Commissioners of Poolesville

WATER RESOURCE ELEMENT

Town of Poolesville's Master Plan Amendment – Water Resource Element required by House Bill 1141.

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Water Resource Element

Introduction

The Water Resource Element (WRE), required by HB1141, mandates local jurisdictions to provide a link between the land use plan and plans for the provision of drinking water supplies, wastewater discharge/treatment capacity and stormwater management. The following text reflects the visions of the existing Master Plan and references supporting documentation already adopted by the Town, which protect and detail how these resources will support the planned development.

Poolesville's Comprehensive Land Use Plan projects a modest growth in population and housing based on an approved allocation plan and the nearly 400 homes under site plan review. The land use plan focuses development within the corporate boundaries and in areas previously zoned for this growth.

The Town, with assistance from the Maryland Department of the Environment (MDE), reviewed and calculated the potential water supply from existing and identified future well sources. A theoretical water availability assessment utilizing rainfall and acreage within the corporate boundaries was conducted by the MDE. It was determined that the groundwater availability was more than adequate to meet the Town's population projections.

The same population projections used to calculate water supply requirements were used to calculate the generation of wastewater and test the initial assimilative capacities of the receiving stream. These were found to be within reasonable limits and the MDE approved the increased discharge permit. The expansion and upgrade of the wastewater facility, which was part of the permitting approval process, allows the planned development to proceed.

Drinking Water

Poolesville currently relies entirely upon nine groundwater wells to supply the needs of its 5,167 residents and multiple businesses. All of the wells are equipped with flow regulating valves and have been set to specific pumping rates to ensure that each wells' major water bearings zones are not dewatered. These rates were determined by continuous 30-day pumping of individual wells during drought conditions and do not take into account any interference that may occur between wells if they were pumped simultaneously for 30 days. The overall current peak day capacity is 720 gallons per minute (gpm) or 1,036,800 gallons per day (gpd). The actual annual average usage is between 450,000 and 500,000 gpd.

The MDE has determined that the yearly average water usage shall be 100 gpd/person; and has further determined that the maximum monthly average usage shall be 140 gpd/person. The current peak day capacity suggests that the Town has an adequate water supply for its current residents with a margin of excess. However, the Commissioners have examined the Town's historical water usage, vulnerabilities and the lack of an alternate source. The Town has also experienced the loss of wells from contamination and increasingly stringent requirements from the MDE. With no alternate sources available, the Commissioners have determined, for the health and safety of the community, that the well field shall be capable of producing 140 gpd/person with the best-producing well not in operation. This results in the adopted policy that wells currently in operation are for existing residents; and for new connections, the system shall have additional capability to produce a peak day demand of 600 gpd/household.

Future Water Demand

In order to meet the MDE's requirements and accomplish the capacity goals established by the Town, three of the larger developers going through plan review, are required to permit, construct and deed municipal wells to the Town. In January 2008, the MDE issued withdrawal permits for two additional municipal wells. Table 1 identifies specific information on each well.
The Town is divided into four watersheds. Withdrawal permits from each of these watersheds are based on data from a MDE Water Supply Program study completed in 2000. The estimated annual average base flow (effective recharge) in the nearest representative Triassic basin (Monocacy River @ Bridgeport) is 461 gpd/avg/ac (6.2 in/yr), with an estimated drought year (1-in-10) baseflow of 290 gpd/ac (3.9 in/yr). When amounts are deducted for maintenance of a seasonal low stream flow (7 gpd/avg) and a 10% reduction for impervious surfaces is made, the amount of theoretical ground water available in each watershed is calculated.

Wells are strategically located throughout Town to reduce drawdown interference between sites. The total of the four watershed appropriation permits are 650,000 gpd for an annual daily average and 910,000 gpd for the daily average of the month of maximum use. These permit amounts were derived in anticipation of the projected growth detailed in the land use plan. Two additional wells, not yet permitted, will be brought online and supply the additional capacity required by Town policy. Table 2 details watershed withdrawal and capacity information.

Table 1.

