PHED/T&E Committees #1
January 21, 2014

MEMORANDUM

January 17, 2014

TO: Planning, Housing, and Economic Development Committee
Transportation, Infrastructure, Energy & Environment Committee

FROM: Keith Levchenko, Senior Legislative Analyst

SUBJECT: Ten Mile Creek Area Limited Master Plan Amendment to the Clarksburg Master Plan and Hyattstown Special Study Area.

Councilmembers should bring their copy of the Plan to the meeting

This is the Planning, Housing, and Economic Development (PHED) and Transportation, Infrastructure, Energy & Environment (T&E) Committees' third joint worksession on the Planning Board Draft of the Ten Mile Creek Area Limited Amendment to the Clarksburg Master Plan and Hyattstown Special Study Area (hereafter referred to as the Ten Mile Creek Amendment).

At this worksession, the Committees will hear from WSSC with regard to the potential impacts of development in Ten Mile Creek on the Little Seneca Reservoir (and drinking water quality in general), and will hear from DEP staff regarding Ten Mile Creek Amendment's water and sewer related recommendations (including the implications for the Clarksburg Historic District).

Little Seneca Reservoir and Drinking Water Impacts

The Little Seneca Reservoir is a regional facility operated by WSSC. The water supply resource is shared with the Washington Aqueduct and the Fairfax County Water Authority. The reservoir was built as part of a regional water supply plan to ensure adequate amounts of water are available in the Potomac River during severe drought conditions. Little Seneca Creek, Cabin Branch, and Ten Mile Creek all drain into the Little Seneca Reservoir (see maps on ©1-2).

Washington Suburban Sanitary Commission Staff Craig Fricke, Planning Group Leader, Engineering and Construction and Martin Chandler, Senior Scientist, Environmental Group will provide a primer on the Little Seneca Reservoir: why it was created, how it works, what condition

it is in, and whether the various Ten Mile Creek development scenarios raise any significant concerns by WSSC regarding the reservoir or drinking water quality in general.

Carlton Haywood, Executive Director of the Interstate Commission on the Potomac River Basin (ICPRB) will also be available at the meeting to discuss the Little Seneca Reservoir's place within regional water supply planning and operations.

An opinion piece in The Washington Post from November 15 (see ©12-13) from several former County officials argued that planned development in the Ten Mile Creek area should be further studied to better understand the potential impacts on the Little Seneca Reservoir. The concerns raised in the opinion piece were echoed by a number of speakers at the Council's public hearings on December 3 and 5.

These concerns had previously been raised at the Planning Board's hearings on the Ten Mile Creek Amendment in September 2013. Planning Board staff discussed these issues with WSSC and DEP staff and provided responses to the Planning Board testimony (attached on ©3-4). The response to potential reservoir impacts from Ten Mile Creek Development includes the Planning Board Staff conclusion that:

> *"WSSC environmental staff has reviewed the M-NCPPC consultant modeling results and has informed M-NCPPC staff that, based on the modeling results, the potential level of new development in the TMC (Ten Mile Creek) scenarios poses no significant threat to the water quality or quantity of the LSR (Little Seneca Reservoir)..."*

In mid-December, Council Staff transmitted a number of questions to WSSC and DEP staff regarding the reservoir (and drinking water impacts in general). These questions and the responses are attached on ©5-11. Notably, DEP's response to Question #10 notes its agreement with WSSC writing:

> *"DEP has reviewed the same modeling data referenced by WSSC in its response and agrees, based on this data, that it is unlikely that the "incremental" development proposed for the Ten Mile Creek watershed will significantly impact the water quality of Little Seneca Lake."*

However, DEP later notes in its response to Question 14 that a study of the cumulative impacts on the reservoir would be worthwhile:

> *DEP agrees that these stakeholders have identified a very important policy issue but is uncertain at this point in time as to the appropriate scope of such a study or whether the study should be conducted prior to approval of the Limited Master Plan Amendment. DEP will continue to evaluate this issue as the PHED Committee worksessions move forward. We note that the advocates have referenced a variety of best practices being used by water utilities across the country to protect source water and it would be helpful to learn more from WSSC about its long-term plans for protection of the reservoir in general and, more specifically, whether WSSC believes*

that a study of the cumulative impacts of existing and proposed development on the reservoir is appropriate at this time.

DEP staff will be available at the meeting to clarify this study concept and whether DEP or the Executive have an opinion yet on whether the Ten Mile Creek Amendment should be deferred pending the outcome of such a study.

Water and Sewer Service to Serve Properties in the Ten Mile Creek Amendment Area

Dave Lake, Manager, Water and Wastewater Management, Department of Environmental Protection (DEP), will provide a summary of general water and sewer planning assumptions for the Ten Mile Creek Amendment properties (see map on ©14). Mr. Lake will also summarize the options and issues for providing sewer service to the Clarksburg Historic District.

Page 40 of the Ten Mile Creek Amendment (see ©17) provides background and recommendations regarding the provision of public water and sewer to areas in Stage 4.[1] As noted in the Ten Mile Creek Amendment, the Ten Mile Creek watershed has no receiving sewers downstream of the Stage 4 area. Therefore, wastewater will need to be pumped out of the watershed into existing systems serving Stage 3 areas (such as Cabin Branch or Little Seneca Creek).

In order to minimize the construction of multiple sewerage systems to serve individual properties in Stage 4, the Limited Master Plan recommends that WSSC develop a comprehensive Stage 4 sewerage plan. The goal of this plan would be to build a "logical, efficient, and environmentally responsible sewerage system for Stage 4..."

It is likely that any sewer dependent development west of I-270 (such as the Pulte property) would require a pump over solution to Cabin Branch. The properties east of I-270 (Miles-Coppola and Egan) would likely share another pumping station that would also pump over to Cabin Branch or Little Seneca Creek. Developers would be required to build all necessary on-site infrastructure (including pump stations), as well any off-site infrastructure to transport wastewater to Cabin Branch. The pump station(s) would be required to be sized to accommodate all existing and future planned development expected to utilize the pump station.

Clarksburg Historic District Sewer

Background

The Clarksburg Historic District is located at the intersection of Clarksburg Road and Frederick Road (see map on ©18). The entire Historic District falls within the planned water and sewer envelope. Most of the properties in the Historic District are within the Ten Mile Creek

[1] The water and sewer recommendations in the Limited Master Plan amendment assume that public water and sewer would be required (and approved) to meet the development goals presumed in the Limited Master Plan Amendment. If the Council were to reduce the zoning density on one or more properties to 1 acre lots or greater, then Water and Sewer Plan policies presume service would be provided with on-site systems.

watershed, although there are several properties on the southeast edge that are in the Little Seneca drainage area. These properties can be served by main extensions originating from existing or planned mains serving other developments (such as Town Center) without any capital program sewer projects required for service.

For the Historic District properties in the Ten Mile Creek Watershed, WSSC and DEP concur that these properties are best served by a future sewerage system constructed in the Stage 4 area (Ten Mile Creek). However, these properties could also be served by a separate smaller pump station that would pump wastewater over to Town Center (in the Little Seneca Creek watershed). If Stage 4 were to later build out on sewer (with a pump station on the Miles-Coppola property, for instance), WSSC and DEP concur that the pump station dedicated to the Historic District should be abandoned and wastewater redirected to the larger Stage 4 pump station.

2008 Sanitary Survey Results and Public Health Problem Area Designation

In 2008, DEP and DPS staff reviewed permit records and site characteristics and documented public health problems in the area and placed properties in the Historic District into "high," "medium," and "low" concern levels. Seventy-eight percent of the properties reviewed fell into either a high or a moderate concern level. The combination of aging septic systems on relatively small lots, and the additional requirements that go with new and/or replacement systems, resulted in the Department of Permitting Services concluding that on-site systems were not a viable long-term solution for the Historic District. Based on these results, the Executive recommended designating the Historic District a public health problem area. **The Council later approved this designation in October 2008.**

This designation has two main benefits for property owners in the Historic District. First, if and when sewer extensions are built, property owners will be eligible for a public health hazard subsidy from WSSC, which can help to partially defray the costs to property owners of extending sewer. Second, the designation allows for expedited service if and when property owners apply to WSSC for construction of main extensions.

Cost Issues

The longstanding issue with serving the Historic District is not approval for sewer but rather the cost to extend sewer. Working with WSSC, DEP staff has estimated an order of magnitude cost for independently serving the Historic District of $2.6 million, including: a new pump station ($1.4 million), 8 inch gravity sewer ($970,000), and force main ($210,000). Under current WSSC financing policies, the applicant (i.e., all property owners seeking to connect at the time the extension is done) must pay the "deficit" cost of the extension.[2] In addition, each property owner must pay substantial on-site costs, including: connection fees, SDC charges, and private plumbing costs.

[2] "Deficit" costs are calculated as the cost to build a water or sewer extension minus the estimated total front foot benefit revenue to be collected by WSSC from the new connections to the extension.

