



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

April 20, 2010

Mr. David Raughley
Town of Townsend
P.O. Box 223
Townsend, DE 19734

RE: PLUS review –2010-03-02; Town of Townsend Comprehensive Plan Update

Dear Mr. Raughley:

Thank you for meeting with State agency planners on March 24, 2010 to discuss the proposed Town of Townsend draft comprehensive plan update.

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:

There are no certification issues with the plan as reviewed.

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

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

The Office of State Planning Coordination would like to commend Townsend for preparing a well crafted and thorough comprehensive plan update. The plan document and map series are very extensive, and represent a detailed vision for the future growth and development for the Town. In particular, we want to thank you for your patience in working this document through the master planning process for the Southern New Castle County area. Though time consuming it is our hope that overall benefits of having such a process will benefit all the residents of this area.

State Historic Preservation Office (SHPO) – Contact: Terrence Burns 739-5685

The Town of Townsend’s update to its comprehensive plan exhibits strong support for the preservation of its historic district and small-town character.

The SHPO applauds its goals and the thread of historic preservation values that can be seen throughout the plan, for instance, in noting the need for storm-water management in the historic area that does not damage the historic setting. Setting up a historic review board will greatly help the Town meet its historic preservation goal, and steering its citizens to participate in the State’s Historic Preservation Tax Credit program will help with maintenance issues. The establishment of open space areas will help preserve archaeological sites if appropriately placed, but storm-water management ponds can damage such sites if not placed carefully.

A consideration for archaeological site protection could be included in the Town’s development review process. As always, they would be happy to provide technical assistance to the Town or its citizens in any of these endeavors, and if you have any questions or concerns, please contact Alice Guerrant at 302-736-7412.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

As a general comment, DelDOT would like to recognize and express their support for the several aspects of the Plan: the proposed Transfer of Development Rights program; the emphasis on connectivity and walkability, especially the section on reducing the impact of the car; and the emphasis on Storm Water Management Best Management Practices. With that said, DelDOT offers the following suggestions:

- Section 2-1g hints at but does not directly address the issue of developing and/or maintaining a sense of community within the Town. In a period of rapid growth, such as occurred in Townsend between 2000 and 2007, it is difficult ensure that new residents think of themselves as Town citizens and become involved in the life of the community. The fire company’s difficulty in finding volunteers who live in the Town may be indicative in this regard. Section 2-6.3 shows that the Town is aware of the situation and working to address it, but it would be appropriate to mention that in Section 2-1g.
- In Section 2-2a, there are references to the “Planning & Zoning Commission,” a “town planning commission,” a “planning commission, and a “zoning committee.” These all appear to be the same body. For clarity, it is recommended that one term be used consistently.
- In Section 2-2b, the Plan mentions that funding has been requested from DelDOT for streetscaping on Main Street to develop more foot traffic. The funding is Transportation Enhancement (TE) funding and the project is scheduled for construction beginning this fall. The Town may want to update the Plan in this regard.

- In several places, the street names in the text do not precisely match the street names on the maps. For example in Section 2-3 there is a reference to “Faulk Road and Chestnut Road,” which are shown on the maps as “Faulkland Street and Chestnut Street.” It is recommended that the Plan be edited by someone familiar with the correct street names.
- In Section 2-4a, the Plan recommends consideration of creating a new agricultural zoning district that would permit one dwelling unit per five acres in the greenbelt. Creation of an agricultural zoning district seems consistent with the Town’s stated desire to establish a greenbelt and DelDOT is not opposed to the Town creating a district that would permit one dwelling unit per five acres but these are two very different things and the Town should decide which one it wants. One unit per five acres is a low residential density but the proliferation of five acre lots would discourage, not encourage, agriculture.
- Section 2-5. Transportation:
 - a) In the section on Traffic Counts, DelDOT would caution against the approach that was taken, apparently comparing volumes from DelDOT’s 2000 and 2006 Traffic Summary reports as though they were counted in those years. In some cases, they were and in some they were not. Resource constraints keep us from counting traffic on every road segment every year. To create the Traffic Summary reports, they count the road segments on a rotating basis and update the old counts using factors developed using data from permanent counter stations located on similarly classified roads. While these volumes can be helpful for some purposes in the absence of actual counts, they can be misleading when used to identify increases or decreases in traffic. In the Traffic Summary reports, the 6th column from the left indicates the year that the most recent count was done for the road segment.
 - b) While it is not a Park and Ride lot, because it has no transit service, DelDOT suggests that the Town may want to mention the Park and Pool lot at Pine Tree Corner (US Route 13 and Pine Tree Corner Road) somewhere in this section.
 - c) Regarding the paragraph titled County Park Intersection, South Street and Commerce Street are both State-maintained streets. DelDOT appreciates that the Town wants to take an active role in providing for traffic safety within the Town limits, but any plan to realign or otherwise change these streets is subject to our approval. As a first step in that regard, they recommend that the Town meet with our Traffic Studies Engineer, Mr. Tom Meyer, to discuss options that do not involve realignment and might therefore be done more quickly and at less cost. Mr. Meyer may be reached at (302) 659-4090. If a realignment is unavoidable, the Town should contact Mr. Drew Boyce, the Assistant Director for Project Development North in our Division of Transportation Solutions. If the improvement is to be done as a Town project, he will want to designate a liaison person to work with the Town’s engineer. If the improvement is to be done as a

