STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

May 20, 2016

Mr. Paul Eckrich
City of Lewes
114 E. Third Street
P.O. Box 227
Lewes, DE 19958

RE: PLUS review 2016-04-01; City of Lewes Comprehensive Plan

Dear Paul,

Thank you for meeting with State agency planers on April 27, 2016 to discuss the proposed update of the City of Lewes'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.

Certification Comments:

- According to Title 22, Section 702 Del C., the Affordable Housing Plan must include policies, statements, goals, and planning components which serve to define the community's strategy for providing affordable housing for current and future residents. DSHA has reviewed the City of Lewes' ten year update to their Comprehensive Plan and has the following certification concern:
    - The policies, statements and planning components for affordable housing are written in a manner to indicate an exclusionary stance by the City.
    - The Position on Housing Growth 'recognizes the importance of affordable housing within the greater Lewes area. As a nearly built-out coastal community, Lewes' ability to add affordable housing is limited'. Page 37 identifies 352 vacant acres, including 158 recorded unbuilt.
    - The Policy for Affordable Housing 'recognizes the need for the development of additional affordable/workforce housing in the *greater* Lewes area'. The City's policies for affordable housing should include opportunities *within the City*. This is especially critical given the tremendous need for affordable housing within the coastal resort region - particularly for the many employees commuting in from western Sussex County.

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- Providing affordable housing for current and future residents is a state *and local issue*. At a time when Federal resources for housing are diminishing and the need is greater than ever, it takes a variety of strategies to meet the housing needs of current and future residents regardless of their stage in life or income. The plan's policies, statements and planning components should reflect the City's willingness to facilitate affordable housing opportunities for people of all income levels to live and work in the City.

- On page 28 in the Plan, in Part III, Section D, the first paragraph under Streets discusses several streets in Lewes including Fourth Street. The next paragraph begins "All of these roads are maintained by the state…" Fourth Street is not maintained by the state. Please correct this sentence.

- On page 31 in the Plan, in the section on Transit, the first paragraph mentions SR 9, where we believe US 9 is intended. SR 9 does not extend into Sussex County. Please correct

- Page 48 - Analysis and Comparison of other documents = State Strategies – last paragraph – Remove the sentence "the state will only consider investing in Level 3 after Levels 1 & 2 have been substantially build out". Level three should be described as follows (per the 2010 Strategies for State Policies and Spending):

  Investment Level 3 Areas generally fall into two categories. The first category covers lands that are in the long-term growth plans of counties or municipalities where development is not necessary to accommodate expected population growth during this five-year planning period (or longer). In these instances, development in Investment Level 3 may be least appropriate for new growth and development in the near term.

  The second category includes lands that are adjacent to or intermingled with fast-growing areas within counties or municipalities that are otherwise categorized as Investment Levels 1 or 2. Environmentally sensitive features, agricultural-preservation issues, or other infrastructure issues most often impact these lands. In these instances, development and growth may be appropriate in the near term, but the resources on the site and in the surrounding area should be carefully considered and accommodated by state agencies and local governments with land-use authority.

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

This office has received the following comments from State agencies:

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

The Office of State Planning would like to congratulate the City of Lewes on a very well written plan that addresses current needs while providing a positive frame work for future growth and development. This office asks that the city consider the recommendations listed below to strengthen the proposed plan.

- Page 10 – Lewes Police Department – second paragraph. The City has identified an issue with encroachment by citizens onto public property. You state that it can become a problem if Lewes adopts a stream and wetland buffer or setback ordinance. It is recommended that you remove the last sentence and add a recommendation regarding code enforcement making a push to stop encroachment such as garages and trees.