With new developments or redevelopments, extensions are often built and paid for by the developer. The developer can recoup these costs through subdivision and sale of additional properties and/or more intense use of the existing property. However, in the case of the Historic District, property owners have existing uses that are not expected to change drastically when sewer service is provided. Even if the costs are divided among most or all of the Historic District property owners requiring sewer, the costs for extending sewer, under current policies, are prohibitive.

If the Historic District sewer extension were to wait until a pump station in Stage 4 were built, then the cost for a separate pump station would be avoided and overall costs would be reduced by more than half. There has also been some discussion that a Stage 4 developer could potentially build some portion of the additional sewer infrastructure needed for the Historic District. However, WSSC, DEP, and Planning Board staff do not believe there is an existing regulatory hook that would require a developer to build off-site extensions to serve other properties.

From a policy standpoint, the County has an interest in seeing the Historic District sewered. The properties are included within the planned sewer envelope and a sewer extension will provide more flexibility for property owners to improve their properties consistent with the 1994 Master Plan intent for the Historic District.[3] Also, given that the area has been identified as a public health problem area, there is also a public interest in permanently addressing any failing septic systems or systems at risk of failure.

The County also has a direct land use interest in the area, since the County owns several contiguous parcels in the Historic District for a future Clarksburg fire station. A sewer extension will be required to serve the new Fire Station. The Approved FY13-18 capital project (see ©19-20) pushed the fire station project out beyond six years but assumed that the County would participate financially in a sewer extension project to serve the Historic District as well as the fire station property. The PDF language requires that an equitable cost-sharing arrangement be worked out with affected property owners before the project moves forward.

In his FY15-20 Recommended CIP, the County Executive recommends $28.4 million for the new fire station, with construction to be completed during FY20 (project description form attached on ©21). The cost to extend a pressure sewer to serve the fire station only is included in the project, with a notation that alternative approaches are being explored.

The issue of extension costs has been a long-standing issue with broader implications than just the Clarksburg Historic District. Basically, the costs an applicant must pay to extend sewer can be so prohibitively high that even property owners with failing septic systems are deterred (and make do with temporary solutions such as holding tanks).

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[3] The Ten Mile Creek Amendment (see excerpt on ©2-3) includes a zoning change (to Commercial/Residential Neighborhood (CRN) for the Clarksburg Historic District). This change is intended to provide property owners more options to rehabilitate properties while remaining consistent with the intent of the 1994 Master Plan's historic preservation goals.

Montgomery County has been seeking to address this problem through collaboration with WSSC and staffs from both Montgomery and Prince George's Counties for a number of years.[4] The issue was recently discussed by the Bi-County Infrastructure Working Group (with some potential policy changes discussed) and later presented at a recent WSSC Commissioner meeting.

List of Attachments

Maps of Drainage Area into the Little Seneca Reservoir	©1-2
Excerpt of Planning Board Staff Responses to Testimony at the Planning Board Hearings	©3-4
Responses from WSSC and DEP to Council Staff Questions Regarding The Little Seneca Reservoir and Drinking Water Impacts	©5-11
November 15, 2013 Washington Post Opinion (by Menke, Fosler, Hanson)	©12-13
Map of Clarksburg Development Stage 4 Cases	©14
10 Mile Creek Amendment Excerpts:	
• Clarksburg Historic District and Vicinity Recommendations (Pages 34-35)	©15-16
• Water and Sewer Service Recommendations (Page 40)	©17
Map of the Clarksburg Historic District	©18
Approved FY13-18 Clarksburg Fire Station Project Description Form	©19-20
Recommended FY15-20 Clarksburg Fire Station Project Description Form	©21

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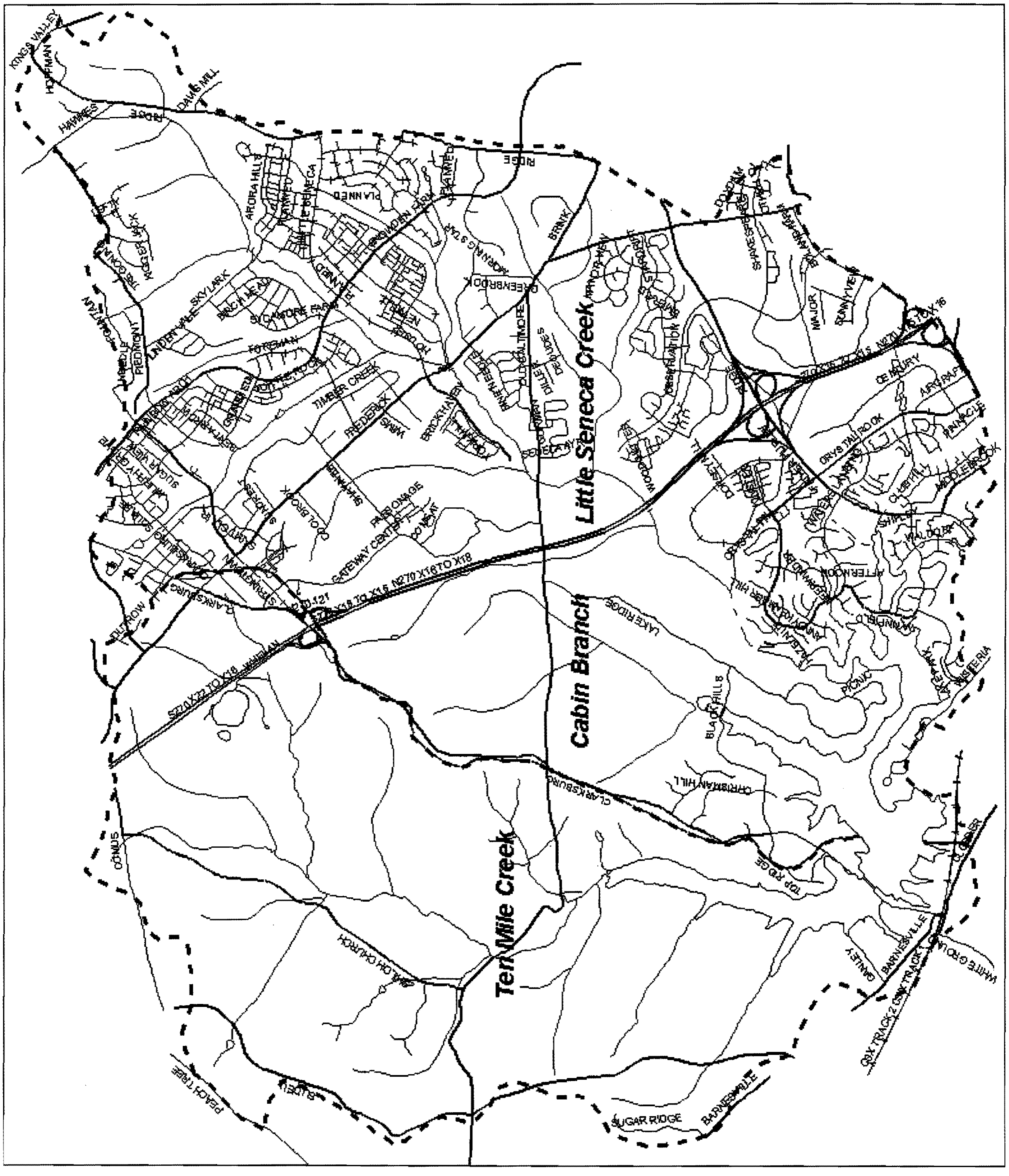
[4] Council Staff has previously suggested several areas that need to be considered with regard to improving the current extension cost policies:

- First, a better allocation of costs between the direct beneficiaries of the extensions should be considered. The current process allows "free riders" to connect to extensions later, while the deficit costs are paid only by the initial applicant(s). The creation of special districts to finance these extensions may be a way to ensure costs are spread appropriately.
- Second, new financing approaches need to be considered that provide more financing flexibility to applicants. For instance, a lien on a property could allow some or all of the repayment of deficit costs to be deferred until the future sale of the property.
- Third, the public benefit gained (whether direct or indirect, as discussed above) from some extensions may warrant consideration of the use of other revenue sources (such as County or WSSC resources) to help defray the extension costs currently borne by applicants.