Well Number	Aquifer	Depth (Feet)	Diameter (Inches)	Sustainable Yield (gpm)	Status
	New Oxford Formation				
2		453	6	100	Online for existing residents
3		285	6	60	Online for existing residents
4		600	6.5	40	Online for existing residents
5		500	6	100	Online for existing residents
6		500	8	110	Online for existing residents
7		700	8	45	Online for existing residents
8		500	8	65	Online for existing residents
9		800	8	125	Online for existing residents
10		762	8	75	Online for existing residents
11		1,200	8	100	Permitted, not constructed, for redundancy (Rabanales)
12			8	72	Permitted, under construction, for future residents (Schraf)
13			8	51	Permitted, not constructed, for future residents (Elgin)
14			8	34	Drilled only, for future residents (Jamison-Westerly)
15			8	48	Drilled only, for future residents (Jamison-Cattail)

Table 2.

Watershed	Area (acres)	"Theoretically" Available groundwater (gpd)	Permitted Average Daily Allocation on a yearly basis (gpd)	Permitted Average Daily Allocation for Max. Month (gpd)	Well Capacity (gpd)	Permittable Average Daily Groundwater Remaining (gpd)
Horsepen Branch (wells 2, 4, 6,8 & 11)	588	149,000	293,000	388,000	597,600	0
Broad Run (well 12)	551	140,000	47,500	66,600	66,600	92,500
Dry Seneca Creek (wells 3 5 &13)	973	247,000	194,500	273,400	303,400	52,500
Russell Branch (wells 7, 9 & 10)	450	115,000	115,000	182,000	359,000	0
Totals	2562	651,000	650,000	910,000	1,326,600	145,000

Water Resource Protection

Poolesville's groundwater is generally of high quality. It meets all current drinking water standards and only needs minimal treatment before it reaches the tap. In recent years, the Town has developed protective legislation to reduce the threat to groundwater from contamination arising from stationary sources. A threat from mobile sources of contamination will always remain from tank trucks carrying such products as gasoline, home heating fuel and pesticides. Appropriate contingency plans for this occurrence has been developed as part of the Wellhead Protection Plan and Emergency Response Plan. The Town should continue to develop one or more additional well fields as far removed from potential sources of contamination as possible. Further, the Town should pursue abandonment of in-Town private well and septic systems to limit this as a potential source of groundwater contamination. The Town views their Wellhead Protection Area as all land within the corporate boundaries and, in some cases, extending beyond the corporate limits. The Wellhead Protection Plan ensures a degree of certainty that the present planning process that reviews new development applications and changes in use provides protection for the Town's water supply.

Wastewater

The Town of Poolesville owns and operates its own Wastewater Treatment Plant. The sequence batch reactor type facility utilizes biological nutrient removal (BNR) technology, multi media pressure filters, ultra violet disinfection and then discharges into Dry Seneca Creek. The permit is currently under review for renewal and upgrade to an Enhanced Nutrient Removal (ENR) process.

In 2006, the Town's National Pollutant Discharge Elimination System Permit was increased from 625,000 to 750,000 gallons per day (gpd). During the design phase, the MDE required the facility to process and filter 2,000,000 gpd in order to deal with inflow and infiltration (I&I) peak flows. Table 3 details the permitted discharge effluent limitations.

Table 3.

	Loading Rate, Kg/day (lbs/day)			**Concentration, mg/l**		
Effluent Characteristics	**Monthly Average**	**Weekly Average**	**Daily Maximum**	**Monthly Average**	**Weekly Average**	**Daily Maximum**
BOD:						
(5/11 to 10/31)	28 (63)	43 (94)	N/A	10	15	N/A
(11/1 to 4/30)	85 (188)	128 (282)	N/A	30	45	N/A
TSS:	85 (188)	128 (282)	N/A	30	45	N/A
TKN:						
(5/1 to 10/31)	9.5 (20.9)	14.2 (31.3)	N/A	3.3	5.0	N/A
Total Ammonia as N:						
(5/1 to 10/31)	3.1 (6.9)	N/A	18.2 (40.1)	1.1	N/A	6.4
(11/1 to 4/30)	6.8 (15.0)	N/A	20.7 (45.7)	2.4	N/A	7.3
Total Nitrogen as N:	……Report only……..					
Total Phosphorus as P:	4.7 (10.4)	7.1 (15.6)	N/A	1.7	2.5	N/A

A flow of 0.75 million gallons per day was used in determining waste calculations.