- Page 26 & 27 – Possible strategies to address flooding and sea-level rise – the plan states that the paragraph is theoretical because actions that the state and private land owners but not the city might undertake and does not constitute an action plan or even a listing of what the city might be able to undertake even in the unlikely event that sufficient resources become available. The section goes on to discuss strategies to address sea level rise. The City is actively working to address sea level rise and it is my understanding that you are currently doing or working on several of the strategies listed. Therefore, the Office of State Planning recommends removing the portion of the sentence which stated it is a theoretical discussion and instead embrace the strategies listed by describing the work currently being done by the City and with recommendations about how the City, the State, and the Federal government can work together to further implement these ideas.

- Page 27 – New development and redevelopment – the plan states that there is limited opportunity for new development or redevelopment in the time frame covered by the plan.

  With 317 vacant lots and (352.9 acre) the town should embrace the fact that there is opportunity for new development and there is always the potential for redevelopment so the town should be looking toward how redevelopment should occur. Therefore, it is recommended that the City remove the word "limited" from the above sentence.

- Page 36 – Exiting Land Uses and Redevelopment – This states that a survey was done in 2013 and verified in June 2014. It also states that there have been changes to the city through annexation but that that information is not included in the current draft. Since the adoption of the last comprehensive plan, 2 areas have been annexed into the City. Because the survey information is now almost 3 years old, it is recommended that a brief

description of the areas annexed since the survey be added to the plan. This description should include the number of acres annexed, how the land is zoned and the current use of the land (vacant, housing being built, etc.)

- Page 25, the Quinn Report Summary, Page 38 – Marine Commercial District study, and Page 47 the Klein memo: The City has included a detailed description of the reports and included several of the recommendations from the reports. If these recommendations are not to be considered as part of the plan, it is suggested that they be removed from the comprehensive plan update. Citizens reading the plan may mistake the recommendations listed with the reports as part of your comprehensive plan recommendations.

- Page 46 – **Recommend taking out the words less likely to be disabled**. Resident Customer and Work Base – following table 15, the plan concludes that the residents of the City of Lewes are older, wealthier, more highly educated, less likely to be in the workforce, **less likely to be disabled**, and more likely to be self-employed then the general population. We recommend removing the section about being less likely to be disabled from this sentence.

- Appendix A – Public Participation – In the overview it is stated that the Mayor and Council reviewed the draft over a course of 9 public meetings and a public hearing however, meeting information is only given regarding the June 2014 public workshops. It is suggested that the plan include brief description of the 9 public meeting and the public hearing. Information should include the date of the meeting, attendance and a brief description of the public comment regarding the plan.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- Sections 2.2.2.4 and 2.4 of the Development Coordination Manual address Transportation Improvement Districts. If the City wishes to work with DelDOT to establish such a district, a necessary step early in that process (See particularly Section 2.4.2.7.) would be to include in the Comprehensive Plan a statement that the City wants to create the district and a map showing where they want to create it.

  The Development Coordination Manual is available at http://www.deldot.gov/information/business/subdivisions/changes/pdfs/Development_Coordination_Manual-Chapter_2.pdf?041116. The City may contact me with questions not addressed in the Manual.

- On page 29 in the Plan, in Part III, Section D, Table 8 is titled Average Annual Daily Traffic Counts and has three columns of numbers labelled Adjusted Summer, Adjusted Winter and Actual August 2013. As DelDOT understands it, the first two columns are daily traffic volumes calculated from volumes in the 2012 DelDOT Traffic Summary.

Traffic Summary volumes are annual average volumes, each calculated from a week-long traffic count. The third column, again as they understand it, is daily traffic volumes calculated from a two-hour traffic count on an August Saturday.

All of these volumes are necessarily projections and subject to error. Because they differ in origin, the errors to which they are subject are necessarily different and may serve to amplify or lessen differences inherent in the original counts.

DelDOT recommends, at a minimum, that the title of the table be changed to Average Annual Daily Traffic Volumes. Consideration should be given to adding notes detailing how the volumes were developed or to eliminating the table altogether.

- On page 30 in the Plan, there is a section on the Lewes Comprehensive Pedestrian Plan, which was adopted in 1998 and updated in 2005 and 2010. It seems like a useful document that is due to be updated again, but an update is not recommended. It is recommended that the City explain why this will not be updated again.

