

DNREC comments on Town of Ocean View Comp Plan

Water Quality

Page 39, Environment - Please replace the narrative and table on pages 39-40 with the following updated information:

The Town of Ocean View is located within the greater Inland Bays drainage. 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 (TMDLs) to restore their beneficial uses (e.g., swimming, fishing, and drinking water). A TMDL defines the amount of a given pollutant that may be discharged to a water body from point, nonpoint, and natural background sources and still allows attainment or maintenance of the applicable narrative and numerical water quality standards. A TMDL is the sum of the individual Waste Load Applications for point sources and Load Allocations for nonpoint sources and natural background sources of pollution. A TMDL may include a reasonable margin of safety 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 the pollutant without adverse impact. Moreover, reducing the pollutants to the level specified by the TMDL(s) will ensure that a water body meets the water quality criteria and goals in the State Water Quality Standards.

A Pollution Control Strategy (PCS) is an implementation strategy that identifies the actions necessary to systematically reduce the pollutant loading rate for a given water body, and meet the TMDL reduction requirements specified for that water body. A variety of site-specific best management practices (BMPs) will be the primary actions required by the PCS to reduce pollutant loadings. The pollutants specifically targeted for reduction in the Inland Bays watershed are nutrients (e.g., nitrogen and phosphorus) and bacteria. The PCS for the Inland Bays was approved on November 11, 2008, and is now a regulatory directive containing enforceable provisions.

The pollutants targeted for reduction in the Indian River Bay watershed are nutrients (e.g., nitrogen and phosphorus) and bacteria (Table 1). As mentioned previously, the PCS will require specific actions that reduce nutrient and bacterial loads to levels consistent with the goals and criteria specified in the State Water Quality Standards. The PCS for the Inland Bays was approved on November 11, 2008, and is now an enforceable regulatory directive.

Inland Bays/Atlantic Ocean Drainage (low reduction area)	N- reduction requirements	P-reduction requirements	Bacteria-reduction requirements
Indian River Bay watershed	40%	40%	40% Fresh; 17% Marine

Table 1: TMDL nutrient (nitrogen and phosphorus) and bacteria reduction requirements for the Inland Bays (low reduction zone).

Water Allocation

The Water Allocation Program regulates water use by the Town through Tidewater Utilities' Ocean View District, which serves 15,739 customers. Tidewater produces the water, delivers it to the Town through its distribution network, and even bills the customers. Although the Town states in its plan that it has had a Town-owned water distribution system since March 1, 2008, this system does not provide any of the functions of a water system.

The Water Allocation Program is currently working with Tidewater to increase its allocation to serve an additional 8,600 customers by 2014. This increase takes into account the additional 300 residents projected by the Town. The water conservation program for the district as a whole is working well, and we have no further concerns for the proposed Town water use.