State project, his office would be responsible for the design. Mr. Boyce may be reached at (302) 760-2276.

- d) DelDOT recommends that the paragraph on the Route 71 and Main Street Intersection be further developed. They have a project under construction to improve the pedestrian crossing there, but the concern about the turn lane, is new to us. From the text, it appears that a left turn lane from northbound Route 71 is desired. By their nature, left turn lanes generally cannot be added to one leg of an intersection without affecting the other legs as well. We recommend that the Town work through the Wilmington Area Planning Council (WILMAPCO) to have a project to improve this intersection added to their Transportation Improvement Program and the Capital Transportation Program.
- e) DelDOT recommends that the paragraph on Highway Capacity be further developed and perhaps re-titled. "Highway capacity" is a technical term referring to the volume of vehicles that can pass through a facility, such as an intersection, in a certain amount of time. Outside of the Route 71 corridor, they do not foresee a situation where capacity could become a significant issue for the Town. Again outside of that corridor, we would expect other issues, such as drainage and safety to be much more important.
- f) The paragraph about truck traffic on residential streets raises a valid point, that the Town should begin planning for a truck route connecting Route 71 to the industrial area near the railroad tracks. However, for DelDOT to begin working substantively with the Town in this regard they first need to get the project into the Wilmington Area Planning Council's (WILMAPCO's) Long Range Transportation Plan. We suggest that the Town's first step should be to contact WILMAPCO. Also, while it is appropriate to mention the concept of building truck routes in the currently undeveloped areas north and south of the existing Town, DelDOT would urge caution in reserving specific parcels for that use now. If the Town selects a route through a process that does not comply with the National Environmental Policy Act (NEPA), environmental permitting agencies could block its construction. Further, until a route has been selected through the NEPA process it may be difficult for the Town to reserve rights-of-way without buying them.
- g) The sixth Transportation Recommendation is to "Coordinate with DelDOT to find out about the Smyrna-Clayton Bypass and how it will affect Townsend." DelDOT believes this recommendation could be eliminated. Presently there is no established alignment for the bypass and no active or planned effort to identify one. The current Kent County Comprehensive Plan allows for the possibility of such an effort but there is no such effort at this time.

- h) As a general comment, DelDOT recommends a better correspondence between the text of this section and the list of Transportation Recommendations. Presently there are some items mentioned in the text that are not clearly reflected in the recommendations, e.g. the truck route, and there are recommendations without supporting text, e.g. emergency access to northbound SR 1. A reasonable practice that could be applied to the whole Plan would be to number the recommendations and then reference them in the paragraphs where they are developed.
- One of the recommendations in Section 2-6 is to initiate an interagency gateway study of Main Street between Route 71 and the east edge of the town. DelDOT would be happy to participate in such a study.
 - Section 2-7 mentions Edgar Street. DelDOT located this street using a map external to the Plan (on which it is labeled as Edgar Road, see Comment above) but it is not labeled on any of the maps in the Plan. It is recommend that the streets in Townsend Village be labeled on at least one of the maps in the Plan.
 - One of the recommendations in Section 2-7, which is mentioned again in Section 3-1, is for a Memorandum of Agreement concerning the Town's annexation areas and areas of concern. DelDOT supports this recommendation and would be happy to work with the Town in this regard.

