but may not be limited to, the Rt. 9 Scenic By-Way; the current University of Delaware Sea Grant research for their "Working Waterfronts" project, and DNREC's Bayshore Initiative. We also encourage the town to consider climate change and sea-level rise in the plan update process.

Our office encourages the Town and its consultants to incorporate these and other projects into the Plan Update. We are able to assist the Town with Census data and meeting facilitation. In summary, we commend the Town of Leipsic for being proactive in updating their comprehensive plan.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- The Plan should recognize that Denny Street (Delaware Route 9) is part of Delaware's Bayshore Byway, a part of the Bayshore Initiative. Little Creek is an important Discovery

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Zone on the byway. For more information, refer to the byway's Corridor Management Plan located here:

http://deldot.gov/information/community_programs_and_services/byways/route9.shtml#byways_page and the manual Context Sensitive Solutions for Delaware Byways, located here:

http://deldot.gov/information/community_programs_and_services/byways/pdf/Context_Sensitive_Solutions_for_Delaware_Byways.pdf. As necessary, the Town may contact Ms. Ann Gravatt, our Byways Program Coordinator, at (302) 760-2254 with questions about the Bayshore Byway or about our Byways Program in general.

- Traffic volumes on Delaware Route 9 have increased since the 2002 data shown on the 2006 plan. Looking comprehensively at the counts shown in our Vehicle Volume Summary, available at http://www.deldot.gov/information/pubs_forms/manuals/traffic_counts/index.shtml, volumes on Route 9 now appear to be between 1,800 and 1,850 vehicles per day in most places.

We would urge particular caution with regard to the 609 vehicle per day shown for Route 9 between Route 42 and the north limits of the Town. A relatively common error in this publication is for the count to reflect only one direction of travel, or about half the two-way daily volume. That may have happened there.

- At the PLUS meeting, the Town's representatives asked about the status of shoulder paving on Delaware Route 9. Local legislators had appropriated Community Transportation Funds (CTF) to have that work done but since then the Town had heard nothing.

Because CTF projects are generally small, DelDOT groups them into contracts by county rather than advertising each project to be bid separately. The Route 9 shoulder work will be in the next Kent County CTF contract and we expect it to be done this summer or fall. Questions regarding the work should be directed to DelDOT's Central District office, which can be reached at (302) 760-2424.

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

2-4, Community Services, Facilities, and Transportation, p.21

- 2-4a. Utilities

Water System: Is there any interest in public water system?

Recharge Areas: DNREC recommends moving the discussion from 2-3a. Floodplains, Wetlands, and Recharge Areas, as recharge areas/wellhead protection areas are related to water supply.

Municipalities under 2,000 Population (as reported in the most recent decennial Census) have the following options for inclusion in their comprehensive plans. Leipsic has one wellhead protection area serving Sambo's Tavern.

- Text of the comprehensive plan may include description of source water requirements in 7 Del. C. 6082(c), 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 22 of the Delaware Code.
- A map of source water resources (excellent recharge areas, wellhead protection areas) may be included in the plan. This map must be derived from the most current datasets¹ provided by the Department of Natural Resources and Environmental Control (DNREC).
- If included, 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 datasets.
- The local government may adopt, after consultation with DNREC, an ordinance that is protective of the resource. If adopted, the ordinance shall refer to the most current official source water map and relevant data, as provided in the current Comprehensive Plan and as amended from time to time or include a map update procedure.

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

Wastewater Treatment System: Are there any updates to this section?

Stormwater Management: DNREC recommend moving the discussion from 2-4b. Community Services and Facilities. The Department recommends that the Town of Leipsic incorporate a requirement for a stormwater review into the Town's preliminary approval requirements for new development requests. The *Delaware Sediment and Stormwater Regulations* have been revised and became effective January 1, 2014. A three-step plan review process is now prescribed in the regulations. Proposed development projects must submit a Stormwater Assessment Study for the project limits of disturbance and hold a project

application meeting with the reviewing delegated agency as the first step, prior to submitting stormwater calculations or construction drawings, which are steps two and three. Resulting from the project application meeting a Stormwater Assessment Report will be completed by the reviewing agency and the developer and forwarded to the Town. This Stormwater Assessment Report will rate the anticipated engineering effort necessary to overcome certain stormwater assessment items such as soils, drainage outlets, and impervious cover. The Sediment and Stormwater Program recommends that the Town consider the ratings from the Stormwater Assessment Report in making a decision to issue preliminary approval for any development request by incorporating the Stormwater Assessment Report as a required element when a plan is submitted into the municipal preliminary plan approval process.

