



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF STATE PLANNING COORDINATION

March 24, 2014

Michael Fortner, AICP  
Principal Planner/Development Supervisor  
City of Newark  
220 South Main Street  
Newark, DE 19711

RE: PLUS review 2014-02-03; Newark Comprehensive Plan Pre-Update

Dear Michael:

Thank you for meeting with State agency planners on February 26, 2014 to discuss the update of the City of Newark'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.

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**Office of State Planning Coordination – Contact: Herb Inden 739-3090**

The Office of State Planning Coordination again greatly appreciates the City of Newark participating in another Pre-PLUS review this time with a completed draft of your comprehensive plan update. As you know the Pre-PLUS review is intended to make the certification process much smoother for the City as you will know up front what potential issues concerns there are from state agencies and also be informed of state code and departmental administrative changes since your last plan was adopted and before you prepare a final draft for PLUS review.

As we said from the previous Pre-PLUS review, we recognize the effort the City has and continues to put into updating its comprehensive plan, including the use of a new format. This is no easy task and we want you to know that we are here to help in any way we can. Additionally, if you feel it is necessary, you can request a submission extension as we understand how big a task this is and the importance of doing the best job possible may take more time than originally anticipated.

Finally, we concur with the DelDOT recommendation to do a thorough proofreading of this document before you release it to the public as we did notice a number of typos and such.

### **Recommendations/Additional Information**

This section includes a list of site specific suggestions that are intended to enhance the project. These suggestions have been generated by the State Agencies based on their expertise and subject area knowledge. **These suggestions do not represent State code requirements.** They are offered here in order to provide proactive ideas to help the applicant enhance the site design, and it is hoped (**but in no way required**) that the applicant will open a dialogue with the relevant agencies to discuss how these suggestions can benefit the project.

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

- DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access include their regulations on Transportation Improvement Districts (TIDs). Specifically see Sections 2.3.4 and 2.13 (available at [http://www.delDOT.gov/information/pubs\\_forms/revisions\\_to\\_ASR/TrafficImpactStudies\\_DraftRegulationAmendment130214.pdf](http://www.delDOT.gov/information/pubs_forms/revisions_to_ASR/TrafficImpactStudies_DraftRegulationAmendment130214.pdf)). These Districts are formed by agreement between DelDOT and the relevant local governments. Their purpose is to plan comprehensively, to expedite the development approval process and to provide adequate infrastructure in areas where development is to be encouraged. These regulations, among other things, require that the Districts be identified in local governments' comprehensive plans.

DelDOT sees that the draft Plan includes an Action Item to create a TID for Newark's Downtown Core. DelDOT looks forward to working with the City in this regard. The City may contact me to begin work on a TID Agreement when they are ready to proceed.

With regard to locating the regulations cited above, the City should be aware that DelDOT expects to advertise an update of DelDOT Standards and Regulations in the May 2014 Register of Regulations. While changes to the content of DelDOT TID regulations are not contemplated, the section numbers cited above are likely to change.

- Also in DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access, there are two subsections within Section 2.9.12.1 that provide for exceptions to DelDOT's Level of Service (LOS) standards with regard to Traffic Impact Studies (TIS). Generally, those standards are LOS C in rural areas and LOS D elsewhere. However, where a local government, as part of its adopted comprehensive plan, determines that acceptance of a lower LOS (D, E or F) is necessary and appropriate to the pattern of development they seek to create, DelDOT will consider that local government's standards. Similarly, where a development is proposed in an area, or on parcels, designated as a "re-development" site by either state or local government, with local government concurrence DelDOT may accept the existing LOS.

DelDOT recommends that the City read Section 2.9.12.1 (available at [http://www.delDOT.gov/information/pubs\\_forms/manuals/subdivisions/pdf/Subdivision\\_M anual\\_Revision\\_1\\_proposed\\_060110.pdf](http://www.delDOT.gov/information/pubs_forms/manuals/subdivisions/pdf/Subdivision_M anual_Revision_1_proposed_060110.pdf)) and consider whether they want to identify a lower LOS standard for some parts of downtown Newark or to designate some area or areas for redevelopment. The redevelopment provision does not require language in the comprehensive plan but the plan seems like an apt place for it.