- Again on page 31 in the Plan, in the section on Transit, the combined daily ridership figure for Routes 204 and 205 in the third paragraph seems high. The Delaware Transit Corporation's Fiscal Year 2013 (July 1,2012 through June 30, 2013) ridership figures for these routes are as follows:

•	• Total FY 2013 Ridership	• Average Daily Ridership
• Route 204	• 24,155	• 206
• Route 205	• 7.160	• 61

- On page 34 in the Plan, there is a paragraph on parking that seems to suggest the City might be interested in managed parking but the plan does not include a recommendation in this regard. Rehoboth Beach and Newark are two Delaware cities that take an active approach to managing parking. Lewes may want to contact them to learn from their experience.

- On page 34, the section on the Infrastructure and Transportation Plan refers repeatedly to safety, and also to the inter-related topics of flooding, flood evacuation and sea-level rise but offers no recommendations with regard to any of these subjects. Should the City wish to work with DelDOT to develop some recommendations, they offer the following names and phone numbers as initial contacts:

  - Safety – Adam Weiser, Manager, Safety Officers and Programs, (302) 659-4073
  - Evacuation Routes – Gene Donaldson, Operations Manager, Transportation Management Center, (302) 659-4601
  - Sea Level Rise – Silvana Croope, Resilience, Climate Change & Sustainability Strategist, (302) 760-2708

Delaware State Housing Authority – Contact Karen Horton 739-4263

- Page 17 lists 'resources that have proven effective in other jurisdictions to allow the current population to age in place'. However, it then states 'These do not suggest the City adopt or provide any particular one, and certainly not all, of these resources'. The comprehensive plan is the official mechanism to outline the City's policies in meeting an identified housing need – in this case helping people age in place. At a minimum, by stating the City may not adopt ***any*** indicates a City position of unwillingness to address an identified housing need.
- Page 42 in Housing Alternatives states 'Options to accommodate homes and rental affordable to people of varying income levels may include cohousing and homeshares'. This is a very limited list as cohousing communities are designed through consensus-planning by the households who will live there. And while all residents share in the cost and upkeep of common land areas, there is no overall shared community economy. As a result, individual units are bought and sold at market rate and in the Lewes housing market will likely be unaffordable to most incomes. This list should be expanded to include a variety of housing types likely to be more affordable to the City's workforce.
- The following are examples of strategies that could be helpful in a coastal resort community such as the City of Lewes:
    - Provide additional affordable housing opportunities within the existing housing stock such as permitting accessory dwelling units in residential areas as a matter of right. This can help residents age in place and address some of the seasonal housing issues.
    - Consider long-term affordability programs and tools to preserve public investment and to ensure a sustainable affordable housing stock. One way to do this is by partnering with the Diamond State Community Land Trust (DSCLT). This can be done by donating land to the DSCLT, within the City, or through contractual agreements for monitoring long-term affordability restrictions on units that have been set aside to be affordable.
    - Encourage the provision of employee-occupied rental units within commercial and public facilities.
    - Coordinate with other area communities to identify and implement regional strategies for addressing affordable housing needs.
- DSHA encourages municipalities receiving federal funds for housing to be aware of their Civil Rights obligations at the U.S. Department of Housing and Urban Development (HUD). Specifically, federal fund recipients are obligated to Affirmatively Further Fair Housing (AFFH) by taking proactive steps to promote racially, ethnically, and socioeconomically diverse communities.

Department of Agriculture – Contact Scott Blaier 698-4532

- The Department of Agriculture appreciates the city's desire to preserve trees on page 35. The Department's Forest Service would be glad to assist the city in meeting their future urban forestry and tree canopy needs and goals.

Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

The Department 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'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 City in a collaborative manner to discuss these recommendations and possible future ordinances.