Under the Tributary Strategies For Nutrient Reduction, point source loads of nitrogen have dropped significantly. Even with these reductions the Bay remains impaired by nutrients. Table 4 below shows the concentrations needed at various flows to maintain the load goal. The Town has undertaken best efforts to meet the goal by optimizing operation of the BNR technology.

Table 4.

Yearly Average Flow, mgd	Total Nitrogen Goal, Mg/l	Total Nitrogen Load Goal, Pounds/year
0.6182	8.0	15,064
0.625	7.9	15,064
0.75	6.6	15,064

The Town is currently in the process of revising its discharge permit and upgrading the treatment plant to an Enhanced Nutrient Removal (ENR) treatment process. The new permit limits, calculated using an annual average discharge of 750,000gpd, will be a maximum annual load of 9,137 pounds/year for Total Nitrogen and 685 pounds/year for Total Phosphorus.

Although the design capacity was increased to accommodate I&I peak flows, the Town embarked on a comprehensive sewer relining campaign, which was completed in the later portion of 2007. Preliminary flow monitoring results (below) show a significant decrease in flows and the efforts are continuing.

Poolesville utilizes a three-year rolling average to determine available wastewater capacity. In 2006, the annual average daily flow was 603,521 gpd. In 2007, it was 520,333 gpd and 2008 was 584,133 gpd. These figures calculate to a three-year rolling average of 569,329 gpd, which equates to an available capacity 180,671 gpd.
The Commissioners will set 5,000 gpd of this available capacity aside for municipal use.

By January 31st of each year, the Town Manager will develop an annual Municipal Sewage Capacity Report for submission to the Commissioners of Poolesville and the MDE (Appendix A). Once approved, 10% of net available wastewater capacity will be granted to the infill lots (four and under list) and the balance will be allocated to the larger developers (five or more list), in concurrence with the Wastewater Management Plan and subject to MDE approval.

Stormwater

Introduction

The Town of Poolesville currently has a population of 5,167 and the corporate limits encompass 2,641 acres. There is no intention to annex additional property into the Town limits at this time. It is anticipated that the population may increase to a maximum of 7,500 over the next 15 years.

The anticipated growth is mostly planned in residential zones with a majority of the construction being single family homes. With this development, it is anticipated that there will be an increase of 403 homes as indicated on Table 1 of the Municipal Growth Element. This growth may have a negative effect on the stormwater treatment process due to the addition of impervious surface coverage and the diminishment of vegetative cover. The Town recognizes this and has adopted zoning with higher density at the Town center and lower densities outwards near the surrounding agricultural preserve.

Stormwater Management Program

The Town is responsible for providing input on stormwater practices to Montgomery County. However, Montgomery County is the regulatory authority for stormwater management and responsible for monitoring stream conditions. All stormwater within Poolesville flows into the Dry Seneca Creek Watershed.

The Town is actively implementing treatment processes for stormwater management such as:

- The use of pervious concrete. The parking area of the Town Hall, recently constructed in 2008, uses pervious concrete. The high school's new walkways use pervious concrete.

- Use of rain barrels for irrigation. The Town has a program of supplying the residents with rain barrels to residents at direct costs.

The Town's drinking water is supplied by a well system. The Town is aware of the need for recharging the aquifer and promotes this through the planning process and the Town's Well Head Protection Plan.

Protection of streams and banks is a major consideration in the Planning Process both by the Planning Commission and the Parks Board.

Approach

As previously stated, the Town establishes and enforces the code using the Montgomery County Department of Permitting Services (DPS) as the regulatory authority. The Town has an ongoing process of evaluating each proposed development. Montgomery County DPS is a strong proponent in the use of the 2000 Maryland Stormwater Design Manual, Volume I & II. Montgomery County DPS also embraces new technology and advancements with regard to stormwater management.