The revised *Delaware Sediment and Stormwater Regulations*, effective January 1, 2014, have a goal of reducing stormwater runoff for the rainfall events up to the equivalent one-year storm, 2.7 inches of rainfall in 24 hours. Runoff reduction encourages runoff to infiltrate back into the soil as in the natural pre-development system and results in pollutant removal and stream protection. Best management practices (BMPs) that encourage infiltration or reuse of runoff, such as porous pavements, rain gardens, rain barrels and cisterns, green roofs, open vegetated swales, and infiltration systems should be allowed for new development sites within the Town. Furthermore, limiting land disturbance on new development projects and limiting impervious surfaces by allowing narrower street widths, reducing parking requirements, and allowing pervious sidewalk materials will be necessary to help achieve the runoff reduction goals in the revised regulations.

Floodplains: DNREC recommends moving the discussion from 2-3a to a separate location. Floodplains, Wetlands, and Recharge Areas. While we don't disagree that floodplains are an environmental feature, they should be thought of in the context of (green) infrastructure and public safety.

The Town's floodplain boundaries were revised by FEMA on July 7, 2014. FEMA delineates the boundary of 1% annual chance flood events on their Flood Insurance Rate Maps. These floodplain boundaries are used for flood insurance and floodplain management purposes. The purpose of the maps is to depict areas at risk of flooding and to aide in developing mitigation strategies to keep development and people out of harm's way. This new data needs to be reflected in an updated map. We recommend creating a floodplain map similar in scale to that of Map 4 in the 2006 Comp Plan.

The Town participates in the National Flood Insurance Program and has adopted a Floodplain Ordinance which addresses the requirements for developing in the floodplain delineated on FEMA's maps. We would like to see some language that addresses the Town's future plans in regards to developing in the floodplain and reducing flood risk to its residents.

- 2-4b. Community Services and Facilities

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 Leipsic is located within SCORP Planning Region 3.

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 3 (Kent County), 63% 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 Leipsic include:

High facility needs:

- Walking and Jogging Paths
- Public Swimming Pools
- Bicycle Paths
- Fishing Areas
- Playgrounds
- Community Gardens
- Picnic Areas
- Off-Leash Dog Areas

Moderate facility needs:

- Hiking Trails
- Camping Areas
- Ball Fields
- Basketball Courts
- Football Fields
- Public Golf Courses
- Soccer fields
- Boat Access
- Canoe/Kayak Launches
- Tennis Courts

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. Under Governor Markell's Executive Order 41, directing Delaware State agencies to prepare for emerging climate impacts and seizing economic opportunities from reducing emissions, DNREC and the Office Of State Planning Coordination are tasked with identifying actions local governments can take to improve community resiliency, including an assessment of infrastructure vulnerabilities, land use policies, and other adaptation strategies that may be integrated into comprehensive land use plans. 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 the Town of Leipsic and its surroundings will be subject to direct and permanent inundation from sea level rise (<http://de.gov/slrmmap>).