Page 11, Stormwater Management

- The Department recommends that the City of Lewes incorporate a requirement for a stormwater review into the City'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:

  1. Submit a Stormwater Assessment Study for the project limits of disturbance and hold a project application meeting with the reviewing delegated agency,
  2. Submit stormwater calculations, and
  3. Submit construction drawings

  Following the project application meeting, a Stormwater Assessment Report will be completed by the reviewing agency and the developer and forwarded to the City. 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 City consider the ratings from the Stormwater Assessment Report in making a decision to issue preliminary approval for any development request. Further, the Sediment and Stormwater Program recommends that the City incorporate the Stormwater Assessment Report as a required element when a plan is submitted to the City's 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 City. 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.

Pages 17-20, Open Space 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.

  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 closely aligned with 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.

  For the purpose of refining data and research findings, Delaware was divided into five planning regions; the City of Lewes is located within SCORP Planning Region 5. Placing high importance on outdoor recreation resonates throughout the five SCORP regions. In Region 5 (Eastern Sussex County), 65% said it was very important to them personally.

  <u>Outdoor Recreation Needs/Priorities</u>

  Based on the 2011 public opinion survey, the most needed outdoor recreation facilities in Region 5 include:

  High facility needs:
  - Walking and Jogging Paths
  - Bicycle Paths

- Public Swimming Pools
- Community Gardens
- Fishing Areas
- Off-Leash Dog Areas
- Picnic Areas
- Basketball Courts
- Playgrounds

Moderate facility needs:
- Hiking Trails
- Boat Access
- Canoe/Kayak Launches
- Camping Areas
- Ball Fields
- Football Fields
- Public Golf Courses
- Soccer Fields
- Tennis Courts

Page 21, Water Recharge Areas and Wellhead Protection Areas

DNREC applauds the City's Source Water Protection Ordinance for its protection of the resource and its intent to annex the land at the location of their wellfield.

- The Comprehensive Plan must contain the following elements per the Memorandum of Understanding between the Office of State Planning and Division of Water dated July 2011.

  Counties and Municipalities over 2,000 Population (as reported in the most recent decennial Census):

  1) Text of the comprehensive plan must include 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.

     ***Recommendations*:**

     The section that addresses source water protection appears in Part III, Existing Resources and Strategies for Conservation, Significant Natural Features. While source water protection areas are significant natural features, they are more closely aligned with water supply. Therefore, DNREC recommends moving the discussion to page 12, Drinking Water.

While there is a discussion comparing the City's regulations to the County's, a description of source water requirements in 7 Del. C. 6082(b) was not included.

2) 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 datasets[1] provided by the Department of Natural Resources and Environmental Control (DNREC).

Recommendation: The map should include the entire wellhead protection area even though it extends outside the City's municipal boundaries. A review of the map found several wellhead protection areas that are abandoned. The map should be updated using the most current dataset.

[1]http://www.nav.dnrec.delaware.gov/DEN3/DataDownload.aspx

Wildlife Habitat

- Some of the areas identified for annexation either include or border wetlands that are mapped as key wildlife habitat because they are part of large complexes that can support an array of plant or animal species. It would be best for future land use plans to consider options that will not impact these habitats. Leaving these areas undeveloped for wildlife is appropriate; to ensure that the integrity of the wetlands are not compromised, we often recommend 100-foot vegetated buffers.

  The open space recommendations in the comprehensive plan focused solely on recreation and did not address other potential uses for open space, like wildlife. DNREC recommends leaving some open space for habitat and wildlife, where appropriate.

Air Quality

- Sussex County, Delaware is classified as non-attainment for not meeting federal and state 8-hour ozone standards. The City of Lewes is encouraged to implement transportation alternatives and land use measures that will substantially enhance air quality and reduce air emissions. This need is especially apparent during "the summer tourist season [when] the population can swell by 300 to 400 percent, causing some transportation problems in the region and in Lewes (page 29). DNREC fully supports efforts that improve traffic flow and reduce vehicle emissions, as are its residents who listed "uncongested roadways" as their second most important quality of life concern (page 60). DNREC also supports efforts to provide tie-ins to the nearest bike paths and links to any nearby mass transport systems including parks, public and cultural facilities and residential neighborhoods.

