## VII. WATER RESOURCES

A Water Resources Element is required by the Town Plan to assure compliance with the requirements of Maryland House Bill 1141 (HB 1141). The purpose of the Water Resources Element (WRE), as defined in Maryland House Bill 1141, is to establish a clear relationship between existing and proposed future development; it further establishes the relationship between drinking water sources and wastewater facilities that will be necessary to serve that development and measures to limit or control the stormwater and nonpoint source water pollution that will be generated by new development. Among other things, preparation of the WRE is an exercise intended to test water resource capacity limits, determine the potential implications of water resource issues for future growth, and facilitate development of coordinated management strategies.

The Town of New Market represents a small portion of the much larger Monocacy River Watershed. Water supply for the Town is drawn from the Potomac River. Since water resource protection issues are of concern watershed-wide, much of the effort to protect or enhance water quality will be dependent on County and State actions and programs.

The Frederick County Division of Utilities and Solid Waste Management (DUSWM) is sole purveyor of water and sewer services within the Town of New Market and the surrounding Town Planning Area. New Market's water and sewage treatment facilities are managed by Frederick County and provided to the Town based on Water Service Area Agreements (WSAA) that detail the timing and process for allocating water and sewer taps by the County to the Town. The Town also relies on the County's regulations and review services for stormwater management approvals in new developments.

DUSWM uses recognized methods and industry standards to estimate water and sewer capacity requirements for both undeveloped and developed land. Estimates for undeveloped land are based on the Frederick County Design Manual for Water and Sewer Facilities adopted by the Frederick County Board of County Commissioners in 1994.

As the sole provider of both water and sewer services to the Town of New Market, the County has the responsibility for planning, developing and operating the water and sewer infrastructure to serve properties within the County's service areas. Long-term water and sewerage planning, for the Town, is contained within the County's Water and Sewerage Plan. Additionally, the Water Service Area Agreement (WSAA) executed between the County and Town of New Market in April 2003, prohibits the Town from maintaining a subsidiary Water and Sewerage Plan.

Because of the limited influence that the Town exerts both on the provision of county water and sewer facilities and services and on the approval of stormwater facilities, the Town elects to, at this time, adopt the relevant sections of the 2010 Frederick County Water Resources Element rather than update the Town's State required WRE Plan Element approved in 2010.

The 2010 County WRE incorporates projections for both municipal growth and for County planned growth around New Market. This includes both the New Market Community Growth Area and the Linganore Community Growth Area that surround the Town as noted in previous chapters of this plan. In addition, the WRE groups that growth with numerous other communities that are projected to receive a large part of the County's growth.



As the County WRE reports, the Town's water service comes from the New Design Water Treatment Plant (WTP) which is the County's largest water system. It provides water to the City of Frederick and to twelve communities that include both municipalities and County defined unincorporated community growth areas alike. Likewise the Town's sewer service comes from the Ballenger/McKinney WWTP which is the County's largest sewer system. It also provides sewer service to the same group of twelve communities.

As the County WRE reports, the Town of New Market is part of the Monocacy River watershed which lies within the larger Potomac River Basin, which drains to the Chesapeake Bay. The Town is also part of two sub watersheds - the division of which is a ridge line that roughly aligns with Main Street and Old New Market Road. To the north is the Lower Linganore Creek watershed and to the south is the Lower Bush Creek watershed.

The Maryland Department of the Environment (MDE) advises that the Monocacy River is an impaired stream and Total Maximum Daily Loads (TMDLs) have been issued for fecal coliform bacteria and sediment in both the upper and lower reaches of its watershed. The Linganore Creek sub-watershed has also been issued TMDLs for sediment and phosphorus. The recent decommissioning of the New Market sewer plant has helped to reduce pollution in the Lower Bush Creek watershed.

The 2010 WRE reported an estimated 7.6% impervious cover in the Lower Bush Creek subwatershed and 7.5% in the Lower Linganore Creek sub-watershed. It recommends that the county pursue mitigation and restoration efforts such as stream buffer plantings, stormwater retrofits and other best management practices to help keep them under a 10% coverage threshold.