Little Seneca Creek
Cabin Branch
Ten Mile Creek
GATEWAY CENTER
TIMBER CREEK
FREDERICK
CLARKSBURG
LAKE RIDGE
CHRISMAN HILL
TOP RIDGE
SHILOH CHURCH
PEACH TREE
SUGAR RIDGE
BARNESVILLE
COMUS
SKYLARK
SYCAMORE FARM
PARSONAGE
AFTERNOON
PICNIC
WISTERIA
CEMETERY
PINNACLE
MIDDLEBROOK
SHAKESPEARE
SUNNY VIEW
MAJOR
KINGS VALLEY
HOFFMAN
RIDGE
PLANNED
BRINK
GREENBRIDGE
OLD BALTIMORE
FOREMAN
PIEDMONT
STRINGTOWN
SUGAR VIEW
BLACK HILL S
OLD HUNDRED
ORYS TAURUS

Planning Board Hearing
Staff Response

Attachment 1

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			work, the biological health condition of this subwatershed will improve into the "Good" category. (Soltesz, Peterson/Tanger)	forest removal, to improve the stream health to "good" is unknown. Stormwater management, stream restoration and forest planting in the stream buffers might offset impacts from new development, but improvement over existing conditions is unlikely. (See response to E-3.)	
E-7	Biological Health in Ten Mile Creek		Staff and its consultants should not have included protection of ephemeral streams in its recommendations because they are already protected by EPA and the Army Corps of Engineers. (Andie Murtha)	Ephemeral streams are those that only flow during or shortly after storm events. They do not flow long enough to provide habitat for stream biological life, and are not afforded any regulatory protection under Federal, State, or County codes or environmental guidelines. They are, however, a part of the natural drainage network and can be locally important, in watersheds with thin soils like TMC, in maintaining wetlands, groundwater flows and base flows in the free flowing streams.	
E-8	Water Quality and Quantity of Little Seneca Reservoir		New development in the TMC watershed will seriously degrade chemical water quality and quantity and add sediment to the Little Seneca Reservoir, compromising its role as an emergency water supply. (Save Ten Mile Creek Coalition, Audubon Naturalist Society, Sugarloaf Mountain Association, Livable Clarksburg Coalition, MD Native Plant	The Little Seneca Reservoir (LSR) provides drinking (release-type) water supply in case of severe drought conditions. When water is released from the reservoir, it flows downstream to the Potomac River. Withdrawals for water supply are made at downstream Potomac water intakes. As a result, the LSR is not a direct source of drinking water like the Patuxent Reservoirs, and LSR water is mixed with a much larger volume of Potomac River water before withdrawal. The LSR is monitored for chemical water quality and sedimentation by WSSC. So far, data collected by WSSC, the State, and the USGS show that the water quality of the	

(3)

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			Society, Montgomery Countryside Alliance, Boyds Citizens Association, Seneca Creek Watershed Partners, Coalition for Smarter Growth, Neighbors of Northwest Branch and many other individuals)	LSR is very good and exceeds all State standards for drinking water reservoirs. Studies show that most of the sediment that enters the LSR, including from the developed portion of Cabin Branch watershed, is captured by sediment forebays designed for that purpose. The studies also show that the forebays are only one third full at this time, with decades of service left before they will need dredging. In addition, sedimentation studies indicate very little sediment accumulation outside of the forebays, with only about 3% loss of reservoir capacity so far. WSSC environmental staff has reviewed the M-NCPPC consultant modeling results and has informed M-NCPPC staff that, based on the modeling results, the potential level of new development in the TMC scenarios poses no significant threat to the water quality or quantity of the LSR, and would not cause it to fail to meet State Water Quality Use standards for drinking water reservoirs.	
E-9	Water Quality and Quantity of Little Seneca Reservoir		Little Seneca Reservoir is a backup release-type drinking water supply that depends on the continued health of TMC. Implementing the Staff Draft would threaten the reservoir. (Save Ten Mile Creek Coalition)	(See responses to E-1, E-3, and E-8.)	

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10 Mile Creek Area Limited Amendment
Questions and Answers Regarding Little Seneca Lake and Drinking Water Quality

Below is a set of questions that were sent to DEP, Planning Board Staff, and WSSC earlier on December 19, 2013. WSSC and DEP staff provided written responses. Planning Board Staff indicated that WSSC and DEP were the appropriate entities to respond to this set of questions.

1. **Please provide a brief history of the creation of Little Seneca Lake, including the reasons the Lake was built, its proposed function, and the agreements that guide water releases from the Lake.**

   WSSC Response: The Little Seneca Lake was built as part of a regional water supply plan to ensure that there are both adequate amounts of water available for the Washington Metropolitan Area's consumption and agreed upon Potomac River flow-by requirements during drought events in the region. The Lake was created by the construction of a dam on Little Seneca Creek. It was built to provide short-term supplemental flow to the Potomac River during periods of drought and it also provides a recreational amenity for the public. The Lake is located in Black Hill Regional Park. Fishing and boating facilities are available at the park.

   The Lake was completed in 1984 and the water supply dam is operated by the WSSC. The water supply resource is shared with the Washington Aqueduct (WA) and Fairfax County Water Authority (FCWA).

   The surface area of the Lake is 505 acres. The average depth is 24.7 feet with a maximum depth of 68 feet. The water supply capacity of the Lake is 3.9 billion gallons.

   Releases from the Lake are driven by the Water Supply Coordination Agreement (WSCA) of 1982 which includes the Low Flow Allocation Agreement (LFAA) of 1978 by reference. The parties to the LFAA agreement are the USA (represented by the Corps of Engineers), the State of Maryland, the Commonwealth of Virginia, FCWA, WSSC, and District of Columbia. The WSCA governs the operation and releases from the Lake. The parties of this agreement are the USA (again represented by the Corps of Engineers), FCWA, WSSC, District of Columbia, and Interstate Commission of the Potomac River Basin (ICPRB). The cost sharing and operating expenses of the Lake are covered by the Little Seneca Lake cost sharing agreement of which the parties are the District of Columbia, WSSC, and FCWA. There is also an inter-agency agreement between WSSC and the Maryland-National Capital Park and Planning Commission that allows for recreational usage of the Lake.

   DEP Response: DEP concurs with the responses provided by WSSC.

2. **Please explain the specific circumstances under which reservoir water is used, when this has happened, and exactly what happens during these events.**

   WSSC Response: Little Seneca Lake water is used when there is a drought event and predictions indicate that the requirements of the LFAA will not be met. The agreement requires that the projected flow in the Potomac at Little Falls is not less than 100 MGD plus a 30 MGD safety factor after the supply withdrawals of FCWA, WSSC and WA have been made. When flow levels are

projected to be below this level, a release is made and water from the Lake is released to the Potomac via Little Seneca Creek to ensure that the LFAA requirements are honored.

In brief the release rules are:

Little Seneca Release Rule:

Little Seneca Lake release decisions are based on hourly flow projections at Little Falls in coordination with ICPRB. These projections are calculated using data from recent and projected utility withdrawals from the River, flows measured at the Little Falls gage, and flows measured at other upstream gages. When projected flow at Little Falls (after withdrawals) drops below 100 MGD (plus the 30 MDG margin of safety), releases from Little Seneca Lake are used to make up the difference. There is no predetermined targeted release rate or volume. Each release is independent and based on the conditions and projections prompting the release. The release rate and volume can be varied on an hourly basis and should be just large enough to keep flow-by just above 100 MGD plus the margin of safety.

Balancing Jennings Randolph and Little Seneca

During drought operations, the use of Jennings Randolph and Little Seneca Lake should be balanced in relation to their storage capacity. The release from Jennings Randolph will be greater than the release from Little Seneca Lake. This ensures that Little Seneca Lake storage remains available to account for short-term unexpected changes in conditions, such as spikes in demand.

There have been water supply releases from Little Seneca Lake in two years: 1999 (22 MG) and 2002 (976 MG). These releases were each for one day only. By comparison, releases from Jennings-Randolph during these same two events were 3,049 MG and 5,106 MG respectively.

DEP Response: DEP concurs with the responses provided by WSSC.

3. **Was the Lake ever considered as a direct emergency water source (i.e. direct withdrawals from the Lake) as opposed to releases from the dam to allow increased flow into the Potomac River? If so, please describe how this direct use would work. How would the water be treated? How would it be delivered to regional customers? Given the capacity of the Lake (4.0 billion useable gallons of water according to what I've read), how long would that water supply be able to serve the WSSD and the region?**

WSSC Response: No, this has not been considered due to the regional requirements of its operation and utilization. The Lake was constructed to provide water that could be released to the Potomac in case of low flow events. There is no consideration underway for this potential change in purpose.

DEP Response: DEP concurs with the responses provided by WSSC.

4. **How much acreage is within the Little Seneca Lake drainage area (i.e. drains directly into the Lake or from water sources that drain into the Lake)?**

WSSC Response: According to data made available to WSSC by Maryland DNR, the watershed area upstream of the Little Seneca Lake Dam is 18,531 acres. This includes the sub-watersheds of the three major tributaries, Little Seneca Creek, Cabin Branch and Ten Mile Creek.

DEP Response: DEP concurs with the responses provided by WSSC.

5. **What is the current estimated imperviousness of this acreage?**

   WSSC Response: This question is best left to the storm water authority to answer.

   DEP Response: Based on GIS data maintained by DEP to implement the Water Quality Protection Charge, the total acreage in the drainage area for Little Seneca Lake is 13,544 acres and approximately 13% of this area is impervious surface.