Presently DelDOT expects to advertise an update of DelDOT regulations in the May 2014 Register of Regulations. While changes to the content of DelDOT LOS standards are not contemplated, the section number cited above is likely to change.

- These comments are confined to Chapter 6 (Transportation) of the Plan and should be read in that context. In contrast to DelDOT's previous comments, which focused on DelDOT regulations, these comments are primarily editorial suggestions as to how the document could be strengthened. Please convey the comments below in addition to those DelDOT sent to you on February 27 (copy enclosed).
- DelDOT believes a better use of the introductory paragraphs would be to state how the transportation system needs to perform in order to support the Plan.
- The section labeled Background could, perhaps more appropriately, be labeled "Current and Future Demand Characteristics." Doing so would eliminate the need for the first paragraph to be in Chapter 6. DelDOT would expect all or most of the information in that paragraph to be available elsewhere in the Plan.
- The section labeled Transportation Planning and Implementation lists accomplishment in complying with the recommendations of the 1998 Plan. The list seems unnecessary in a forward-looking document. DelDOT suggests that it be removed.
- The "Key Focus Areas" from the Newark/Elkton Intermodal Transportation Plan seem to be the essence of the chapter but they are found six pages into it. DelDOT recommend that this section be moved to the front.
- To repeat a recommendation from DelDOT's September 4, 2013, comments from the August 2013 PLUS review, while DelDOT respects the City's right to set its own goals, DelDOT suggest that the relocation of the CSX railroad line is unrealistic. No source of funds or possible alignment for the relocation is suggested, and the rail line has been there longer than most of the development along it. If the line is the concern for the City that the Plan suggests, DelDOT recommends that they consider beginning to plan for buffering and/or compatible uses along it. These changes would need to be implemented over a long period but they seem more feasible than the proposed relocation. Another goal the City might consider is grade separation of the railroad and North College Avenue, where it seems possible to take the road under the railroad. This would be an expensive and impactful project, but again it seems

more feasible than the relocation of the rail line.

- DeIDOT recommends a thorough proofreading before the chapter is advertised for public comment.

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

- **Chapter 4, Public Utilities and Infrastructure**

**Water Allocation.** Newark’s current water allocation permits total 2.15 billion gallons (BG) per year, 55% more than the current annual water use. With a projected 20-year population growth of only 3% (0.15% per year), the current allocation is expected to be more than adequate.

The sum of groundwater allocations for the City is more than 1.5 BG per year, enough to cover the expected demand over 20 years without relying on any surface water supply. However, the City has not yet completed the investigation of contamination in the Columbia aquifer well field, and the full groundwater allocation may not be available if the contamination cannot be easily remediated. In 2013, only 4 wells were used, and only 31% of the total water supply was groundwater. The other wells remained unused because of contamination, cost of operation, and maintenance issues. It has not been reported to the Department what percentage of allocated groundwater can actually be used to meet future demand.

In 2013, the City used 741 million gallons (MG) from its White Clay Creek intake, exceeding the allocation of 648 MG. This overuse was necessary because of the contamination issue in the well field. However, the allocation was calculated based on stream flow and protection of species in White Clay Creek, and this volume may not be available in dry years. Future water use must make use of a greater number of the City’s facilities and not rely so heavily on a few sources.

As seen in the City’s 2013 water usage, there is a considerable amount of maintenance that needs to be done to be able to meet future demand. Although it is fortunate that very slow growth of resident population is expected, the proposed plan does not address water use by students, who comprise 34% of the City’s total population when they are present.