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

Overall, DNREC commends the town for its commitment to protecting open space and habitat. If you would like more information on the comments in this letter or help with specific environmentally protective ordinances, please contact Lee Ann Walling, 739-9006, LeeAnn.Walling@state.de.us, so she can coordinate a response to your request(s).

Fish and Wildlife

Page 28, Wildlife Preservation

- 1) DNREC appreciates the Town's recognition that linking open space and preserved areas will benefit wildlife. Wildlife corridors should not be proposed as mitigation for loss of core habitat. However, with careful planning and design, wildlife corridors can help reduce the negative effects of habitat fragmentation by allowing dispersal of individuals between large patches of remaining habitat. An effective wildlife corridor is generally much wider than buffers for water quality or other protective purposes. Wildlife corridors are defined as strips of habitat comprised of natural vegetation that serve as travel pathways for wildlife between two or more larger fragmented areas of habitat. Wildlife corridors are typically found adjacent to streams or wetlands and support the survival of many species by providing sources of food and water, providing protective cover from predators and shelter from harsh weather, and reconnecting isolated

populations. Research studies show a great number of songbirds, game birds, small mammals, reptiles and amphibians, and other wildlife use corridors as a regular part of their life cycles.

- 2) Stormwater management practices that include the following are generally not considered a sustainable practice in terms of wildlife habitat preservation and should be avoided where possible: forest clearing for stormwater basins; locating basins within 100 feet of wetlands and waterways; conversion of valuable isolated wetlands into stormwater facilities; and directing stormwater to habitat that supports rare species sensitive to water quality changes.
- 3) ‘*Delaware* native species’ should be referenced in lieu of ‘native species’ because some nursery and plant suppliers may list a species as native when in fact it is native to America but not necessarily native to Delaware.

Section 2-4. Natural Resources

Isolated Wetlands. The Town should be aware that there are isolated wetlands that occur within the town that are not regulated by the State or the Army Corps of Engineers and impacts to these wetlands are often at the discretion of those that make land-use decisions such as counties, towns and other municipalities. Some of these are forested wetlands occur within areas designated on Map 7b for residential development, future residential development and ‘Greenbelt’. It would be desirable for the Town to consider developing revisions to the zoning, code or ordinance (whichever is appropriate) that would serve to protect isolated wetlands of value.

Isolated wetlands can provide breeding habitat for a variety of animals, including amphibians and invertebrates, and often support a unique and rare assemblage of plants. Isolated wetlands perform many of the same environmental functions as other wetlands, including filtering pollutants, recharging streams and aquifers, and storing flood waters. The lack of regulatory protection for this wetland type in Delaware is not based on science and does not reflect the ecological importance of this wetland type. Other states in the U.S. have state acts and regulations that make no distinction between isolated and non-isolated wetlands.

It is generally recommended that direct impacts to these wetlands be avoided and that at least a 100-foot upland buffer be left intact.

Rare Species. Rare species and Species of Greatest Conservation Need (SGCN¹) have been documented within current Town boundaries (primarily associated with forested areas and wetlands) and could also occur in areas slated for future development or annexation. The Town should consider requiring applicants of development projects to contact the Natural Heritage and Endangered Species Program (NHESP) of DNREC's Division of Fish and Wildlife to determine if their project activities will impact a state-rare or federally listed species. In some cases a site visit may be requested in order to provide the necessary information. The Town should then consider requiring implementation of recommendations provided by the NHESP before approving site plans.

Contact information:

c/o Environmental Review Coordinator
Natural Heritage and Endangered Species Program
DNREC-Division of Fish and Wildlife
4876 Hay Point Landing Rd
Smyrna, DE 19977
(302) 735-8654