6. **What proportion of the total acreage that drains into Little Seneca Lake is from the Ten Mile Creek Watershed?**

   WSSC Response: According to data made available to WSSC by Maryland DNR, the sub-watershed area of the Ten Mile Creek is 4,801 acres and represents approximately 25.9% of the entire Lake watershed.

   DEP Response: DEP concurs with the responses provided by WSSC.

7. **What is the condition of the reservoir right now? How does your agency evaluate the condition of the reservoir? How does development in the watershed affect the quality of the reservoir itself and the quality of the water in the reservoir? What are your agency's major concerns (if any) with regard to the water quality of the reservoir? Sediment? Pollutants?**

   WSSC Response: WSSC conducts water quality monitoring three times per year (spring, summer, fall) and tests for nutrients (nitrogen and phosphorus), algae, sodium chloride, dissolved oxygen, water clarity and other physical and chemical parameters. The data obtained by WSSC since 2010 are very similar to data obtained prior to 2001, from which MDE determined in 2006 that the Lake was not impaired and did not qualify for a Total Maximum Daily Load. Accordingly, we infer that the more recent data demonstrate that the Lake is currently meeting State water quality standards for water supply reservoirs. WSSC does not evaluate quantitatively the impact of development; however, based on studies by the Center for Watershed Protection and others, we are aware that both urban development and agriculture can affect water quality by increasing sediment loadings in the tributary streams draining to the Lake, and by increasing nutrient and pollutant loads (e.g., sodium chloride). WSSC's objective for Little Seneca Lake at this time is maintaining sufficient capacity to achieve its original purpose of supplementing Potomac River flow. Over time sediment inflow can reduce storage capacity, although such capacity loss as of 2010 was a very modest 0.1% loss per year, which by comparison is about half of the rate of infill in the Patuxent Reservoirs.

   DEP Response: DEP concurs with the responses provided by WSSC.

8. **How far does water released from the Lake flow to reach the Potomac River? How far upstream from the Potomac Water Filtration Plant does the released water enter the Potomac River? At its greatest potential release during a severe drought, what proportion of Potomac River water at the Potomac Water Filtration Plant intake would be from the reservoir?**

WSSC Response: Using measurements from the GIS system, the distance that water from the Lake flows to reach the Potomac River is approximately 11.8 miles. Once the water is released, it mixes with water from other tributaries en route to the Potomac River. The point the water enters the Potomac is approximately 5.25 miles upstream of the Water Filtration Plant. There is not an accurate way to make a determination as to what percentage of water in the River is from the Lake release, but using the available tools, an ICPRB-derived estimate based upon periodic measurements made over the course of the previous two releases suggests that the Little Seneca Lake releases ranged from 1% to 17% of Potomac River flow on the days of the release, with an average of approximately 7%.

DEP Response: DEP concurs with the responses provided by WSSC.

9. **Given Question #8, does the released water make up a sufficient portion of the Potomac River water at a given time to have a significant impact on drinking water quality? How much does the water quality of the Lake affect Potomac River water quality and drinking water quality at the Potomac Water Filtration Plant?**

   WSSC Response: Releases from the Lake occur only during periods of low Potomac River flows to increase the quantity of water in the River and are not intended to improve water quality in the River. For this reason, information concerning water quality at the Potomac WFP intake during releases compared to water quality under normal conditions has not been measured or recorded. However, the water in the Lake is currently presumed to be of a higher quality than the River due to a lack of mixing and other naturally occurring phenomena of the River though Lake characteristics vary somewhat throughout the year. Therefore, the effect on water quality in the River will be dependent upon the condition of the Lake and of the River at the time of the release and the weather conditions leading up to and at the time of the release.

   DEP Response: DEP concurs with the responses provided by WSSC.

10. **To what extent would the scale of development being debated in the Stage 4 Limited Master Plan Amendment have a significant impact on the Little Seneca Lake Reservoir or drinking water quality from the Potomac River in general? To what extent would the alternative levels of development that have been suggested (ranging from no additional development to the Planning Board recommendations to the increased levels of development requested by property owners) result in differences in the quality of WSSC drinking water?**

    WSSC Response: This is not a question that WSSC has the knowledge to answer and is best left to those looking at the development, the amount of storm water runoff associated with the development and the measures used to manage that runoff and maintenance of related facilities.

    DEP Response: In response to Question 11, WSSC stated the following: "WSSC has seen modeled data for development in the Ten Mile Creek watershed that suggests that adverse water quality impacts in that sub-watershed would probably not be significantly changed from current conditions. Changes in Ten Mile Creek, if they occur as modeled, are not likely to be substantially distinguishable from the cumulative water quality condition in the entire Lake, which (as noted in A.7) is currently not impaired."

DEP has reviewed the same modeling data referenced by WSSC in its response and agrees, based on this data, that it is unlikely that the "incremental" development proposed for the Ten Mile Creek watershed will significantly impact the water quality of Little Seneca Lake. DEP notes, however, that this is a different question than the question of how development scenarios would impact water quality in the Ten Mile Creek tributaries and main stem. DEP also notes that the modeling data relating to development scenarios in the Ten Mile Creek watershed are only one component of the data that would be necessary to evaluate a different but related issue – i.e., how do the cumulative impacts of development throughout the entire Little Seneca Lake watershed impact the reservoir?

11. Comparisons to Watts Branch's impact on Potomac River water quality have been made, with some contending that WSSC is considering a mid-River intake at least partly because of reduced water quality closer to shore as a result of the degradation of Watts Branch's water resulting from upstream development. To what extent would increased development in the Ten Mile Creek watershed raise similar questions?

WSSC Response: WSSC has seen modeled data for development in the Ten Mile Creek watershed that suggests that adverse water quality impacts in that sub-watershed would probably not be significantly changed from current conditions. Changes in Ten Mile Creek, if they occur as modeled, are not likely to be substantially distinguishable from the cumulative water quality condition in the entire Lake, which (as noted in A.7) is currently not impaired. The infrequent releases of water from Little Seneca Lake are combined with water from other Seneca Creek tributaries (Great Seneca Creek, Dry Seneca Creek) before reaching the Potomac River 5.25 miles upstream of the water plant intake (as noted in A.8). Flow from the entire Seneca Creek watershed (with or without contribution from Little Seneca Lake) probably mixes in the Potomac River and would not cause reconsideration of the mid-channel intake, which is a modification contemplated specifically in relation to Watts Branch. The confluence of the Watts Branch and the Potomac River is just upstream (approximately 1,500 feet) of the Potomac Water Filtration Plant intake.

DEP Response: DEP concurs with the responses provided by WSSC.

12. Please describe the factors that underlie your conclusions on questions #10 and #11. For instance, could a particular level of increased imperviousness in the Ten Mile Creek watershed tip the balance in the Little Seneca Lake catchment area?

WSSC Response: With the exception of the mid-River intake addressed as part of question #11, Questions 10 – 11 deal with the impact of development – a topic where WSSC is not the authority.

DEP Response: WSSC's response to Questions 10 and 11 indicate that they are based on WSSC's analysis of the environmental models evaluated by the Planning Board regarding the impact of projected increases in nitrogen, phosphorous and sediment loads on the Little Seneca Lake resulting from different development scenarios. DEP's responses are based on the same models. The available scientific data does not allow DEP to identify a specific level of imperviousness that would "tip the balance" of water quality in Little Seneca Lake – viewed from the perspective of whether the changes in water quality would impact the reservoir's intended uses. In general, the more imperviousness the greater the potential impact to water quality. Again, the question of how development activities impact the reservoir is a different question than the question of how development activities impact Ten Mile Creek's tributaries and main stem.

13. If specific levels of development in the Ten Mile Creek area would result in significant impacts on water quality, what options should the County consider to reduce or mitigate these impacts?

WSSC Response: WSSC is not the authority on the impact of varying development schemes on the quality of Ten Mile Creek and also is not the authority on storm water runoff mitigation techniques and their potential results.

DEP Response: As mentioned above in our responses to Questions 10 and 11, the question of how development impacts water quality in the reservoir is a different question than the question of how development impacts the water quality of Ten Mile Creek's tributaries and main stem. We concur with WSSC's conclusion that the incremental impacts of the various development scenarios modeled by the Planning Board are not likely to adversely impact the water quality of Little Seneca Lake. However, the different development scenarios do pose a risk of impacting water quality in Ten Mile Creek's tributaries and main stem. In addition to minimizing the amount of impervious surfaces, there are a number of other options that could help to reduce or mitigate impacts on water quality, including:

- All of the recommendations included on pages 19-21 of the Planning Board's report on its recommended Limited Master Plan Amendment.

- Establishing conservation management plans in all areas located outside the limits of disturbance in the Ten Mile Creek watershed.