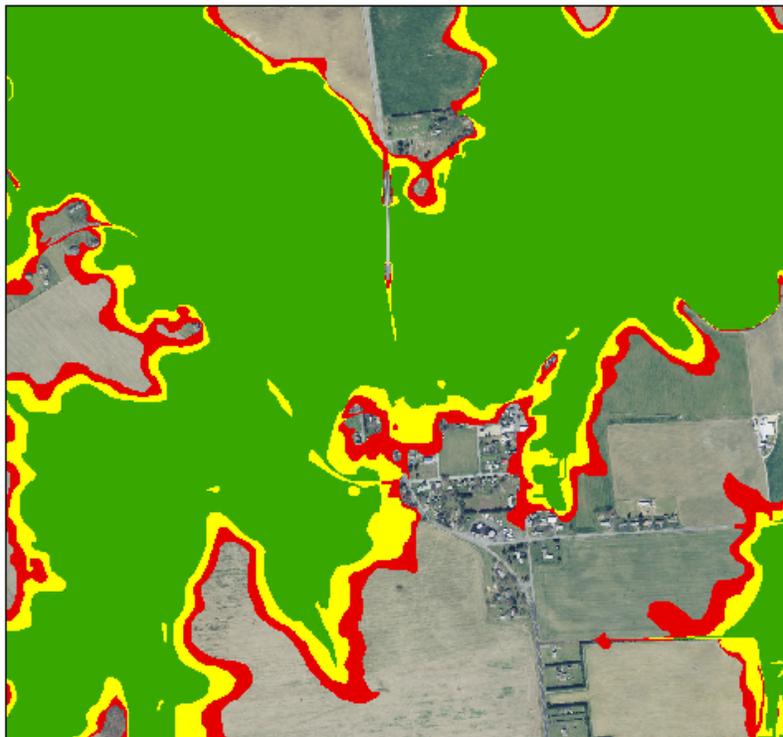
Sea levels in Delaware have risen by about a foot over the past century (NOAA, 2014). This rate of sea level rise is likely to accelerate in the coming decades as a result of global climate change and local subsidence. Accelerated sea level rise will result in permanent flooding of low-lying coastal areas, increased risk of flood damage during storms and increased frequency of nuisance flooding (DNREC, 2012).

Sea level rise may accelerate the rate of salt water intrusion into ground water and affect water supplies.

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.



1 inch = 0.19 miles



Legend

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|------------------|------------------------|
| —+— RailRoads | ■ SLR 1.0 Meter |
| ■ ncco deldot | ■ SLR 1.5 Meter |
| ■ Current MHHW | OrthoPhoto_2012 |
| ■ 0.5 meters SLR | RGB |
| ■ 1.0 meters SLR | ■ Red: Band_1 |
| ■ 1.5 meters SLR | ■ Green: Band_2 |
| ■ 1.5 meters SLR | ■ Blue: Band_3 |
| □ Sussex | |
| ■ SLR 0.5 Meter | |

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>.

Wildlife Species and Habitats.

- Consider the incorporation of the Delaware Wildlife Action Plan, which is a comprehensive strategy for conserving native wildlife species and habitats into the Leipsic Comprehensive Plan. For example, the Delaware Wildlife Action Plan identifies Key Wildlife Habitat that may be considered in Land Use Planning. The Delaware Wildlife Action Plan is in the process of being updated, with a new version expected to be available in 2016. For more information on the Delaware Wildlife Action Plan, see: <http://www.dnrec.delaware.gov/fw/dwap/Pages/default.aspx>.

Air Quality.

- A comprehensive plan is intended to provide direction to the community as it considers the economic development, natural environment and the quality of life of its residents.

DNREC supports the desire to expand open space for recreational uses, such as playgrounds or town parks. According to the US EPA, open space helps to enhance the beauty and environmental quality of neighborhoods. DNREC also supports the Town's consideration to connect such open space to nearby Delaware Greenways. As the Town of Leipsic considers these opportunities, attention should be given to safe access for pedestrians and cyclists. For every vehicle trip that is replaced by the use of a sidewalk or bike path, 7 pounds of VOC and 11.5 pounds of NO_x are reduced each year.

While DNREC supports efforts to create a "Waterfront" district through a mixture of uses along the Leipsic River, particularly those taking place on/near Front Street, we caution the Town about the exposure of residents to commercial and recreational boat emissions. The US EPA states that diesel engines are a major source of air pollution, especially NO_x and particulate matter. As these emissions combine with heat and sunlight, ground level ozone (smog) can form. Scientific studies have linked exposure to these pollutants with aggravated asthma, reduced lung capacity, bronchitis, pneumonia, heart attack, and premature death. Diesel exhaust, specifically, is considered a "likely" carcinogen. In order to balance the desire for commercial and recreational boating activities with the need to protect human health, DNREC recommends that the Town consider adopting policies to reasonably limit hoteling and vehicle idling; reference to such policies should be made in the Comprehensive Plan.