Non-point Source Loading Analysis

Based upon the Municipal Growth Element, the projected population growth is near 1,289 persons with a consumption of 632.61 acres (Table 2 of the Municipal Growth Element.) Appendix B depicts the location of the proposed subdivisions.

Currently, the Town has opted not to develop a GIS Infrastructure data base and relies on the existing paper plans or gathers information as needed.

Currently, a total of 25 septic systems remain in operation. The Town is connecting systems existing near new construction and has planned infrastructure expansions where possible. The existing septic systems are over 15 years of age and by code, no additional septic systems are permitted. All new development must be connected to the waste water treatment plant.

The Town's Wastewater Treatment Discharge Permit, effective July 2010, sets Total Nitrogen limits at 9,137 lbs. and Total Phosphorous at 685 lbs. Table 1 indicates the new anticipated loads.

Table 1

	Nitrogen Loading (Lbs/yr)		Phosphorus Loading (Lbs/yr)	
	Current	Proposed	Current	Proposed
Sewer	15,064	9,137	125	685
Septic	304	304	0	0
Stormwater	102,827	112,130	102,828	111,454
Total	**118,159**	**121,571**	**102,953**	**112,139**

All Calculations based upon Maryland Chesapeake and Atlantic Critical Area 10% Rule Guidance Manual. Provided by the State of Maryland

The removal of the septic systems would provide a reduction of less then 1% of the total loading based upon the data in this report.

A summary of the nonpoint source loading analysis indicates that proposed development will increase the Nitrogen loading by 8.8% and the Phosphorus Loading by 8.2%. The proposed loadings are based upon the completion of the ENR upgrades to the waste water plant.

Based upon the loading analysis Priority Funding Area (PFA), the Town should concentrate on removing septic systems and limiting the increase of impervious areas.

Non-point source loading impacts

The Town is a proponent of improved growth policies, which is evident through sub-division regulations. Poolesville's Planning Commission has coordinated with Montgomery County's policies to achieve responsible and practical policy advancement. Through the coordination of Stormwater Management and the Land Use Elements, the Town continues to act in a responsible manner.

During the Town's development plan review process, the Town mandates that critical and sensitive areas be retained in a natural condition. The Town identifies those areas and places them into a conservation easement so as to limit construction and encourage bio-diversity.

Within the Town limits is a parcel of approximately 264 acres that has been placed in a reserve program. Additionally, there are parcels of land that will not be developed in the foreseeable future due to lack of availability of sewer and water taps, which the Town controls.

The Town should encourage the use of drainage swales for quality and quantity control. The Town believes that this configuration encourages the filtration and absorption of surface flows and maintains the rural character of the Town.

The Town follows and establishes subdivision regulations. From time to time the Town reviews those regulations and establishes new regulations after careful review of existing regulations. The Town strictly monitors and enforces the regulations. An appeals process is open to the complainant.

The Town maintains a maintenance budget for the stormwater system and allocates funds and resources as required.

The Town of Poolesville has coordinated with Montgomery County Government, and supplied the land cover and other information needed for the County to include the Town within the overall County Nutrient Loading Analysis.

Review Criteria for Stormwater Management

The criteria for stormwater management are established by Montgomery County DPS (MCDPS). By law, Montgomery County must use the 2000 Maryland Stormwater Design Manual Volume I and II. MCDPS may modify these standards only if the modified criteria are greater than the standards of the design manual. The Town acts in concert with MCDPS in the review process. When review questions arise, the County reviewer is contacted and made aware of the Town's concerns.

Sensitive Areas

Introduction

The purpose of this section is to convey the goals, objectives, principles, polices and standards to protect sensitive areas from the adverse effects of development. The Town uses various tools to control development and examine sensitive areas. During the initial review process, the plans are examined for existing features including, but not limited to, significant tree groves, scenic or historic areas, streams, drainage areas, outstanding natural topographic features, wells, wetlands, and 100-year flood plains, as stated in the existing subdivision Town Code.