While both the Town's 2014 Municipal Growth Element update and this plan, projects more municipal growth by 2030 than does the 2010 WRE, the Town's projected increase represents a reallocation of the growth already projected by the WRE. It does not necessarily increase the currently projected growth in the watershed or demand in water and sewer service areas of which the Town is a part. The same is true for impervious cover.

The County's 2010 Water Resources Element (WRE) addresses the County owned and operated water and wastewater systems and provides a detailed analysis of water resources. It includes data for municipal systems and municipal growth areas and is divided into three components:

- Drinking Water Assessment;
- Wastewater Assessment; and
- Managing Stormwater and Non-point Source Pollution.

It includes recommendations for sound land and water resource management practices that contribute towards the health and sustainability of major watershed systems and human communities and includes as series of goals, policies, and action items.

The 2010 County WRE states that Policy statements and implementation strategies specific to the municipality will be independent of the County's Water Resources Plan and will be addressed within the respective municipal water resources and comprehensive plans. Therefore, the Town plan incorporates the following goals, policy statements and implementation strategies that are relevant to New Market.

## GOALS

The Goals relevant to the Town's role in water resource managements as follows:



- 1. Work with the county to assure the provision of a safe and adequate drinking water supply to accommodate the needs of the current Town population as well as future generations.
- 2. Work with the County to protect and enhance the quality of Town's surface waters, ground water resources, and wetlands.
- 3. Support County investment in water and sewer infrastructure that will provide adequate treatment capacity and reduce pollutant loading in rivers and streams.
- 4. Promote coordinated planning between jurisdictions and agencies responsible for drinking water, wastewater, and stormwater management.
- 5. Engage the public in watershed conservation and promote a stewardship ethic.

## **POLICY STATEMENTS**

Policies relevant to the Town's role in water resource managements includes the following:

- 1. Work with the County and State to encourage compact Town growth to preserve agricultural lands around the Town in order to allow for more efficient provision of community facilities and reduce nutrient impairment of the watershed.
- 2. Work with the County to maintain a distinct and identifiable community.
- 3. Work with the County and State to find ways to prevent further nutrient impairment of the watershed and find opportunities for nutrient reductions/credits within the Town.
- 4. Promote provision of community water/sewer service within the Town and the Town's Planning Area.
- 5. Work with the County to promote timely access to the current and planned capacity in the New Design Water Treatment Plant and the Ballenger-McKinney System wastewater treatment system.
- 6. Work with the County to promote connection to community water/sewer services by existing developed properties now on well and septic that are located within the Town and in areas to be annexed.
- 7. Minimize new development utilizing individual well and septic systems to protect the quality and quantity of ground water resources.
- 8. Work with the County and State to protect water quality in areas still using individual wells as a drinking water source.
- Promote protection of existing forests within the Town in accordance with the Town's forest conservation ordinance as a means to prevent added nutrient loading in the watershed.
- 10. Promote protection of streams within the Town, in accordance with the Town's floodplain conservation ordinance, as a means to prevent added nutrient loading in the watershed.
- 11. Work with the County and State to integrate watershed planning and management into the Town comprehensive planning process.

## **ACTION ITEMS/IMPLEMENTATION STRATEGIES**

- Work with the County on their efforts to educate residents and businesses about the need to conserve water, to prevent and reduce pollution, and to protect and restore watersheds.
- 2. Coordinate with the County the development of GIS mapping and data for the Town.
- 3. Coordinate with Frederick County to evaluate solutions that ensure future water and wastewater capacity and adequate management planning.
- 4. Work with the County on their efforts to pursue mitigation and restoration efforts such as stream buffer plantings, stormwater retrofits, and other best management practices.
- 5. Within the Town, encourage Low Impact Development practices in both new development and by existing homeowners.

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- 6. Encourage retrofitting of water quality improvements on existing development in Town through stormwater management techniques such as rain barrels, rain gardens, and buffer plantings.
- 7. Continue to establish a land use planning framework that is supportive of water quality protection efforts
- 8. Maintain land use patterns that limit adverse impacts on water quality.
- 9. Continue to focus growth to areas best suited to utilize the existing and planned water and wastewater infrastructure efficiently.