Water Resource Protection Areas

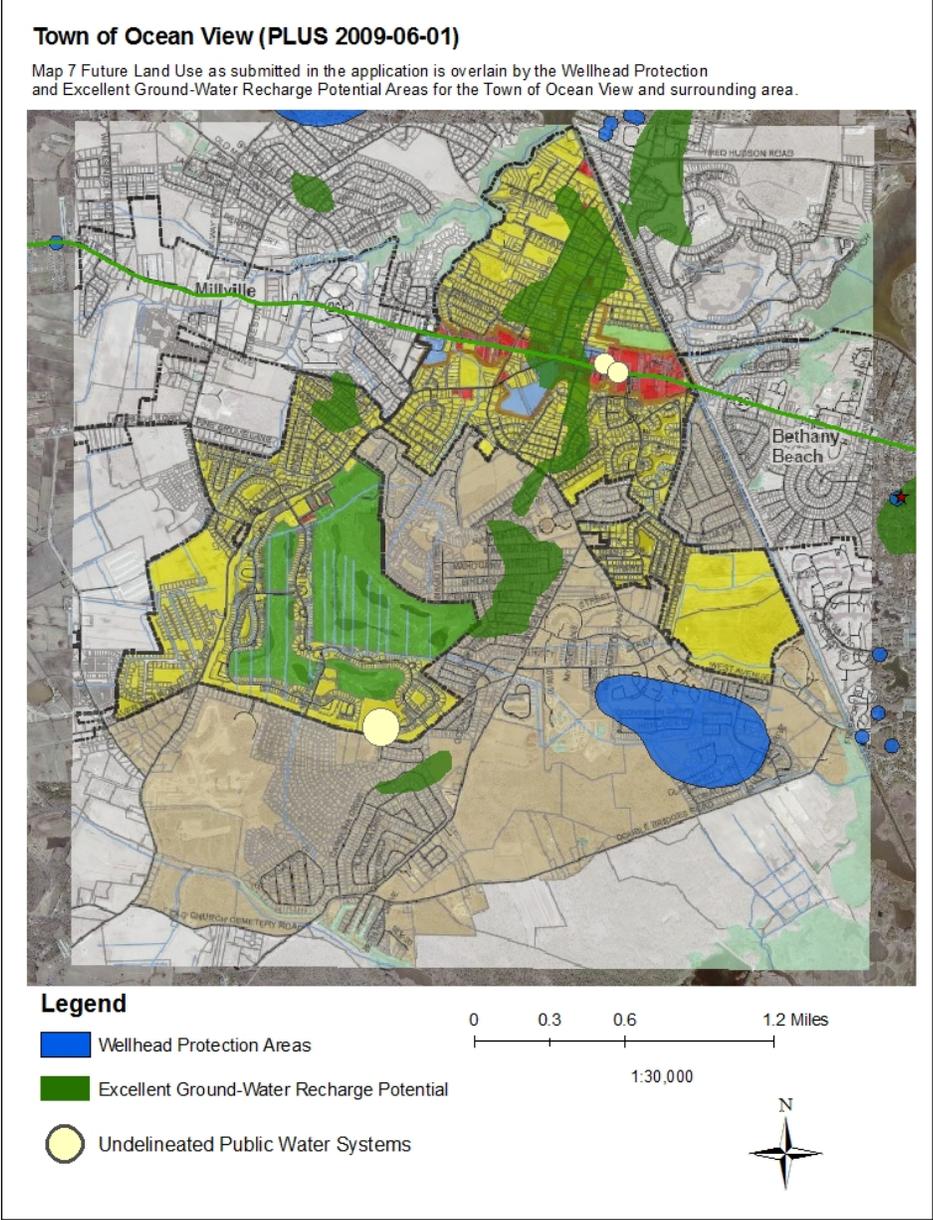
The Water Supply Section, Ground-Water Protection Branch (GPB) is pleased that the Town intends to adopt a source water protection ordinance. However, the plan lacks a few key elements.

- 1) There is a brief discussion on excellent and good ground-water recharge potential on page 40. The discussion only addresses that these areas warrant special protect.

In the second paragraph on page 41, the plan discusses impervious cover and mitigation of groundwater recharge. It does not specifically address the excellent ground-water recharge potential areas. The discussion on page 41 is interpreted to apply to all lands within the municipal boundaries.

- GPB recommends that the Town address Source Water Protection in a separate section of the Plan. The section should convey an understanding of the resource and the need for protection.
 - GPB recommends referring to the DNREC *Draft Model Ordinance for Smaller Municipalities of Kent and Sussex Counties* found at http://www.wr.udel.edu/swaphome/Publications/SWPOrdinances/FinalDraftModelOrdinance_KnS_041408.pdf. This publication will provide language for inclusion in the Plan and aid in the development of Ordinances.
- 2) The expressed intent to adopt an ordinance to protect the resource should include a statement to adopt the source water protection area maps as delineated by DNREC.
 - GPB recommends inclusion of language as to how this intent will be implemented.
 - 3) Map 4 shows wellhead protection areas for wells operated by Tidewater Utilities (TWU). It does not show public water systems that are privately owned. The Town is required to protect all public well fields as defined by DHSS-Office of Drinking Water under Del. Admin. Code Title 16 §§ 4000- 4400 – 4462.
 - GPB recommends contact DNREC for updates to the wellhead protection overlay.

GPB recommends using the DNREC *Draft Model Ordinance for Smaller Municipalities of Kent and Sussex Counties* found at http://www.wr.udel.edu/swaphome/Publications/SWPOrdinances/FinalDraftModelOrdinance_KnS_041408.pdf. This publication will provide language for inclusion in the Plan and for development of Ordinances.



Drainage/Stormwater

Page 36, Stormwater and Drainage

The Division of Soil and Water Conservation makes the following recommendations:

- The Town should incorporate a requirement for a stormwater and drainage review into the Town's preapproval requirements for new development requests. Proposed development projects should hold a pre-application meeting with the delegated agency, the Sussex Conservation District, to discuss stormwater and drainage prior to the town reviewing and/or approving plans or issuing building permits. The Sediment and Stormwater Program is set to begin requiring a pre-application meeting for all proposed land disturbing activities that require a detailed Sediment & Stormwater Plan within the coming year. These meetings are structured to assist developers in the design process and for early notification of approval requirements. In order to schedule a pre-application meeting, the applicant must forward a completed Stormwater Impact Study (SIS) to the appropriate Delegated Agency.