- **Bald Eagle.** There are two active Bald Eagle (*Haliaeetus leucocephalus*) nests within an area designated on Map 7b as 'Greenbelt'. The nests are protected by both federal and state law (7 Del. C. § 739). Although no longer protected by the Endangered Species Act, Bald Eagles and their nests retain protection under the federal Bald and Golden Eagle Protection Act. The US Fish and Wildlife Service developed National Bald Eagle Management Guidelines, to help landowners and others minimize impacts to eagles, including disturbance, which is prohibited. The federal guidelines provide distance buffers for various activities, including residential development and determinations of allowable activities in these buffer areas are made on a case by case basis by the USFWS. For more information please contact Anthony Gonzon at (302) 735-8673, NHESP or Craig Koppie of the US Fish and Wildlife Service at (410) 573-4534.
- **Bog Turtle.** As noted in the plan, surveys are (were) being conducted on wetlands adjacent to the Townsend Village II development for habitat that could support the federally threatened and state endangered bog turtle (*Glyptemys muhlenbergii*). It should be noted that according to our GIS database there are additional areas of potential bog turtle habitat within Town Boundaries, and within areas of future residential development and areas designated as "Greenbelt." Because the bog turtle is a federally listed species,

¹ Species of greatest conservation need (SGCN) are indicative of the overall diversity and health of the State's wildlife resources. Some may be rare or declining, others may be vital components of certain habitats, and still others may have a significant portion of their population in Delaware. SGCN are identified in the Delaware Wildlife Action Plan (DEWAP) which is a comprehensive strategy for conserving the full array of native wildlife and habitats-common and uncommon- as vital components of the state's natural resources. This document can be viewed via our program website at <http://www.dnrec.state.de.us/nhp>.

protected under the Endangered Species Act, its presence can affect the scope of work. Additional bog turtle surveys may be required for development in these areas.

Open Space and Agricultural Preservation Areas. *Townsend has been able to counteract some of the negative effects of development on wildlife habitat and natural ecosystems through zoning regulations that mandate a requirement of at least ten percent open space in new developments, programs that encourage using native plants, and reforestation requirements.*

- 1) Negative impacts to wildlife habitat will not likely be minimized if the required 10% of open space is comprised of narrow perimeter strips or small disconnected spaces throughout the development. Larger, connected areas of open space are generally more beneficial to wildlife and should be required or at least encouraged.
- 2) Several sections of the plan include mention of the town's desire to use native plant species. For habitat restoration efforts we direct the town to the '*Flora of Delaware Checklist*' which includes a list of all plant species native to Delaware and their habitat requirements. This publication is currently not available electronically, but can be obtained by contacting our program botanist, Bill McAvoy at (302) 735-8668 or at William.McAvoy@state.de.us . In addition, Bill would gladly assist the Town in developing a list of plants suitable for restoration efforts.

Parks and Recreation

Natural Areas. All of the forested areas located on the Carter Farm parcel are part of the Blackbird Natural Area (see attached map). Natural Areas contain lands of statewide significance identified by the Natural Areas Advisory Council as the highest quality and most important natural lands remaining in Delaware. The Office of Nature Preserves respectfully requests the Town recognize state listed Natural Areas on Map 5, Environmental Features. For Natural Areas boundary lines, please contact the office of Nature Preserves at 302.739.9235.

DNREC should be notified at the 24-hour emergency number (800-662-8802). In addition, SIRB should be contacted as soon as possible at 302-395-2600 for further instructions.

Water Resources Comments

Section 2-4b, Total Maximum Daily Loads (TMDLs). Please replace the existing section under TMDLs and replace with the following:

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) is the regulatory directive that identifies what specific actions (e.g., best management practices) are 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). The PCS will also include some voluntary or non-regulatory components as well.

The Town of Townsend is located within the greater Delaware River and Basin drainage and is encompassed by two separate watersheds – the Appoquinimink River and Blackbird Creek. The Appoquinimink and Blackbird Creek watersheds have specific assigned nutrient (nitrogen and phosphorus) and bacterial TMDL load reduction rates (See table 1). Currently the Pollution Control Strategies for the aforementioned watersheds bounding the Town are pending review or have not been completed and/or adopted to date.

Delaware River and Bay Drainage	N	P	Bacteria
Appoquinimink River watershed	60	60	8% Fresh, 71% marine, 9% MS4 fresh, 71% MS4 marine
Blackbird Creek watershed	40%	40%	80%

Table 1: TMDL reduction requirements for the Appoquinimink River and Blackbird Creek watersheds

Water Resources Protection Areas

DNREC Water Supply Section, Ground Water Protection Branch (GPB) acknowledges that the Town has a source water protection ordinance that is protective of the resource.