During the Town's preliminary plan review phase, the town relies upon interagency reviews such as Montgomery County, which has approval authority of Strom Water Concept plans, The State of Maryland and the U.S. Corps of Engineers has authority with regards to permitting with in a designated wetland, Federal Emergency Management Administration (FEMA) which delineates the 100 year flood plain, and other interagency reviews. These inputs are all topics of discussions during the Preliminary Plan Phase of plan submittal.

History

The Town is located in the piedmont geophysical region of the State of Maryland and may be characterized as having topography that is relatively flat with no significant steep slopes and drainage toward the Dry Seneca Creek basin. The land has historically been used for grain production from the late seventeen hundreds to present and is located within the Montgomery County Agriculture Reserve. The Town has grown in various waves of development and is currently undergoing another wave.

Proposed Development Impact

Presently, the Town limits incorporate approximately 2,641 acres, 209 of which are impervious, and are projected that an additional 39 acres of impervious shall be added to the Town when the proposed development is complete. The current area of impervious material within the Town limits is approximately 8.6%. Upon completion of construction projects that have been submitted the percentage will rise to approximately 9.4%.

Appendix E depicts the locations of new subdivisions that have been submitted for review or are already under construction.

Streams and Buffers

In the planning process, the Town considers and recognizes the importance of streams and seasonal streams with the impact that may occur if these systems are disturbed without the proper remediation. The Town understands that these systems are an integral part of a clean and safe environment. These systems serve as a purification system for the waters that eventually enter the Chesapeake Bay. These areas also server as wildlife refuge areas that are essential to the ecological diversity of the area. The Town recognizes these areas by the use of the existing FEMA maps and through site observation. The Town has taken the position that wetlands, 100

year flood plain and the 25 foot buffer to the flood plain are being placed into a conservation easement. This process serves two purposes. The first is to aid the Town in creating ecological niches for diverse species growth. The second of this process gives the Town the ability to enforce no construction or extremely limited construction with-in conservation easements.

The Town recommends that intermittent and perennial streams be regarded as environmental features and surrounded with a 100 foot buffer. Similarly, a 25 foot buffer should be designated around wetlands as is the practice within parts of Montgomery County.

Through emphasis of the 2000 Maryland Stormwater Design Manual the process allows the following:

- The use of standard design computations.
- The use of bio-retention in the design.
- Controlled release of stormwater flows into the existing streams.

Habitats of Threatened and Endangered Species

The identification of threatened and endangered species is conducted by the State of Maryland and The Federal government. When a new development is to take place the State of Maryland Department of Natural Resources (DNR) will supply a letter identifying possible threatened and endangered species present in the general area to the developer and if further action is needed in the natural resource inventory statement along with forest conservation work up.

Tree Conservation Policy

Currently, the Town follows the State of Maryland Forest Conservation Policies and requires Forest Conservation Plans for each proposed subdivisions. The Town understands that the forest canopy and its supporting system is the starting point for filtration of precipitation and control of runoff and further more is an integral part of the environment.

Sensitive Area Protection and Improvements

Poolesville's responsibility is that of a steward of the land and may be summarized as "to protect, where possible, and to enhance the existing natural environment of the area within the Town Limits of Poolesville, with coordination of County, State, and Federal Government programs". This process provides the Town a coordinated regulatory program and an understanding of its responsibility with regards to sensitive areas.

Adopted: March 19, 2007

Commissioners of Poolesville
Wastewater Treatment
Capacity Management Plan

Purpose

State law requires that local governments have a mechanism in place to track and manage the capacity of their wastewater systems in a manner that considers all prior commitments and the ability of the system to handle any additional flows.

The Maryland Department of the Environment (MDE) has issued guidelines for the development of Water and Wastewater Management Capacity Plans for those jurisdictions that control the allocation of water and sewer. These Management Plans are useful planning tools to ensure that municipalities have adequate water and sewer facilities to serve proposed developments and to provide guidance in developing required annual Municipal Sewage Capacity Reports.