- In addition to the Planning Board's general recommendation to require wide buffers around streams and to maintain natural topography and vegetation where possible (particularly forests in headwater areas), overall performance of Environmental Site Design (ESD) could be improved by promoting a more even flow from bioretention facilities. In this respect, riparian buffer areas should be treated as a critical component of stormwater management. Every effort should be made to promote more even distribution of flow from ESD facilities along the entire range of forested or meadow buffer areas.

- The new 20-acre limit on grading established by State law may provide additional mitigation during construction but State law allows grading of additional areas to proceed once 50% of the 20 acres is "stabilized." Optimizing the success of improved stormwater control measures needs to focus on source reduction rather than best management practices (BMPs) for treatment. Source reduction is by far the best BMP.

- Soil decompaction needs to be incorporated as practical to address effects due to both construction and prior agriculture or other activity, but without disturbing vegetation to be saved on soils that might have had prior compaction effects. DEP's experience suggests there may be cases where collecting, stockpiling and reusing local topsoil generates more sediment than it saves. It may be better to compost amend whatever soil is left on the ground to start topsoil generation, and minimize the amount of grubbing early in a project to leave whatever root mat and organic content was in place for as long as possible.

14. Do you believe additional research or analysis is needed to sufficiently answer any of Questions #10 - #13?

WSSC Response: WSSC believes that others studying the impact on the environment are better able to discern if more effort is needed to address these Questions.

DEP Response: DEP's responses to Questions 10-13 are based on its review of available modeling data regarding the incremental impact of development scenarios in the Ten Mile Creek watershed on Little Seneca Lake. Former Councilmember Scott Fosler, former Planning Board Chair Royce Hansen, former DEP Director John Menke and numerous other environmental and water resource advocates have called for further review and analysis of those impacts before Council takes action on the Planning Board's recommended Limited Master Plan Amendment. More specifically, they have called for a study that evaluates the cumulative impacts of all existing and proposed development in the entire Little Seneca Lake drainage area before action on the Limited Master Plan Amendment.

(NOTE: Council Staff has attached at the end of this document the abovementioned opinion piece that appeared in the Washington Poston on November 15, 2013 authored by Mr. Fosler, Mr. Hansen, and Mr. Menke.)

These advocates note that the headwaters of the Little Seneca Lake reservoir and the reservoir itself are located in three different master plan areas within the County -- Germantown, Clarksburg-Hyattstown and Boyds. As a result, they stress that the impacts of development in all three master plan areas on the reservoir have never been fully evaluated as a part of the County's master plan process. They argue that, before further development is approved, an appropriate study should be conducted to assess the cumulative impacts of development – both existing and proposed – within the Little Seneca Lake drainage area. They cite best practices for protecting "source water" that are being implemented throughout the country and argue that this kind of study is needed in order to identify any steps that must be taken by the County over the long-term to protect the reservoir's water quality and its intended use as source water for the region during drought situations.

DEP agrees that these stakeholders have identified a very important policy issue but is uncertain at this point in time as to the appropriate scope of such a study or whether the study should be conducted prior to approval of the Limited Master Plan Amendment. DEP will continue to evaluate this issue as the PHED Committee worksessions move forward. We note that the advocates have referenced a variety of best practices being used by water utilities across the country to protect source water and it would be helpful to learn more from WSSC about its long-term plans for protection of the reservoir in general and, more specifically, whether WSSC believes that a study of the cumulative impacts of existing and proposed development on the reservoir is appropriate at this time.

Montgomery County rolls the dice with the region's water system

By John Menke, Scott Fosler and Royce Hanson, Published: November 15

Anyone who lives in the D.C. region and relies on clean drinking water to live — in other words, everyone who lives in the D.C. region — needs to be aware of a debate that's about to come to a head in Montgomery County.

A proposal to amend the land-use plan for the Clarksburg area, in the northern part of the county, is set to be taken up by the county council in December. This proposal may endanger the integrity of the water system for metropolitan Washington by permitting millions of square feet of commercial and office development and the construction of hundreds of residences alongside the headwaters of Ten Mile Creek, the last undeveloped tributary of Little Seneca Reservoir.

As former Montgomery County officials, each of us was involved in the creation of the reservoir and its designation as a key component of the water system for metropolitan Washington. It supplanted massive and ill-conceived alternatives, including a proposal to place some 16 dams on the Potomac River that would have inundated most of the C&O Canal and destroyed the character of the river basin. Regional leaders discovered that in the event of a drought, with an appropriate regional system of interconnected local water supplies, Little Seneca Reservoir alone could sufficiently augment the flow of the Potomac until water released from another, larger reservoir reached intakes in the river.

This new regional water supply system, with Little Seneca Reservoir at its core, was formalized in the 1982 Water Supply Coordination Agreement, signed by the region's major water utilities in Maryland, Virginia and the District and the Interstate Commission on the Potomac River Basin.

But the integrity of that system is now threatened. The development blueprint approved by the county Planning Board in October concedes that development of any scale would degrade Ten Mile Creek; the only questions are by how much and what effect would this have on the reservoir. We don't know the answers to these questions because no comprehensive study has been carried out. Notably, the Planning Board's professional staff recommended a level of development well below what the board approved — and even that lower intensity involved significant risk. The board then increased the level of development recommended by its staff by 50 percent east of Interstate 270 and 300 percent west of the highway. No justification for this level of damage is offered in the plan.

To approve such expanded development without a careful, professional and independent analysis of its impact on this critical water resource would constitute an abandonment of the stewardship

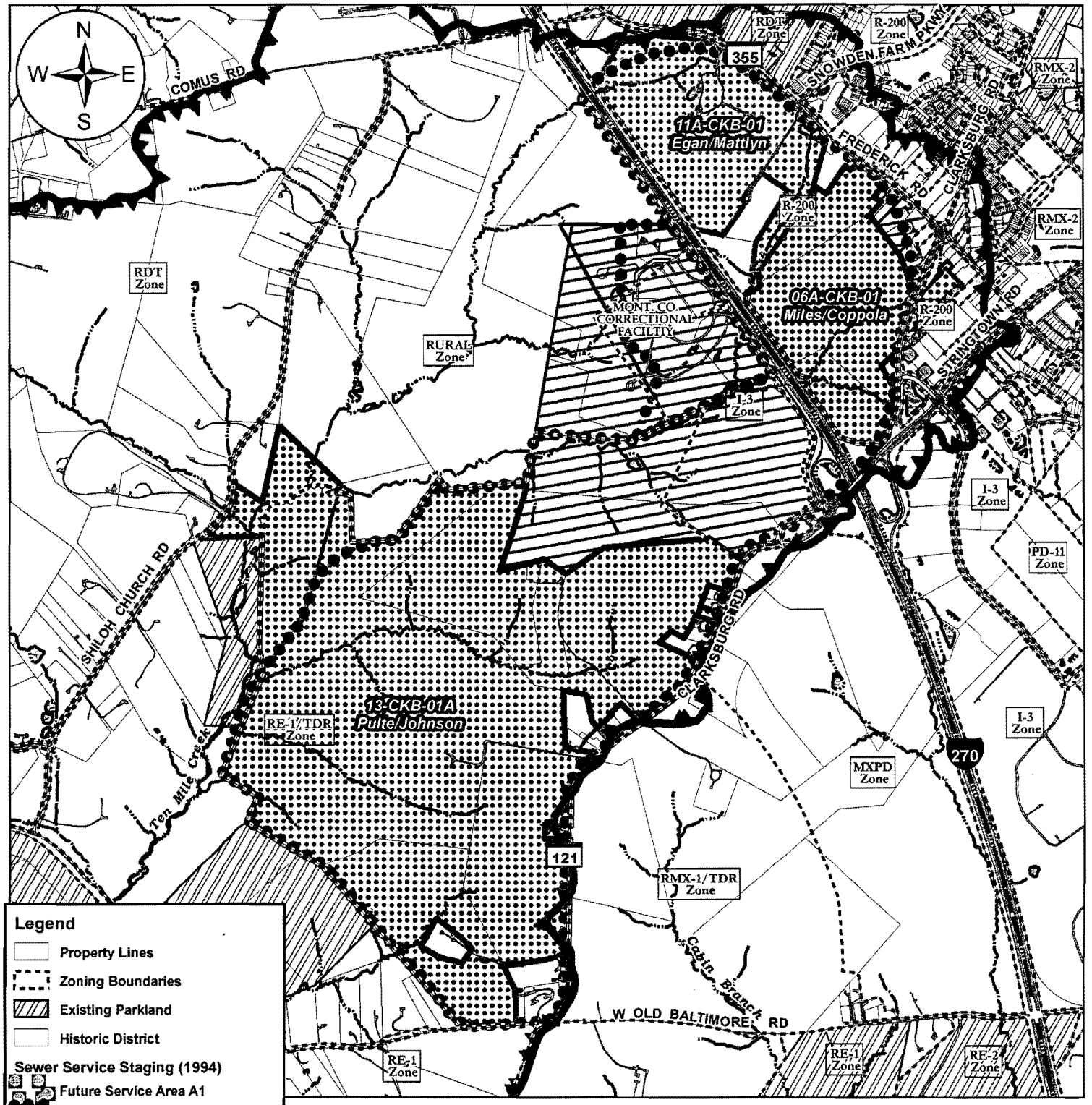
responsibilities that the county exercises for the 4.3 million people whose water is drawn from the Potomac.