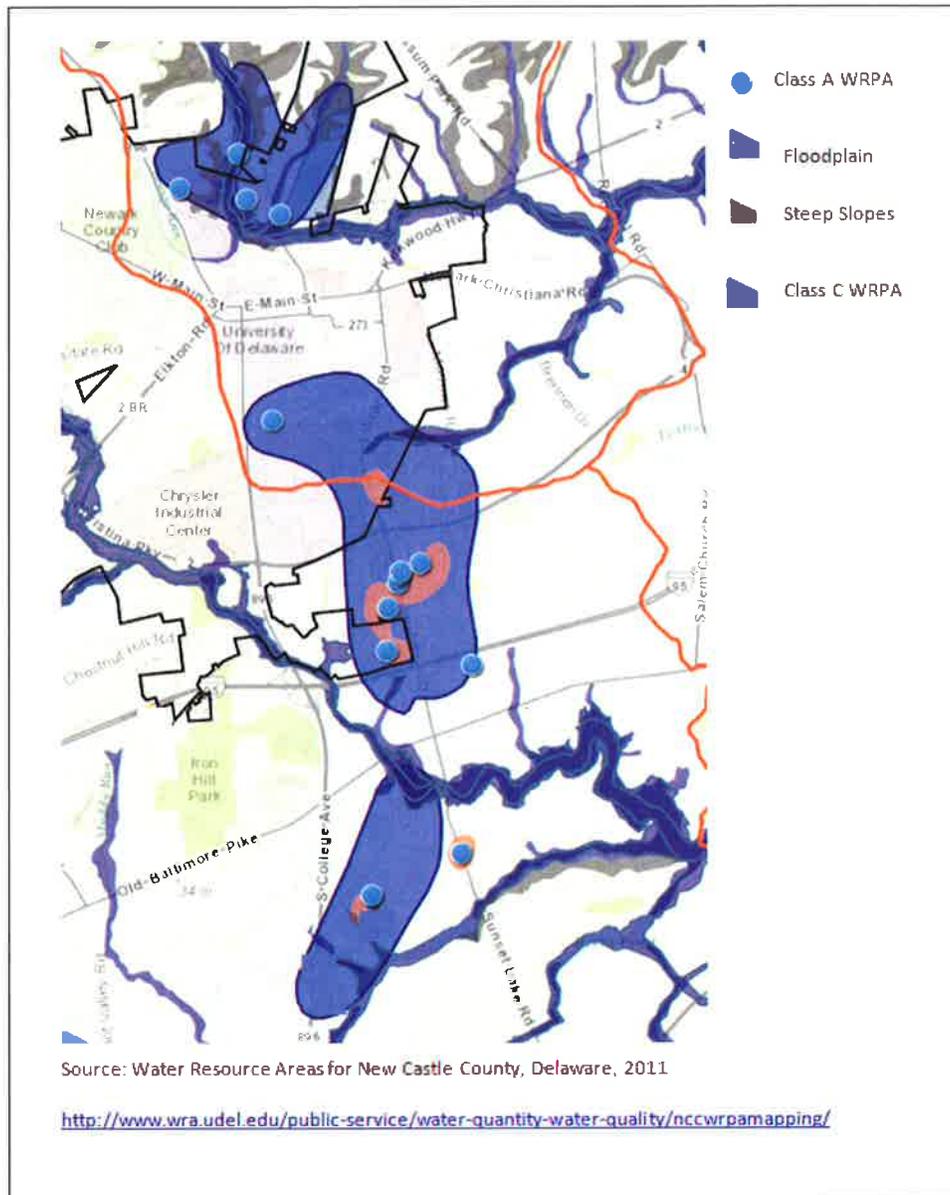
*Recommendation:* The population and water use breakdown in the proposed plan should be expanded to include projected water use by non-resident students. The plan should also include a more detailed breakdown of which wells will be brought back online to reduce the use of surface water to allocated volumes.

**Source Water Protection.** The Comprehensive Plan **must** contain the following elements per the Memorandum of Understanding between the Office of State Planning Coordination and the Division of Water, dated July 2011.