In past year's, the MDE has annually summarized the previous two years of flow data from the Discharge Monitoring Reports submitted by all Wastewater Treatment Plants and provided municipalities with an allocation table. Beginning in 2005, the MDE is using three years of flow data, however, the tables will not include a determination regarding the facility's remaining flow capacity.

The MDE is requiring local municipalities to be responsible for determining allocation capacities and to prepare Wastewater Management Capacity Plans incorporating design capacity, available wastewater, proposed connections and allocation amounts.

Wastewater Treatment Plant

In 2006, the Town's National Pollutant Discharge Elimination System Permit was increased from 625,000 to 750,000 gallons per day (gpd). During the design phase, the MDE required the facility to process and filter 2,000,000 gpd in order to deal with inflow and infiltration (I&I) peak flows.

Although the design capacity was increased to accommodate I&I peak flows, the Town has embarked on a comprehensive sewer relining campaign. Preliminary results show a significant decrease in flows and the efforts are continuing.

If the WWTP meets any one of the following conditions, it is considered hydraulically overloaded and shall not commit additional allocations and/or halt the issuance of building permits until corrective action is taken:

Condition 1

When sewage overflow or bypasses occurs due to hydraulic limitation

a) During dry weather conditions or
b) Four times during previous six-month period

Condition 2

The daily average flow rate reported for the plant using flows from the last three complete calendar years exceeds the daily average flow rate used in the discharge permit to establish effluent loading limitations.

Condition 3

The adjusted daily average flow rate reported for the plant using the last three calendar years is 90% or more of the daily average flow rate used in the discharge permit to establish effluent loading limitations, **and** in the last three years- there have been either effluent violations, bypasses or sanitary sewer overflows attributed to high flows or flow spikes during storm events.

Allocation Management Criteria

By January 31 each year, the Town is required to develop and submit to the MDE a Municipal Sewage Capacity Report. The reports will include the three most recent years of flow data contained in the Discharge Monitoring Reports. To determine the annual average flow, the monthly average flow for each month will be averaged with the other monthly averages.

The Town has developed the following procedures to manage wastewater capacity and to control the distribution of capacity to avoid burdens to the system and to maintain sufficient set aside to accommodate the system.

According to the MDE, use of an estimate of 250 gallons per day (gpd) per single-family dwelling or 100 gpd per person is a common practice. Although actual domestic usage may be less, this figure includes allowances for I&I. Taking into account that new construction will be virtually free of I&I, the Town is conservatively using 325 gallons per day per single-family dwelling well above the 290 gpd as recommended in the 2005 Master Plan.

The following methodology will be used in the annual wastewater capacity determinations:

- Calculate the past three-year averages
- Add the number of allocated (not connected) sewer connections that the local government has provided a written commitment
- Subtract this sum from the permitted 750,000 gpd
- The remaining balance is the **net available wastewater capacity**

Development Allocation

The Commissioners of Poolesville have not committed to nor issued building permits since 2000. High flows to the wastewater facility, planned upgrades and sewer improvements have halted all building until improvements are complete.

On September 9, 2002, the Commissioners adopted an allocation list consisting of 41 infill residential units on the four and under list and 372 residential units on the five and more list, which will require 134,225 gpd of wastewater capacity. Although the list was adopted, commitment of the allocations have not been made and will only occur on an annual basis as declared by the Commissioners using criteria outlined in this document. If capacity is not available, commitment of allocations will not occur.

The current capacity does not fulfill the requirements necessary to facilitate the complete allocation list build-out at this time. However, the comprehensive sewer relining campaign is producing a significant decrease in high flows during rain events, hence driving down the annual average and creating capacity. Taking into account typical "dry day flows" at 500,000 gpd to 550,000 gpd, it is anticipated that adequate capacity will be available to complete the projected build-out. If not, building will cease and the Commissioners will not over allocate. Commitments to allocations on the list will not resume until additional capacity is created.