Recommendations for Ordinances and Plan Implementation

- **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.

- **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).

- **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 County, the 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.

State Historic Preservation Office – Contact: Terence Burns 7367404

The Town of Little Creek does have some individual properties listed in the National Register of Historic Places. These National Register-listed properties are part of the Multiple Resources of Leipsic and Little Creek (K03057).

The Town may want to establish a historic zoning ordinance and incentives to protect the historic properties. A major benefit of listing is that it makes properties eligible for financial incentives in the form of federal, state, and county historic preservation tax credits and occasional grants. Such financial incentives will help in the maintenance of the aging housing stock, which is one of the Plan's concerns and recommendations.

Department of Agriculture – Contact: Scott Blaier 698-4532

The Department is encouraged by the town's interest in farmland preservation and a greenbelt concept as discussed on pages 8, 24, 25, and 29, and the recommendations regarding support for farmland preservation. The department encourages the town to continue that support in its comprehensive plan update.

The Agricultural Lands Preservation program has added new properties and permanently preserved several properties around the town since the last comprehensive plan was written. We request that the town or their consultant contact Milton Melendez (698-4530) here at the Department to acquire the latest GIS coverage of properties in the preservation program. This information can be used to update Map 6 in the 2006 plan.

Department of Public Health – Contact: Laura Saperstein 744-1011

The Delaware Division of Public Health (DPH) is pleased to be able to participate in the PLUS application process. In keeping with its mission to protect and promote the health of all people in Delaware, DPH looks for opportunities to encourage and enhance our population's health behaviors that will result in healthy people and healthy communities.

Community design can impact the health of a population. Studies show that persons in lower-income communities, the elderly, and children often suffer more from consequences of inadequate land-use and transportation. Additionally, we know physical activity has a direct correlation to many chronic diseases, including hypertension, diabetes and obesity. In 2013, 33.6% of Delawareans reported a BMI of "overweight;" an additional 31% reported a BMI as "obese." To that end, DPH looks to make recommendations for land-use that can empower Delawareans to make good health behaviors a part of their daily lives.

You may be aware that DPH recently released its State Health Improvement Plan (SHIP). As a result of this community collaborative, two goals were developed which, if addressed, would have a significant impact on the health of Delawareans. One of the goals is stated as, "To assure an infrastructure necessary to increase the adoption of healthy eating and active living." To that end, DPH has the following comments for the Town of Leipsic's Municipal Comprehensive Plan, as these will create an opportunity to increase positive health behaviors for its residents:

- DPH is pleased to see the inclusion of many references, goals and recommendations specific to the built environment and use of land development, especially noting community features most valuable to the citizens of Leipsic, like sidewalks, open space and parks and recreational facilities. The inclusion of this pedestrian infrastructure enables residents to choose walking as a recreational option. Additionally, locating housing developments within a reasonable distance to active recreation facilities enables residents the option of incorporating physical activity as part of their everyday life. DPH commends the use of language recommending mobility friendly community design, connectivity, open space design techniques, and development opportunities for parks and recreational infrastructure.
- The Town of Leipsic Comprehensive Plan, adopted November, 2006 includes many positive strategies that address community goals, parks and recreation, housing, zoning code, etc. As part of the development, implementation and adoption of its updated Comprehensive Plan, the Town of Leipsic should identify which of these recommendations were not implemented in order to achieve the desired outcomes by its residents.
- The only connector into Leipsic on Smyrna Road is a very narrow bridge with no bike lanes or pedestrian walkways. Consider working with DelDOT to improve active and recreational non-motorized transportation options to enhance connectivity for the town's residents.
- Include marked crosswalks at all key intersections
- Further consider SCORP regional priorities when addressing Parks and Recreation developments as noted in the Recommendations; develop recreational facilities that address active recreation for all age groups.
- Consider the inclusion of a section dedicated to health, developing boilerplate language that promotes the influence of the built environment on health; priorities that influence health may include parks and open space, transportation, other ways to impact health, like, repurposing open space for farm stands, etc.

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,

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

Constance C. Holland, AICP

Director, Office of State Planning Coordination