  With the volume of Lewes citizens commuting to work by car, truck or van alone projected to reach 75 percent in 2013 (page 28) and 43.6 percent of the population being aged 65 and older in 2010 (page 4), it is imperative that transportation mitigation

measures be taken at the local level to improve the quality of life of Lewes residents. Lewes is a growing retirement community and the elderly are considered a high-risk demographic for the potentially damaging effects of air pollution.

There are additional measures that can be implemented to reduce the impact of growth and development on air quality in Lewes. The Division of Air Quality point of contact is Lauren DeVore, and she can be reached at lauren.devore@state.de.us or at (302)739-9437.

Flooding and Sea Level Rise.

- Lewes is to be commended for recently completing a vulnerability assessment of its critical infrastructure and evacuation routes. The study examined risks of flooding from coastal hazards including sea level rise. Portions of infrastructure and the evacuation routes will be subject to more frequent inundation as sea level rise continues to accelerate. According to the vulnerability study, the following 5 sites rose to the top of the priority list for attention: Savannah Road by the electrical sub-station and wellfield; New Road at Canary Creek Bridge; Savannah Road on the north side of the Canal Bridge to Massachusetts Avenue; Cape Henlopen Drive at Freeman Highway; and Cedar Avenue's west end.

  Lewes's 2015 Comprehensive Plan recommends improving safety and evacuation capacity by elevating New Road at Canary Creek Bridge and Savannah Road on the north side of the Canal Bridge. It recommends annexing land that would give Lewes greater control over future improvements at Savannah Road by the electrical sub-station, but it does not address the intersection of Cape Henlopen Drive and Freeman Highway or the west end of Cedar Road. Lewes is strongly encouraged to address flood risks at these two locations because they are critical to the safe and timely evacuation of residents and visitors. Further, the City should consider adopting innovative stormwater management strategies in addition to elevating roadways and infrastructure at all 5 locations.

  It is a concern that the City proposes to encourage business development along Savannah Road on the beach side, north of the Canal. This area is extremely prone to flooding and is ranked third in the vulnerability study. Business development should not be encouraged in this zone without adequate controls in place. At a minimum, the City should delay new development in the marine commercial zone until the roadway is elevated and other stormwater mitigation measures are completed. In addition, the City should consider special designs and building codes for this district which require additional freeboard on top of the minimum guidelines in place in Lewes, and other strategies such as permeable pavements for parking areas and sidewalks, rain gardens, and smaller lot coverage for buildings.

  DNREC supports the City's efforts to plan and improve your coastal resiliency. In multiple places the plan refers to "The City of Lewes Hazard Mitigation and Climate Adaptation Action Plan," (June 2011)

(http://www.ci.lewes.de.us/pdfs/Lewes_Hazard_Mitigation_and_Climate_Adaptation_Action_Plan_FinalDraft_8-2011.pdf). This plan is now five years old and should be updated with new information including the results of the vulnerability assessment. The updating process would be an ideal platform to educate residents and visitors about the risks of flooding from storms, extreme tides and sea level rise.

Recommendations:

1. Mitigate flood risks at all 5 of the sites most at risk, per the 2016 Evacuation Route & Critical Infrastructure Vulnerability Study.
2. In addition to elevating roadways, investigate the feasibility and effectiveness of permeable pavements, bioswales and other innovative stormwater management strategies for the top 5 sites.
3. Work with BPW to ensure appropriate updates to the electric system, stormwater, waterworks and sewer system to accommodate projected sea level rise.
4. The City should discourage new development within high risk areas of the City, such as the beach side of Savannah Road. Where such development cannot be avoided, the City should adopt more stringent freeboard requirements and other design and land use controls to protect the health, safety and general welfare of businesses and people.
5. Update the City's 2011 Hazard Mitigation and Climate Adaptation Plan to incorporate findings from the vulnerability study and other new data from the past 5 years. Use this opportunity to engage and educate citizens about flood risks and other climate hazards.
6. Post the 2016 Vulnerability Study on Lewes's public website.
7. 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.