We have walked in the shoes of planners and council members and understand the difficulty of making decisions that are certain to disappoint some interested parties. We share responsibility for the present problem because 30 years ago, when we proposed and acquired land for the reservoir and helped to negotiate the agreements for its role in the regional system, we should have taken stronger action to ensure its protection. But we did not anticipate that future planning boards and county councils would consider massive development along the headwaters of the reservoir without first carefully studying the damage it could do to the region's water supply.

We believe the responsible course for the Montgomery County Council to take at this point is to drastically reduce the proposed density and impervious-surface limits in the Clarksburg amendments. Better yet, reject the plan and remand it to the Planning Board for reconsideration after a thorough, independent analysis.

John Menke was a member of the Montgomery County Council from 1974 to 1978 and later served as director of the county Department of Environmental Protection. Scott Fosler served on the county council from 1978 to 1986. Royce Hanson was chairman of the Montgomery County Planning Board from 1972 to 1981 and 2006 to 2010.

Comprehansive Water and Sewer Plan Map:
Ten Mile Creek Master Plan Amendment - Clarksburg Development Stage 4 WSCCR Cases



Legend

- Property Lines
- Zoning Boundaries
- Existing Parkland
- Historic District

Sewer Service Staging (1994)

- Future Service Area A1
- Future Service Area C

Stage 4 Category Change Requests

- 06A-CKB-01 (Miles/Coppola)
- 11A-CKB-01 (Egan/Mattlyn)
- 13-CKB-01A (Pulte/Johnson)
- County-Owned Sites
- CKB MP Development Stage 4
- Ten Mile Creek Watershed

0 0.25 0.5 0.75 1

Scale (Miles)

Montgomery County, Maryland
Draft 2013 Comprehensive Water Supply and Sewerage Systems Plan

12/10/13

DEP
Water and Wastewater Policy Group

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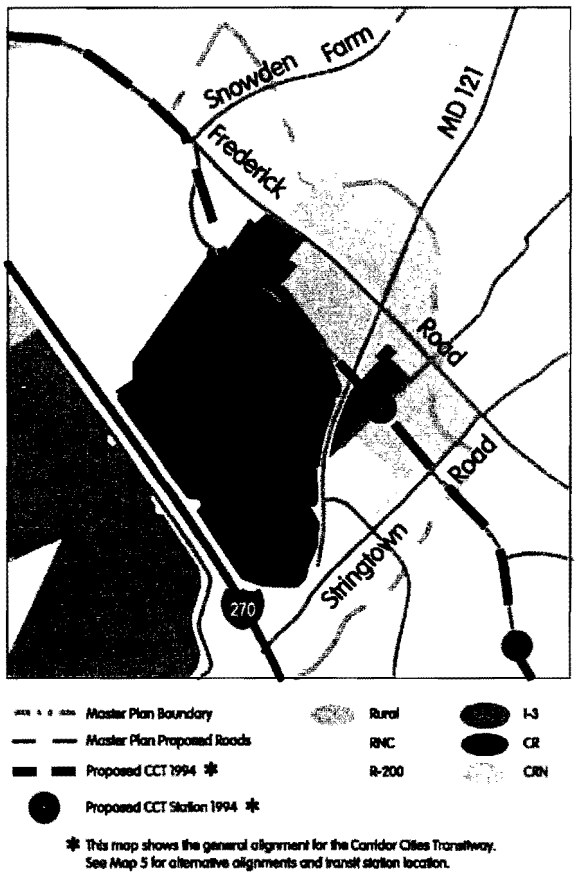
- The Commercial Residential Zones offer an opportunity to balance a mix of uses for each development area, while providing significant amounts of housing and commercial uses that would help implement the 1994 Plan's vision for a complete corridor town. Development on the properties should nonetheless employ Environmental Site Design techniques and preserve undeveloped open space to reduce imperviousness. Should optional method development occur, construction of the MD 355 Bypass should be considered a priority as a major public benefit.

- This Plan Amendment recommends CR 0.75, C 0.5, R 0.5 H 85 for these properties. Maximum building heights of 85 feet are appropriate in the portion of the properties nearer I-270, and in areas along MD 121 closest to the I-270 interchange, where buildings will be less visible from the Historic District and Town Center. Development closest to the Historic District should be compatible with building heights in the Historic District, but not exceed 45 feet. There should also be a transition in heights on the Miles/Coppola properties, from the areas designated for lower building heights to those where taller buildings are envisioned.

Clarksburg Historic District and Vicinity



The majority of Clarksburg's Historic District lies within the Ten Mile Creek watershed (see Map 9). The district straddles MD 355 from its intersection with Stringtown Road to west of its intersection with MD 121. The 1994 Plan identified the historic district as a focal point of the Town Center, encouraging sensitive and appropriate infill development in the district as an important component of the Plan's objectives for the Town Center. The Plan includes a series of design guidelines that are designed to retain the identity of the historic district by reinforcing building scale and historic building patterns—structures close to the road, deep back yards, and expanses of nearby green space—that characterized the original settlement. The Plan recommended renovations of existing buildings that would allow both residential and smaller scale commercial activities, like shops and offices. To protect the district, the Plan recommended reduced building heights and residential zones in the immediately adjacent areas, and recommended relocation of MD 355 to carry through trips away from the Historic District.

The existing zones in the district—convenience and general commercial (C-1 and C-2) and one-family residential (R-200)—are not adequate to accomplish the 1994 Plan's historic preservation goals, particularly the idea of accommodating residential and light commercial uses across the entire district. The Commercial

Residential Neighborhood (CRN) Zone allows densities and building heights tailored more precisely to the Plan's land use objectives for the district, while supporting the Plan's recommendation to protect the scale and character of the historic district. It also allows property owners the flexibility to rehabilitate properties for a variety of potential uses, making renovation more attractive.

Although it is not in the Historic District, the area between the Miles-Coppola properties and existing MD 355 is also appropriate for the CRN Zone. This area—nine parcels totaling about 10.5 acres—is in the C-2 and R-200 zones. The County plans to build a new Clarksburg Fire Station on two of the parcels, and the remaining parcels are vacant, or improved with small homes or businesses. The CRN Zone would allow redevelopment that would complement Historic District development across MD 355 and create a consistent physical setting along the road.

Recommendations

- This Plan Amendment recommends CRN 0.25, C 0.25, R 0.25 H 35 for the portion of the historic district within the Amendment boundary. It should be noted that the proposed revision of the Zoning Ordinance includes language exempting from density calculations those historic resources that are recommended for preservation and reuse in the applicable master plan. Contributing resources in the Clarksburg Historic District shown on the Master Plan for Historic Resources would be eligible for the exemption.
- Design guidelines set out for the Historic District in the 1994 Plan remain in place and should be used to direct infill development. In addition, infill or new development must adhere to district-specific guidelines found in the Master Plan for Historic Preservation.
- This Plan Amendment recommends CRN 0.25, C 0.25, R 0.25 H 35 for the area between the Miles Coppola properties and existing MD 355.

Transit Station

The 1994 Plan shows a transit station where the MD 355 Bypass intersects Redgrave Place. The Plan recommends residential uses near the station at a scale sympathetic to the adjacent historic district, enabling local residents to walk to the transit stop. Clarksburg Elementary School is currently located in the area proposed for the station and the Plan recognizes that the school would remain for a number of years before its eventual relocation or replacement. It is important that the transit station maintain a strong pedestrian connection to the Town Center via Redgrave Place.

Recommendations

- Maintain the transitway to Clarksburg and in the vicinity of the Miles-Coppola properties, where it could serve primarily residential and employment uses, as well as development east of MD 355 and west of MD 121.
- Two alternative alignments for the Bypass are also shown and should be studied as part of a facility plan when the Miles-Coppola properties develop (see Map 9). The facility plan should study the need for the full 150-foot ROW for the bypass considering potential modifications to the design of the Corridor Cities Transitway. If an alternative alignment is chosen, the transit station location should retain a pedestrian connection to Redgrave Place and fulfill the intent of the 1994 Plan to connect the Town Center with the Historic District.

Water and Sewer Service

The 1994 Master Plan recommended the provision of public water and sewer service in the Stage 4 area of Clarksburg based on its initial zoning recommendations. This Plan Amendment continues to recommend public services to support the planned development for Stage 4. Specifically, public water and sewer service is recommended for the area identified as "Future Service Area C" in the 1994 Plan, which includes Stage 4, to support planned development densities, including recommended cluster development. The provision of public sewer service will help to reduce the potential for existing and future septic systems to impact the watershed. Public and individual water supply and wastewater disposal service in the master plan area is recommended to be provided in a manner consistent with the service policies included in the County's *Comprehensive Water Supply and Sewerage Systems Plan*. Properties within the Plan Area not already receiving public service or recommended for public service are expected to use individual, on-site water supply and/or sewerage systems (wells and septic systems).

