DNREC comments on the Town of Elsmere Comprehensive Plan

Fish and Wildlife

Map 9, Area of Concern: A review of our GIS database indicates there may be suitable habitat for the federally listed bog turtle (*Glyptemys muhlenbergii*) within the proposed 'Area of Concern; specifically, within the undeveloped wetland and open space area along Little Mill Creek and Wilson Run. Bog turtles typically occur in freshwater wetlands with open canopies, mucky soils, and tussock vegetation; however, they can occur in more marginal habitats as well. The bog turtle is a **federally listed** species, protected under the **Endangered Species Act**. Projects proposing a land-use change or hydrological change in this area could impact this habitat and would need to be screened by our program. We may request a Phase I survey to determine if habitat is present. If habitat is found during the survey, the applicant will be required to either completely avoid all direct and indirect project impacts to the wetland, in consultation with the U.S. Fish and Wildlife Service and Delaware Division of Fish and Wildlife, or have Phase II surveys conducted to determine if bog turtles are present.

Phase I surveys can be conducted any time of year when ice and/or snow cover is not present. If potential habitat is found, however, please note there is a time of year restriction during which Phase II surveys for bog turtles must be conducted. *A Delaware approved bog turtle surveyor must be used to conduct the surveys.*

Riparian Areas: The plan doesn't specifically mention the importance of riparian areas and the upland buffers that protect those areas from degradation. A portion of the land adjacent to Little Mill Creek is designated for possible future Industrial development. The remaining land along Little Mill Creek and Chestnut Run are already developed or comprised of Parks and Recreation land. In the interest of water quality and wildlife habitat, we recommend maintaining an upland buffer of *at least* 100 ft along Little Mill Creek and Chestnut Run (and Wilson Run if area is annexed). This recommendation is based on peer reviewed research that suggests that buffer values increase noticeably with widths of 100 or more feet. This buffer should *not* be a maintained lawn area but comprised of existing vegetation or planted with Delaware native species of trees, shrubs, grasses or wildflowers. If the Town is interested in conducting plantings to enhance the buffer zone, our program botanist Bill McAvoy could assist with drafting a list of Delaware native plants suitable to the area. Bill can be reached at (302) 735-8668 or William.McAvoy@state.de.us.

Parks and Recreation Facilities

Section 5-7, Recreational Opportunities and Space, Parks and Open Space: There are 11 park/open space areas that are managed by the Town of Elsmere:

- **Chestnut Run Park**-10.6 acres of Open Space located along Jefferson Ave.

- **Junction Park**- .5 acre park with playground, basketball and tennis courts, picnic tables and a pavilion. Located at Junction Street and Casapulla Ave.
- **Vilone** Park- 18.6 acre park with playground, ball fields, picnic tables, benches, and concession stand. Located at Olga Road and Marvillo Avenue.
- **Joseph R. Walling Park**- 2 acre park with playground, basketball and tennis courts, picnic tables, and a pavilion. Located along Linden Avenue.
- **Bryan Martin Park**- .1 acre park with a playground. Located along Tamarack Avenue.
- **Maple Avenue Park**- 6.2 Acre park with playground, benches and handicap facilities. Located at Maple Avenue and Sycamore Ave.
- **Elsmere Memorial Park**- .5 acre of open space with a gazebo and bus stop. Located at the intersection of Rt. 2 and Rt. 100.
- **Town Hall Park**- .34 acre park with playground, picnic tables, and benches. Located at 11 Poplar Avenue.
- **Fairgrounds Park**- 32 acre park with playground, ball fields, picnic tables and concession stand. Located at Dover Avenue and Filbert Ave.
- **Village Circle Park**- .5 acre park with brick walkway and gazebo. Located at New Road and Alvil Road.
- **Baltimore Avenue Dog Park**- 1 acre parcel formerly the Delmarva Sub-station. Located at the intersection of Baltimore Avenue and Northern Avenue.

Delaware Land and Water Conservation Trust Fund (DTF): Thank you for referencing the DTF program in the Comp Plan update. The following is an April 2010 update on the parks in Elsmere that have received funding through the DTF program; Junction Park, Vilone Park, Joseph R. Walling Park, Bryan Martin Park, Maple Avenue Park, Town Hall Park, and Fairgrounds Park. The Town of Elsmere could further benefit from this program when incorporating new outdoor recreational facilities (particularly when planning or developing the Baltimore Avenue Dog Park) or adding amenities to existing parks. For more information on the Delaware Land and Water Conservation Trust Fund, please contact Robert Ehemann @ 302.739.9235.

Although it is not currently being considered, Section 4.2c Land and Infrastructure discusses the possibility of selling some publicly owned park/land. The Town of Elsmere should be aware that properties that have received DTF funding are protected as public recreational facilities in perpetuity. Delaware Code Title 30, c. 54 (II) § 5423 (4) states 'It is intended that property acquired or improved with funds from the Earnings Account shall remain in public outdoor recreation and conservation use in perpetuity. Said property may not be converted to other uses without a subsequent act of the General Assembly. If the General Assembly approved the sale or lease of any project or a portion thereof, the State shall receive its pro rata share of net sale and/or lease income. Said funds shall be deposited in the Earnings Account to be immediately available for other projects.'
Reference: http://delcode.delaware.gov/title30/c054/sc02/index.shtml#5423

Potential Brownfield sites

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.

Water Resources comments

The Water Supply Section, Ground-Water Protection Branch (GPB), has determined that the Town does not contain any excellent ground-water recharge potential or wellhead protection areas.

Stormwater/Drainage comments

Explore the feasibility of 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.

The Town should pursue drainage easements along waterways and storm drains where currently there are none.

Plan Implementation

Page 55, Recommendations: The Plan should offer more specific “actionable” environmental protection strategies than currently offered. We recommend that the following ordinance or ordinances (unless current Town ordinances address these concerns) 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 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.

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.