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

- Text of the comprehensive plan must include description of source water requirements in 7 Del. C. 6082(b)<sup>1</sup>, and include goals and objectives related to the protection of the resource. This text shall be placed within the water and sewer element of the local government's comprehensive plan, as prescribed by Title 9 or Title 22 of the Delaware Code.
- A map of source water resources (excellent recharge areas, wellhead protection areas) shall be included in the plan. This map must be derived from the most current source water protection datasets<sup>2</sup> provided by the Department of Natural Resources and Environmental Control (DNREC).
- The map and plan text must clearly include the note that the regulatory provisions of any source water ordinance<sup>3</sup> will refer to the most current source water protection datasets<sup>1</sup>.

1. <http://delcode.delaware.gov/title7/c060/sc06/index.shtml>
2. <http://www.nav.dnrec.delaware.gov/DEN3/DataDownload.aspx>
3. <http://library.municode.com/index.aspx?clientId=10128>
  - a. Chapter 30, Article VII



**Wastewater (Referred to as “Sewage” on page 32).** *Recommendation:* This section should include language that addresses the adequacy of the New Castle County transmission system and the Wilmington Regional Wastewater Treatment facility to accommodate Newark’s growth over the next twenty years.

**Stormwater Management.** *Recommendation:* This section should include language that refers to the new sediment and stormwater regulations that went into effect in January 2014, giving a brief description of the new regulations and how that will impact Newark as a delegated agency for sediment and stormwater management plan reviews.

- **Chapter 7, Environmental Quality and Natural Environment**

**TMDLs.** *Recommendation:* Move the discussion of TMDLs (a water quality issue), using the following language, from page 33, Chapter 4, Public Utilities and Infrastructure (under the heading of Stormwater Management), to Chapter 7, Environmental Quality and Natural Environment:

Under Section 303(d) of the 1972 Federal Clean Water Act (CWA), states are required to identify all impaired waters and establish total maximum daily loads to restore their beneficial uses (e.g., swimming, fishing, drinking water, and shellfish harvesting). A TMDL defines the amount a given pollutant (i.e., or the pollutant loading rate reduction for a given pollutant) that may be discharged to a water body from all point, nonpoint, and natural background sources; thus enabling that water body to meet or attain all applicable narrative and numerical water quality criterion (e.g., nutrient/bacteria concentrations, dissolved oxygen, and temperature) in the State of Delaware’s Water Quality Standards. A TMDL may also include a reasonable margin of safety (MOS) to account for uncertainties regarding the relationship between mass loading and resulting water quality.

In simplistic terms, a TMDL matches the strength, location and timing of pollution sources within a watershed with the inherent ability of the receiving water to assimilate that pollutant without adverse impact. The realization of these TMDL pollutant load reductions will be through a pollution control strategy (PCS). A Pollution Control Strategy (PCS) identifies the specific strategies and actions (e.g., best management practices) necessary for reducing pollutants in a given water body (or watershed), thus realizing the water quality criterion or standards set forth in the State of Delaware’s Water Quality Standards, ultimately leading to the restoration of a given water body’s (or watersheds) designated beneficial use(s). Currently, the PCS for Christina River Basin contains only non-regulatory recommendations.

The City of Newark is located within the Piedmont drainage, specifically within the greater Christina River Basin. The Christina River Basin includes the Christina River Sub-basin and the White Clay Creek Sub-basin. In this Basin, specifically-designated nutrient (nitrogen and phosphorus) and bacterial TMDL load reduction requirements are displayed in the following table (Table 1):

<b>Piedmont Drainage</b>	<b>N</b>	<b>P</b>	<b>Bacteria</b>
Christina River Basin	Capped at pre-development baseline (0% increase allowed)	Capped at pre-development baseline (0% increase allowed)	29-95% High Flow

Table 1: TMDL reduction requirements for the Christina River Basin

*Recommendation:* In this chapter, DNREC would expect the City to discuss issues like Total Maximum Daily Loads (TMDLs) and water quality, wetlands/water bodies/buffers, air quality, floodplains (please be advised that new Flood Insurance Rate Maps are available), wildlife habitat (how the City intends to preserve and enhance), and urban forestry.