Preparing for a Changing Climate.
Overall, the City did an excellent job of incorporating climate change impacts, primarily focusing on flooding. In particular, DNREC is pleased to see these items:

Climate Change and Hazard Mitigation (pp. 23 – 27) Includes reference to (and key excerpts from):

- 2011 Hazard Mitigation and Climate Adaptation Action Plan
  - Describes vulnerabilities of the wastewater treatment plant
- 2013 Quinn Report
- Climate Framework for Delaware

    - Identifies agency-specific adaptation recommendations of importance to the City
    - This section also includes strategies to address flooding and sea level rise
    - Opportunities for coordination with DNREC, DelDOT, UD on flood monitoring, improving evacuation routes, protecting and enhancing marsh habitats, relocation of historic structures, and use of green BMPs.
  - The Environmental Protection Plan (p. 27) is surprisingly short, but it does restate and reinforce some of the climate adaptation recommendations. This redundancy is a good thing – climate change is both highlighted and integrated into this document.
  - Analysis and Comparison of other Relevant Planning Documents (pp. 48 – 50) is very good. It includes reference to State Strategies (however, this refers to the 2010 version, which should be updated to the 2016 version). It also references other Comprehensive Plans for Rehoboth and Sussex County and notes where regional issues should be addressed (e.g., Lewes-Rehoboth Canal, land use in county jurisdiction).
  - Intergovernmental Coordination Strategy (pp.55 – 58) is very good. It underscores the responsibilities of the City (and its departments, particularly the Board of Public Works) and also the role of state agencies that provide technical and financial support for implementing many of the recommendations in the Plan.

A few areas that could be strengthened or clarified:

- Flooding impacts to water and wastewater systems are clearly a high priority issue to the City, so these sections need to be clear and consistent with other parts of the plan.

  In the "Services and Utilities" section, Stormwater, Drinking Water, and Wastewater are discussed (pp. 11 – 13)

  - Drinking water source is from an unconfined aquifer, susceptible to contamination from sewage, spills, etc. Saltwater intrusion may be a potential concern; test wells are currently monitored. The City's wastewater treatment plant (WWTP) is located in the floodplain. An excerpt from the Climate Change Adaptation Plan describes the "serious risk" to the community of damage from flooding. However, the plan notes that "The BPW has had the WWTP evaluated and an elevation certificate was issued showing the plant to have nine feet of freeboard above the 100-year floodplain. In the event of the access road being flooded, the BPW has a plan for critical staff to access the WWTP by boat."

- In the "Significant Natural Features" section, Water Recharge Areas/Wellhead Protection Areas and FEMA Flood Zone Maps are discussed (pp. 21 – 22)

  - The plan notes that recharge and protection areas are essential to ensuring quality and quantity of groundwater for drinking water systems, and that salt water intrusion can be exacerbated by groundwater consumption.

- The plan also states that "Neither FEMA nor the State nor Lewes prohibits development within the FEMA flood zone areas." However, it goes on to note that updates to the City's zoning codes include certain additional requirements in the floodplain.
- In the Climate Change and Mitigation section (pp. 23 – 24) there is an excerpt from the 2011 Climate Adaptation Action Plan that identified 34 critical facilities; "of special concern" is the City's wastewater treatment plant, located in the floodplain.

- All three sections have related discussion on the potential impacts of flooding, and particularly the risk of contamination from WWTP overflows (which did occur in 2012 during Hurricane Sandy).