In the section entitled “Source Water Assessment and Protection Program,” the second paragraph references Senate Bill 119. This reference should be struck and replaced by references to Title 7, Chapter 60, Subchapter VI, § 6082 (b) and (c).

Plan Implementation

Page 42, Natural Resources Recommendations. The Town should consider other “actionable” strategies including the following ordinance or ordinances (unless current Town ordinances address these concerns) under said section which would:

- a) 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.
- b) Help protect freshwater wetlands where regulatory gaps exist between federal and state jurisdictions (i.e., isolated wetlands and headwater wetlands).
- c) Require a 100-foot upland buffer width from all wetlands or water bodies (including ditches).

Based on a review of existing buffer research by Castelle et al. (1994), an adequately-sized buffer that effectively protects wetlands and streams - in most circumstances - is about 100-foot 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 the landward edge of all wetlands and water bodies (including all ditches).

- d) Require an impervious surface mitigation plan for all residential and commercial developments exceeding 20% imperviousness. In commercial developments, it is strongly recommended that pervious paving materials be required on at least 50% of the total paved surface area(s).
- e) 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 stormwater management structures.
- f) Require the assessment of a project's TMDL nutrient loading rate through use of the Department's nutrient budget protocol. The applicant should be further required to use any combination of approved Best Management Practices (BMPs) to meet the required TMDLs for the affected watershed(s) in question.
- g) Exclude structural Best Management Practices (BMPs) such as community wastewater treatment areas, open-water stormwater treatment structures and natural areas containing regulated wetlands from consideration as open space.
- h) Prohibit development on hydric soil mapping units. 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.
- i) Require the applicant to use "green-technology" stormwater management in lieu of "open-water" stormwater management ponds whenever practicable.
- j) All open space land uses should be designed and managed in a manner that mitigates or reduces nutrient pollutant loading and its' damaging impacts to water quality. Since changes in land use often increase runoff of nutrient pollutants into nearby waterways (including wetlands) draining a common watershed, these nutrient pollutant loading impacts should be assessed at the preliminary project design phase. To this end, the Watershed Assessment Section has developed a methodology known as the "Nutrient Load Assessment Protocol" to assess such impacts. The protocol is a tool used to assess changes in nutrient loading that result from the conversion of individual or combined land parcels to a different land use(s), and serves as a "benchmark indicator" of that project's likely impacts to water quality. It is the intention of this protocol to inform those relevant governmental entities (i.e., State, county, and municipal) how a given project will affect water quality in their jurisdictions, while informing/encouraging developers of the need to incorporate better conservation practices (i.e., BMPs) in their project designs to help improve water quality.

State Fire Marshal's Office – Contact: Duane Fox 856-5298

The Delaware State Fire Marshal's Office has the responsibility to review all commercial and residential subdivisions for compliance with the Delaware State Fire Prevention Regulations. This Agency asks that a MOU be established and be maintained between the Delaware State Fire Marshal's Office and the Town of Townsend. The State Fire Marshal's Office would be issuing approvals much like DeIDOT and DNREC. This Agency's approvals are based on the Delaware State Fire Prevention Regulations only.

Department of Agriculture - Contact: Scott Blaier 739-4811

The Department of Agriculture (Department) would like to commend the Town of Townsend on a thorough and well-written comprehensive plan update. The Department especially appreciates the attention the town has given to farmland preservation and including the concept of a "greenbelt" in the town's future planning and annexation strategy.

The Department is also pleased that the town will continue to work the Delaware Forest Service's Urban and Community Forester to address the town's urban tree and forestry needs.

The only comment the Department offers is including a zoning category, or categories, that allow agribusiness that are compatible with the town's current and future land uses.

Approval Procedures:

1. Once all edits, changes and corrections have been made to the plan, please submit the completed document (text and maps) to our office for review. **Your PLUS response letter should accompany this submission.** Also include documentation about the public review process. In addition, please include documentation that the plan has been sent to other jurisdictions for review and comment, and include any comments received and your response to them.
2. Our office will require a maximum of 20 working days to complete this review.
 - a. If our review determines that the revisions have adequately addressed all certification items, we will forward you a letter to this effect.
 - b. 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.
3. Once you receive our letter stating that all certification items 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.

4. 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.
5. At his discretion, the Governor will issue a certification letter to your City.
6. 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 project. 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

CC: Ed O'Donnell
New Castle County