**Brownfields.** *Recommendation:* Move the discussion of brownfields from page 34, from Chapter 4, Public Utilities and Infrastructure (under the heading of Stormwater Management), to Chapter 9, Economic Development. Brownfields are typically discussed under the heading of “Redevelopment.”

- **Chapter 8, Parks, Recreation, and Open Space**

*Recommendation:* Page 98, Goal 1, Action Item 1: Please replace “the Delaware Division of State Parks” with “the Delaware Division of Parks and Recreation.”

*Recommendation:* Please see information to include in the Plan at [http://www.dnrec.delaware.gov/parks/Information/Documents/nemours-brief/2011.05.33%20Newark%20Insert\\_alt.pdf](http://www.dnrec.delaware.gov/parks/Information/Documents/nemours-brief/2011.05.33%20Newark%20Insert_alt.pdf). In addition, the 2009-2011 Statewide Comprehensive Outdoor Recreation Program (SCORP) identified the following:

### Newark Outdoor Recreation Facility Needs

#### High Priorities

Walking or Jogging Paths  
Bike Paths  
Hiking Trails  
Trails  
Playgrounds  
Courses  
Swimming Pools  
Open Space/Passive Recreation  
Access to Historic Sites  
Beach Access  
Picnic Areas  
Fishing Access

#### Moderate Priorities

Nature Programs  
Basketball Courts  
Baseball/Softball Fields  
Camping Areas  
Golf Courses  
Tennis Courts  
Soccer Fields  
Canoe/Kayak Access  
Football Fields  
Volleyball Courts  
Mountain Bike Trials  
Rollerblading/Roller-skating  
Areas

#### Low Priorities

Skate Parks  
Powerboat Access  
Equestrian  
Disc Golf  
Lacrosse Fields  
Hunting Areas  
ATV Trails  
Roller Hockey Areas  
Dog Parks

- **Sustainability.** *Recommendation:* Newark may want to group its discussion of Green Energy (Green Energy, McKees Park Solar Project) and Conservation (Energy Conservation, Newark LEED Program, Recycling and Reuse, and the U Don’t Need It Program), present its health and sustainability visions and goals, and discuss issues like resiliency, assessment of infrastructure vulnerabilities in increased temperature and

precipitation scenarios, green buildings, etc., in a subsection of Chapter 7 or as a stand-alone chapter entitled “Sustainability.”

### **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 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 City’s central business area, require an impervious surface mitigation plan for all residential and commercial developments exceeding 20% imperviousness outside that area, or at least in excellent recharge areas outside that area. The impervious surface mitigation plan should demonstrate that the impervious cover in excess of

20% will not impact ground water recharge, surface water hydrology, and/or water quality of the site and/or adjacent properties. If impacts to groundwater recharge, surface water hydrology will occur, the plan should then demonstrate how these impacts will be mitigated. If the impacts cannot be mitigated, the site plan should then be modified to reduce the impacts from impervious cover.

- **Poorly Drained (Hydric) Soils:**

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

- **Green Technology Stormwater Management:**

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

- **Stormwater Utility:**

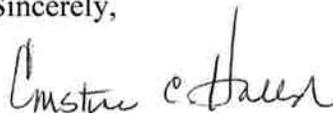
*Recommendation:* Explore the feasibility of a stormwater utility to fund upgrades to existing stormwater infrastructure. Upgrades to the stormwater system may reduce pollutant loads and help reach the established total maximum daily load for nitrogen, phosphorus, and bacteria. Reach out to the New Castle Conservation District, New Castle County, 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 is none.

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, appearing to read "Constance C. Holland".

Constance C. Holland, AICP

Director, Office of State Planning Coordination