Please contact Elaine Webb with the DNREC Sediment and Stormwater Program if you have any questions regarding this new process. Please note that this process does not replace the State's PLUS process. The SIS Findings report will also be provided through that process.

- **Lines and grades:** If the Town does not have a lines and grades requirement for new construction, the Division recommends this be considered to help resolve drainage issues arising from new construction during and post construction. County/municipal building inspectors would be able to use approved lines and grades requirement to field verify prior to issuance of Certificate of Occupancy or building permit, as appropriate.
- The Drainage Program recommends that each parcel have a tax ditch right-of-way review conducted on the parcel prior to annexation by the Town. Please contact our Georgetown office at (302) 855-1930 to request a review tax ditch rights-of-way on a parcel.
- When a project involves a tax ditch, or tax ditch right-of-way, include the Drainage Program in the pre-application meeting with the Sussex Conservation District to discuss drainage, stormwater management, tax ditch maintenance, and the release of stormwater into the tax ditch.
- Contact the Drainage Program concerning technical assistance for the maintenance and upgrade of private drainage ways within the town or future annexation area.
- Streams, tax ditches, and private ditches will require periodic reconstruction at intervals dependent upon the sedimentation load from upstream. Periodic reconstruction involves the removal of sediment from the ditch bottom to establish or re-establish a design grade. The removed sediment, referred to as spoil, is typically disposed of by spreading or piling alongside the ditch. On a Tax Ditch this is done within the tax ditch right-of-way which is why Tax Ditch rights-of-way need to be unobstructed. For private ditches, a Drainage Management Plan would include a maintenance plan for drainage conveyances, include points of access for maintenance equipment, and designate spoil disposal areas.

- The Drainage Program agrees that streams and ditches should be buffered from development. However, the planting of riparian buffers should consider future drainage maintenance. When applied in conjunction with a Drainage Management Plan, existing buffers should be enhanced or new buffers planted to obtain riparian buffers on each side of the existing water conveyance. A tree and shrub planting on buffers with the tallest trees planted on the south and west side of the water conveyance will maximize shading of water. Trees and shrubs should be native species, spaced to allow for mechanized drainage maintenance at maturity. Tree and shrub planting in this manner will provide a shading effect promoting water quality while allowing future drainage maintenance. Do not plant trees closer than 5 feet of the top of the bank to avoid future blockages from tree roots. Remove invasive vegetation prior to the planting of native species. The construction of pedestrian and bicycle paths within the buffer should be encouraged.

- The Drainage Program is pleased with the Town's plan to implement an ordinance that would require buffer zones along wetlands. Please consider designating the wetland buffers as un-subdivided open space. During prolonged wet periods, the wetland buffers may become too wet for normal residential use. No portion of any building lot should be within the buffers. Designation as open space will reduce nuisance drainage complaints.

Intergovernmental Coordination Efforts

- Coordinate with Sussex County and surrounding municipalities for a dredge spoil disposal site for future White Creek dredging.

Brownfields

DNREC's Site Investigation and Restoration Branch (SIRB) encourages the development of Brownfields and can provide assistance when investigating and remediating Brownfield sites. Although SIRB has no specific comments regarding the proposed comprehensive plan at this time, if any future development occurs on sites with previous manufacturing, industrial, or agricultural use, SIRB recommends that a Phase I Environmental Site Assessment be conducted prior to development, due to the potential for a release of hazardous substances. If a release or imminent threat of a release of hazardous substances is discovered during the course of future development (e.g., contaminated water or soil); construction activities should be discontinued immediately, and DNREC should be notified at the 24-hour emergency number (800-662-8802). In addition, SIRB should be contacted as soon as possible at 302-395-2600 for further instructions.

Parks and Recreation

Map 5, 2007 Land Use/ Land Cover: John T. West Park is currently represented in yellow as residential. This designation needs to be changed to green or 'recreational'.

John T. West Park is located North of Oakwood Drive in between Central and West Avenues.

Map 7, Future Land Use: John T. West Park is currently represented in yellow as residential. This designation needs to be changed to green or 'recreational'. John T. West Park is located North of Oakwood Drive in between Central and West Avenues.