The Ten Mile Creek watershed has no receiving sewers downstream of the Stage 4 area. Wastewater flow from the majority of Stage 4/Future Service Area C will need to be pumped out of the watershed into sewerage systems serving adjacent Stage 3 development. The *Clarksburg Stage 3 and 4 Area Facility Plan,* prepared for the Washington Suburban Sanitary Commission (WSSC), anticipated the need for planned Stage 3 area sewerage facilities to accept and handle pumped wastewater flows from Stage 4. Environmental concerns and competing development interests within Stage 4 could result in individual proposals for several wastewater pumping facilities scattered throughout the sewer service area. To minimize infrastructure operation and maintenance needs, and to create a logical, efficient, and environmentally responsible sewerage system for Stage 4, this amendment recommends WSSC's coordination of a comprehensive Stage 4 sewerage facility plan, with the participation of all major Stage 4 development interests. If necessary, this requirement should be incorporated into service area category change approvals for the Stage 4 sites.

The lack of public sewer service, needed to replace aging septic systems, has hampered improvement and redevelopment of the Clarksburg Historic District, an integral part of the Town Center. The County is investigating the design and construction of a public sewerage system to serve the historic district. If this sewerage system is constructed ahead of other Ten Mile Creek development, it would include a small, interim pumping station and force main tying into the Town Center system. This interim station and force main would be removed from service when gravity sewer service becomes available from the Miles-Coppola property. Planning and development of the Miles-Coppola project sewerage system will need to include, at a minimum, a gravity main extension to accept wastewater flows from the historic district.

Recommendations

- Approve amendments for public water and sewer service for the Stage 4 area (Future Service Area C) of Ten Mile Creek in the County's Water and Sewer Plan. Include a requirement for a comprehensive Stage 4 sewerage system facility plan. WSSC service and financing policies will require construction of needed water and sewer facilities as part of the development process by the property owner.
- Locate sewer main alignments and pumping station sites to minimize, as feasible, disturbance of environmental buffers and forested areas.
- Provide sewer service to the Historic District as part of the Stage 4 development, including at a minimum, the removal of interim wastewater pumping facilities in favor of gravity sewer service.

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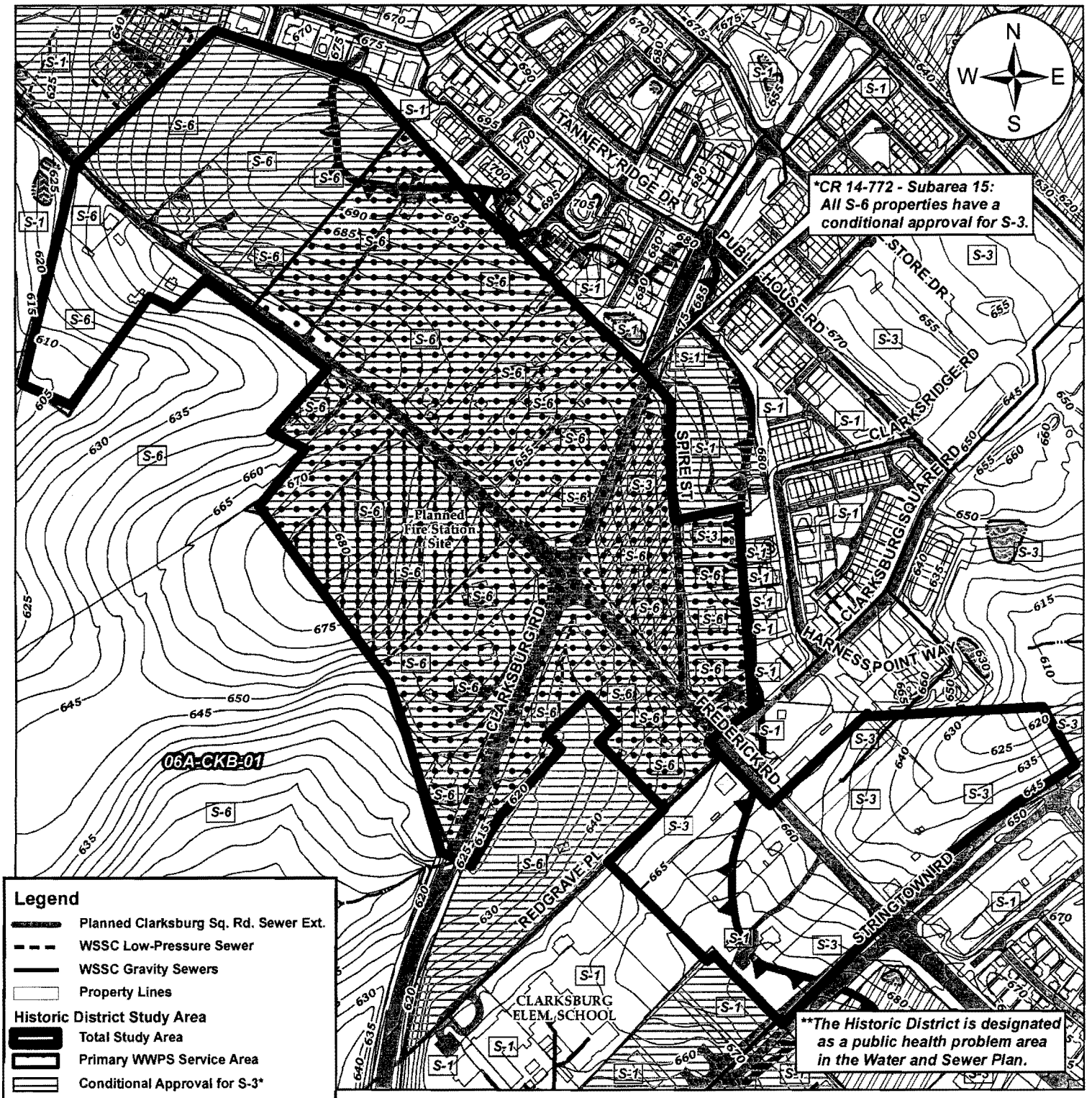
Sewer Service Area Category Map:
Ten Mile Creek Master Plan Amendment - Clarksburg Historic District



Legend

- Planned Clarksburg Sq. Rd. Sewer Ext.
- WSSC Low-Pressure Sewer
- WSSC Gravity Sewers
- Property Lines

Historic District Study Area

- Total Study Area
- Primary WWPS Service Area
- Conditional Approval for S-3*
- Sewer Catagories
- Topography (5 ft. c.i.)
- Existing Parkland
- Ten Mile Creek Watershed
- Clarksburg Historic District**

Stage 4 Category Change Requests

- Miles-Coppola Project (06A-CKB-01)
- Egan/Mattlyn Project 11A-CKB-01)
- County-Owned Sites

0 200 400 600 800 1,000

Scale (Feet)

Montgomery County, Maryland
Draft 2013 Comprehensive Water Supply and Sewerage Systems Plan

12/9/13

DEP
Water and Wastewater
Policy Group

Approved FY13-18 CIP

Clarksburg Fire Station -- No. 450300

Category	**Public Safety**	Date Last Modified	**May 14, 2012**
Subcategory	**Fire/Rescue Service**	Required Adequate Public Facility	**No**
Administering Agency	**General Services**	Relocation Impact	**None.**
Planning Area	**Clarksburg**	Status	**Preliminary Design Stage**

EXPENDITURE SCHEDULE ($000)

Cost Element	Total	Thru FY11	Est. FY12	Total 6 Years	FY13	FY14	FY15	FY16	FY17	FY18	Beyond 6 Years
Planning, Design, and Supervision	3,374	462	291	125	125	0	0	0	0	0	2,496
Land	1,660	1,660	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	6,514	2	42	2,413	84	2,329	0	0	0	0	4,057
Construction	9,811	0	0	0	0	0	0	0	0	0	9,811
Other	5,577	4	0	0	0	0	0	0	0	0	5,573
Total	**26,936**	**2,128**	**333**	**2,538**	**209**	**2,329**	**0**	**0**	**0**	**0**	**21,937**

FUNDING SCHEDULE ($000)

G.O. Bonds	26,366	2,128	333	1,968	209	1,759	0	0	0	0	21,937
Intergovernmental	570	0	0	570	0	570	0	0	0	0	0
Total	**26,936**	**2,128**	**333**	**2,538**	**209**	**2,329**	**0**	**0**	**0**	**0**	**21,937**

DESCRIPTION

This project provides for a new Fire and Rescue Station in the Clarksburg area and the purchase of associated apparatus. Also, the project will provide a connection to the Washington Suburban Sanitary Commission (WSSC) sanitary sewer system for the fire station and for properties along MD 355 within the Clarksburg Historic District. The new facility will be located at 23420 Frederick Road, Clarksburg. The new station will be constructed in accordance with square footage specifications of the prototype Program of Requirements (POR) for a Class I Fire Station. A Class I Fire Station is approximately 22,600 gross square feet and includes apparatus bays, dormitory and support space, personnel living quarters, administrative offices, and a meeting/training room. This station will include offices for a Battalion Chief, a Police satellite facility, additional space for the Upcounty Regional Services Center and personal protective equipment storage totaling 2,589 square feet. On-site parking will be provided. Fire/Rescue apparatus to be purchased for this station includes an aerial truck, a tanker and a brush truck.