- The plan notes that the City has a 20-year plan for wastewater, recently updated in 2015. Similarly, the City has a 10-year plan for drinking water, updated in 2010. Both of these plans should address resilience of these systems as well as their capacity to meet future demands.

- Preparedness for extreme weather events is suggested in several places in the Plan, primarily in reference to evacuation routes. Other current and future risks are posed by severe storms (including extreme precipitation and/or wind), drought, and extreme heat events. While these may be less frequent, and therefore of less concern, than flooding events, the Comp Plan is an opportunity to identify existing or potential resources to help the community shelter in place when these events occur. Some considerations include:

  - Demographics: Nearly 37% of the population are age 65 and older and live alone.
  - Housing stock: 57% of homes were built before 1980. (Older homes are less likely to have efficient air conditioning, are more difficult to maintain efficient heating and cooling, and have lower structural resilience to storms and flooding.)
  - Existing resources: The Plan mentions plans for expansion of Beebe Health Care. The local library has recently expanded. Both of these facilities may offer community shelter resources (e.g. cooling centers during heat waves).

Brownfields

Brownfields are real property that may be vacant, abandoned or underutilized as a result of a reasonably-held belief that they may be environmentally contaminated (7 Del.C., § 9103(3)). Productive use of these idle properties provides "new" areas for economic development, primarily in former industrial/urban areas with existing utilities, roads and other infrastructure.

***Recommendation*:**

- DNREC encourages the development of Brownfields and can provide grant funding and other assistance when investigating and remediating Brownfield sites.

The Delaware Brownfields Marketplace is an interactive database that contains a list of market-ready Brownfield sites throughout Delaware. The inventory is designed to make it easier for potential buyers and developers to locate available Brownfield properties. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and helps to create jobs for Delaware citizens, while preserving Delaware's precious green space and natural resources.

***Recommendation*:**

- To add sites in your municipality to the Marketplace (with owner approval) or to determine if any sites in your municipality are Brownfields, please contact Melissa Leckie at DNREC's Site Investigation and Restoration Section at (302) 395-2600 or by e-mail at Melissa.Leckie@state.de.us . For more information online, please visit: http://apps.dnrec.state.de.us/BFExt/BFExtMain.aspx

Recommendations for Ordinances and Plan Implementation

Wetlands Delineations:

- ***Recommendation*:** Require all applicants to submit to the City 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 a condition of 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 into account all constructed forms of surface imperviousness - including all paved surfaces (roads, parking lots, and sidewalks), rooftops, and open-water stormwater management structures.

- ***Recommendation***: To encourage compact development and redevelopment in the City's central business area, require an impervious surface mitigation plan for all residential and commercial development outside that area exceeding 20% imperviousness, or at least in excellent recharge areas outside of 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" stormwater management in lieu of "open-water" stormwater 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 (TMDL) for nitrogen, phosphorus, and bacteria. Reach out to Sussex County, the Conservation District, and the Delaware Clean Water Advisory Council as partners in funding stormwater retrofits.

Drainage Easements:

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

Sussex County – Contact Janelle Cornwell 855-7878

- Sussex County does not expect provide Sanitary Sewer Service within the boundary of the City of Lewes. Sussex County provides sanitary sewer service to an area east and south of the City of Lewes, through the West Rehoboth Expansion of the Dewey Beach Sanitary Sewer District (WRSSD). Some areas shown as future annexation areas of Lewes, extend into the WRSSD. The areas are east and south of the city's boundary along Gills Neck Road and includes the city's well field and an adjoining parcel. Sussex County will continue to provide sewer service in those areas if they are annexed into Lewes. Those lands have been provided sewer capacity of 4.0 equivalent dwelling units per acre on the basis of the County's agricultural/residential zoning (AR). If areas within the sewer district are annexed into the City of Lewes, the city's annexed areas should reflect that density to assure that sewer capacity is adequate. Sussex County does not expect to provide sewer service to parcels shown in the annexation north of Savannah Road.

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.

- 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,

Connie Holland

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

Cc: Sussex County