Delaware Wildlife Action Plan: Annexations and Open Space

Map 7, Future Land Use Map: Tax parcel #s 134-16.00-39.01, 134-19.00-76.00, 134-17.00-36.00, and 134-19.00-72.00 are part of the Assawoman Wildlife Area and should not be designated as a 'Growth and Annexation Area'. These parcels should be omitted from the map or designated as "Open Space." The landowner (i.e. DNREC- Division of Fish and Wildlife) did not apply for annexation of the Wildlife Area into the Town of Ocean View.

To identify priorities for open space protection, we recommend the County refer to the Delaware Wildlife Action Plan (DEWAP). Several parcels designated for 'Growth and Annexation' are mapped as Key Wildlife Habitat in the plan. DEWAP is a comprehensive strategy for conserving the full array of native wildlife and habitats-common and uncommon- as vital components of the State's natural resources. Key wildlife habitat areas depicted in DEWAP can guide site-specific conservation planning efforts. DEWAP also contains a list of Species of Greatest Conservation Need (SGCN¹) as well as species-habitat associations. This document can be viewed via DNREC's Natural Heritage and Endangered Species Program website at <http://www.dnrec.state.de.us/nhp>.

Rare, Threatened and Endangered Species

Pages 46-47 describe the importance of coordination between the Town and Federal, State, County and neighboring communities. The Town should also include coordination with the Natural Heritage and Endangered Species Program (NHESP) of DNREC's Division of Fish and Wildlife to ensure that land-use changes do not impact habitat that supports SGCN. The town should also require developers, or applicants of development projects, to contact the NHESP to determine if their project activities will impact a SGCN. In some cases a site survey 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) 653-2880 ext. 101
Edna.Stetzar@state.de.us

¹ Species of Greatest Conservation Need (SGCN) are identified in the Delaware Wildlife Action Plan (DEWAP). In a broad sense, SGCN, as defined for DEWAP, 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.

Wildlife Habitat Preservation

Residential Land-use, Page 20 includes the following bulleted item:

- Tree and natural resource preservation will be encouraged.

Encouraging voluntary efforts to preserve natural resources, especially trees, may not provide adequate protection for those resources. Preservation is more likely to be accomplished if the Town develops zoning ordinances, subdivision regulations or codes that include specific actions or requirements.

Several items in the plan pertain to the Town's efforts to work with the Delaware Forestry Service on issues such as urban forestry, riparian buffers, etc. The Town should include coordination with NHESP in their efforts to develop ordinances or codes that target forest preservation. The NHESP can offer technical assistance regarding habitat restoration or enhancement in areas that support SGCN. In areas where SGCN occur, the NHESP coordinates with the Forestry Service in the development of their stewardship plans. Recommendations made by the NHESP are often incorporated into the stewardship plans and provide landowners with the option of protecting or managing their habitat for SGCN.

Page 21 (Agricultural/Residential) contains the following text *"Through the development of the revised zoning code for the Town, this future land use will be further defined to describe acceptable agricultural activities, encourage and provide incentives to protect and establish natural resources and allow for residential development that is in keeping with the historic and rural characteristic of the community".* What types of incentives are going to be offered to landowners to protect natural resources? What is meant by 'establish natural resources'?

Pages 42-43 contain text that is an excerpt from previous comments made by the NHESP for PLUS 2008-08-02 (Town of Ocean View pre-plan update). These comments were specific just to Delmarva Fox Squirrel habitat, but in this 2009 plan the Town used the comments to include habitat preservation for wildlife in general. This change deviates from the original intent of the comments and is not necessarily beneficial to wildlife the way they are being used.

To more accurately reflect the Town's intent to provide for wildlife habitat preservation, we recommend the following changes to the text:

- Our GIS database indicates that mature forest blocks do not exist in the Ocean View area, so it is important that reference to *"mature forest"* in the text be changed to *"forested habitat."* Otherwise, the recommendations will provide very little protection for existing forested areas. Retention of existing forested areas that are not presently mature will provide habitat for species that require early-mid successional habitat, and if left intact, will eventually become mature.
- Reference to the US Fish and Wildlife Service (USFWS) should be omitted. The USFWS doesn't regulate wildlife habitat unless a federally protected species is involved. Since this text is now being used for wildlife habitat preservation in general and not specifically to Delmarva Fox Squirrel, reference to the USFWS is not accurate. In addition, the UFWS no longer regulates habitat for the Assawoman DFS in this area. Please see the Section below pertaining to this issue.