Three commercial sites were also listed. Using the concept plans submitted with the allocation applications, the following equivalent dwelling unit (edu) amounts are associated with these commercial properties:

A. **Donegan,** this site plan detailed a restaurant, retail, and a doctor/office space located in three separate buildings. Using WSSC flow guidelines, this site would require 12,753 gpd or 39 edu's.
B. **Jamison** (Elgin Road), this site plan detailed one office building. Using WSSC flow guidelines, this site will require 875 gpd or 2.7 edu's.
C. **Jamison** (Norris Road), this site plan detailed one office building. Using WSSC flow guidelines, this site will require 1050 gpd or 3.2 edu's.

Considering the success of the sewer relining campaign and the decreasing WWTP flows, it is anticipated that allocation disbursement could begin early 2007. The 2006 WWTP annual average flow was 603,521 gpd. Averaging 2005's 691,000gpd and 2004's 701,000 gpd with 2006, computes to a three-year rolling average of 665,000 gpd.

Although the above flows equate to an available capacity of 84,826 gpd, the Town believes that it is prudent to carefully monitor and control the distribution of its sewer capacity to avoid burdens to the system during extremely wet weather conditions. The Town further believes that the best means of avoiding overburdening the expanded WWTP is to continuously monitor flows and the issuance of building permits. In the event unforeseeable problems arise, the issuance of building permits will cease until corrective action can be taken. Allocating and monitoring in this manner will protect the Town from sudden and undue demands and will provide housing alternatives for buyers.

By January 31st of each year, the Town Manager will develop an annual Municipal Sewage Capacity Report for submission to the Commissioners of Poolesville and the MDE. Once approved, 5,000 gpd will be set aside for the Commissioners of Poolesville, 10% of net available wastewater capacity will be granted to the four and under list and the balance will be allocated to the five or more list, in concurrence with the Water Management Plan and MDE approval:

1. **Winchester-98 units**
    a) 31,850 gpd of available capacity will be allocated to the Winchester Subdivision
    b) The developer has proffered that only 30 homes per year will be built.
2. **Brightwell Crossing- 177 units**
    a) 25,675 gpd to phase one (79 units)
    b) 31,850 gpd to phase two (98 units)
3. **Donegan Commercial**
    a) 12,753 gpd
4. **Jamison Townhomes-19 units**
    a) 6,175 gpd
5. **Jamison Westerly- 60 units**
    a) 19,500 gpd
6. **Longshore- 6 units**
    a) 1,950 gpd
7. **Vinci/Slaysmen- 12 units**
    a) 3,900 gpd

The table below illustrates a possible scenario of how the build out could occur. Data from the last round of development proved that over an eight year period the development averaged 30 houses per year. However, in 1992, 1993, 1994 and 1999, the growth occurred respectively by 69, 52, 36 and 43 units. This table is only an estimation; Net available capacity and the market shall set the true rate.

	2007	2008	2009	2010	2011	2012	2013
Winchester	30	30	30	8			
Brightwell Crossing		30	30	30	30	30	27
*****Donegan			21	18			
Jamison (Townhouse)			19				
Jamison (Westerly)			30	30			
Longshore			6				
Vinci/Slaysmen			12				
*****Res/Com Infill	23.9	23					
Total Units/Year	**53.9**	**83**	**127**	**68**	**30**	**30**	**27**
Additional gpd/year	17,518	26,975	47,275	28,853	9,750	9,750	8,775

***Equivalent dwelling unit amounts are associated with the commercial properties.**

The recipient of an allocation must accomplish one of the following actions within a specified time period (depending upon the type of development) after being notified that an allocation has been offered; for a commercial development or a development of more than one lot, submit a preliminary site plan for Planning Commission review within 24 months of the date of notification; and for a single unit residential project, apply for a building permit from the Town of Poolesville within 12 months of the date of notification. The Planning Commission may extend or waive the forgoing time constraints for good cause shown. Persons receiving an allocation with insufficient time remaining in the life of the Plan to accomplish the actions set forth above shall have the appropriate twenty-four (24) or twelve (12) month time period after receiving the allocation to accomplish their respective actions. Any proposer not meeting the above requirements within the time frame set forth herein (including any extension given) shall lose their allocation.

Appendix B – Proposed Subdivision Location Map