- Page 43, Item 1: This item pertains specifically to forest restoration. Leaving existing trees intact is preferred, but plantings of species indigenous to Delaware such as oaks, hickories, loblolly, shortleaf pine and pond pine would benefit native wildlife. Plant species indigenous to Delaware that are food sources for wildlife, including plants that host beneficial pollinators and butterflies should be part of any restoration plan. The Town should not limit restoration efforts only to forested habitat and should consider restoration of other habitat types such as wetlands, grasslands and shrublands. The NHESP can provide technical assistance in restoration efforts and can recommend plant species that support a variety of wildlife species including SGCN.
- Page 43, Item 2: First, the following needs to be omitted from this item because it is specific to the Delmarva Fox Squirrel: *“preserving the opportunity for wildlife to disperse from the experimental release site.”* Also, any reference to *“the Service”* should be omitted. Secondly, a suggested minimum buffer width should be included; otherwise, the forest could be cleared and reduced to widths that are not viable for wildlife use or adequate for water quality protection. Thirdly, this recommendation should also include wetlands, not just riparian areas. We suggest the current text be replaced with: *“Forested riparian corridors and uplands surrounding wetlands should be retained to a minimum width of 100 feet, and in sensitive areas, a minimum of 300 feet in width. Riparian buffers are utilized by wildlife as a travel corridor, for breeding, feeding and resting and protect water quality. Upland buffers around wetlands not only protect the function and integrity of the wetland, but also provide critical breeding habitat for wetland dependent species during a portion of their life cycle.”*
- Page 43, Item 3: Reference to DFS should be omitted. Also, this time of year restriction on tree clearing would not protect a majority of birds and other wildlife that utilize forests for breeding because this recommendation was specific to DFS only. All clearing of trees should be avoided as much as possible during the breeding season, not just those that are greater than 12 inches in diameter. Ground nesting species or those that utilize the understory would be impacted by clearing and by heavy equipment. We suggest this item be replaced with the following text:

“To reduce impacts to nesting birds and other wildlife species that utilize forests for breeding, clearing in forested areas should not occur April 1 to July 31.” This clearing recommendation would only protect those species during one breeding season; once trees are cleared, the result is an overall loss of habitat.
- Page 43, Item 4: The last sentence, *“To avoid these potential effects, the Service recommends placing structures and roads 150 feet or more from forested habitat’* is a recommendation specific for the Delmarva Fox Squirrel. Leaving open space adjacent to forested areas is desirable and beneficial to wildlife; however, if the open space is an area of maintained lawn it will not provide the same benefits or support the number of species as an area of open space with natural vegetation. If the Town wants to implement this type of open space requirement, it should be specified that the open space be comprised on natural vegetation, not maintained lawn.
- Page 43, Item 5: This item is not necessarily an action that will result in habitat preservation and would be more appropriate in sections of this plan that address solid waste or air quality. This recommendation was originally specific to the Delmarva Fox Squirrel with the purpose of minimizing predator activity in areas where the squirrel occurs because they are an endangered

species. While it is important to minimize trash dumping, the real issue with improper trash disposal in natural areas is one of human-animal conflicts rather than predator/prey relationships. Predators are part of the food chain and don't necessarily cause adverse affects to prey populations, especially if prey species are common. Some predatory species, such as Short-eared Owl (*Asio flammeus*) and Cooper's Hawk (*Accipiter cooperii*) are state endangered. We recommend that the following sentence be omitted: "*Controlling the availability of trash and other wastes possibly attractive to potential predators of wildlife (e.g., foxes, owls feeding on rodents at trash sites), will reduce the likelihood of indirect adverse affects on wildlife.*"

Delmarva Fox Squirrel (*Sciurus niger cinereus*)

The US Fish and Wildlife Service have declared the Assawoman Delmarva Fox Squirrel population as failed and no longer regulates habitat in the area for the species. However, if any of the Assawoman squirrels are still in the vicinity, the habitat preservation recommendations outlined above would still be beneficial to them.

Plan Implementation

Overall, the Plan should offer more specific "actionable" environmental protection strategies than currently offered. We strongly recommend adopting an ordinance or ordinances 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. (Castelle, A. J., A. W. Johnson and C. Conolly. 1994. *Wetland and Stream Buffer Requirements – A Review*. J. Environ. Qual. 23: 878), an adequately-sized buffer that effectively protects 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 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.