ESTIMATED SCHEDULE

The fire station planning and design is complete through the design development stage. The final design and construction of the Clarksburg fire station is deferred beyond six-years due to fiscal capacity. Funds for the design and construction for the sewer extension required to serve the fire station and the Clarksburg Historic District are included in FY13 and FY14.

COST CHANGE

Previously funded costs are for land and partial design costs for the fire station up to the design development phase. FY13-18 project costs represent preliminary cost estimates for the sewer extension only. Costs and funding reflected on this PDF will be revised after the County completes a cost-sharing agreement with the affected property owners in the Clarksburg Historic District and finalizes the scope of work with WSSC.

JUSTIFICATION

A new station will be necessary in this area due to the present and projected population density for the Clarksburg area. Clarksburg is expected to increase from a few thousand residents to more than 25,000. The Clarksburg Town Center is envisioned to include a mix of housing, commercial, retail, recreation and civic uses with the Clarksburg Historic District as the focal point. Residential areas include the Newcut Road neighborhood, the Cabin Branch neighborhood, the Ten Mile Creek area, the Ridge Road transition area, the Brink Road transition area, as well as projected residential development in the Transit Corridor District and the Gateway Center.

In addition, the property for the fire station and the surrounding properties are not connected to the sanitary sewer system; with failing septic systems, they do not meet modern wastewater disposal standards. Therefore, this project also includes the design and construction of the sanitary sewer connection for the fire station and 38 surrounding properties. This will help keep the Clarksburg Historic District a viable community, promote rehabilitation of existing structures, and allow for limited development that is consistent with the adopted master plan. This sanitary sewer connection was based on the 2010 WSSC report "Sewer Facility Plan for Historic Clarksburg."

This project is recommended in the Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan approved by the County Council in October 2005 and the Montgomery County Fire and Rescue Service Station Location and Resource Allocation Work Group, Phase I Report, "Need for Upcounty Fire-Rescue Resource Enhancements, October 14, 1999. Development of this facility will help Montgomery County meet the NFPA 1710 Guidelines.

OTHER

Unexpended appropriation for the design and construction of the fire station has been removed. The County Council will consider a future appropriation request for the design and construction of the sewer extension once the County Council and County Executive have agreed upon a cost-sharing agreement for the sewer extension with the affected property owners. This agreement should equitably allocate the sewer extension costs between the County and the

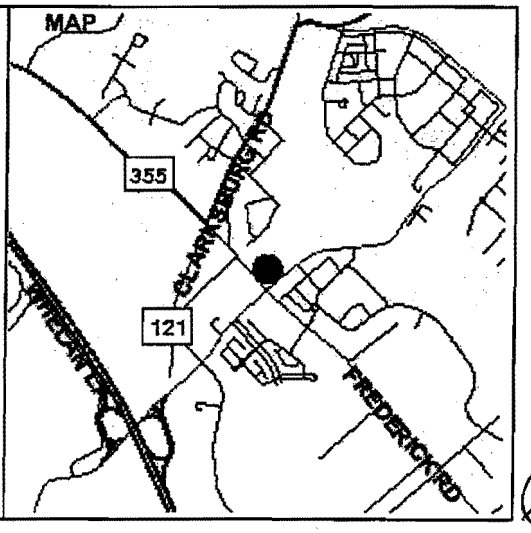
APPROPRIATION AND EXPENDITURE DATA

Date First Appropriation	FY03	($000)
First Cost Estimate Current Scope	FY13	4,999
Last FY's Cost Estimate		3,952
Appropriation Request	FY13	-726
Appropriation Request Est.	FY14	1,047
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		3,952
Expenditures / Encumbrances		2,893
Unencumbered Balance		1,059
Partial Closeout Thru	FY10	0
New Partial Closeout	FY11	0
Total Partial Closeout		0

COORDINATION

Montgomery County Fire and Rescue Service
Department of Police
Upcounty Regional Services Center
Department of General Services
Department of Permitting Services
Department of Technology Services
M-NCPPC
State Highway Administration
WSSC

MAP



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private property owners who will benefit from the extension. The property for the fire station will require a sewer category change prior to the issuance of permits. Contributions reflect a planning level estimate of a WSSC health hazard subsidy for which Clarksburg Historic District property owners would be eligible for construction of new sanitary sewer mains.

OTHER DISCLOSURES

- A pedestrian impact analysis will be performed during design or is in progress.

Clarksburg Fire Station (P450300)

FY15-20 CIP
CE Recommended

Category	Public Safety	Date Last Modified	1/6/14
Sub Category	Fire/Rescue Service	Required Adequate Public Facility	No
Administering Agency	General Services (AAGE29)	Relocation Impact	None
Planning Area	Clarksburg	Status	Preliminary Design Stage

	Total	Thru FY13	Est FY14	Total 6 Years	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Beyond 6 Yrs
EXPENDITURE SCHEDULE ($000s)											
Planning, Design and Supervision	3,867	712	1	3,120	0	0	0	1,962	574	584	34
Land	1,663	1,663	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	4,728	2	0	4,726	0	0	0	0	2,660	2,066	0
Construction	11,572	0	0	11,572	0	0	0	0	6,613	4,959	0
Other	6,579	5	0	6,574	0	0	0	0	5,165	1,409	0
Total	**28,409**	**2,382**	**1**	**25,992**	**0**	**0**	**0**	**1,962**	**15,012**	**9,018**	**34**
FUNDING SCHEDULE ($000s)											
G.O. Bonds	28,409	2,382	1	25,992	0	0	0	1,962	15,012	9,018	34
Total	**28,409**	**2,382**	**1**	**25,992**	**0**	**0**	**0**	**1,962**	**15,012**	**9,018**	**34**

APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 15	0
Appropriation Request Est.	FY 16	0
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		3,226
Expenditure / Encumbrances		3,115
Unencumbered Balance		111

Date First Appropriation	FY 03	
First Cost Estimate		
Current Scope	FY 15	28,409
Last FY's Cost Estimate		28,709

Description

This project provides for a new Fire and Rescue Station in the Clarksburg area and the purchase of associated apparatus. The new facility will be located at 23420 Frederick Road, Clarksburg. The new station will be constructed in accordance with square footage specifications of the prototype Program of Requirements (POR) for a Class I Fire Station. A Class I Fire Station is approximately 22,600 gross square feet and includes apparatus bays, dormitory and support space, personnel living quarters, administrative offices, and a meeting/training room. This station will include offices for a Battalion Chief, a Police satellite facility, additional space for the Upcounty Regional Services Center and personal protective equipment storage totaling 2,589 square feet. On-site parking will be provided. Fire/Rescue apparatus to be purchased for this station includes an aerial truck, a tanker and a brush truck.

Estimated Schedule

The fire station planning and design is complete through the design development stage. Design to begin in FY19 with construction in FY19-20.

Cost Change

Previously funded costs are for land and partial design costs for the fire station up to the design development phase. Cost is added for completion of the design and construction of the project.

Justification

A new station will be necessary in this area due to the present and projected population density for the Clarksburg area. The Clarksburg population is expected to increase from 13,766 in 2010 to almost 40,000 by 2025. The Clarksburg Town Center is envisioned to include a mix of housing, commercial, retail, recreation and civic uses with the Clarksburg Historic District as the focal point. Residential areas include the Newcut Road neighborhood, the Cabin Branch neighborhood, the Ten Mile Creek area, the Ridge Road transition area, the Brink Road transition area, as well as projected residential development in the Transit Corridor District and the Gateway Center. This project is recommended in the Fire, Rescue, Emergency Medical Services and Community Risk Reduction Master Plan approved by the County Council in October 2005 and the Montgomery County Fire and Rescue Service Station Location and Resource Allocation Work Group, Phase I Report, "Need for Upcounty Fire-Rescue Resource Enhancements, October 14, 1999. Development of this facility will help Montgomery County meet the NFPA 1710 Guidelines.

Other

Project only includes cost to provide sewer service to the station. Alternative approaches to providing sewer service to the historic district are being explored.

Disclosures

A pedestrian impact analysis will be performed during design or is in progress.

Coordination

Montgomery County Fire and Rescue Service, Department of Police, Upcounty Regional Services Center, Department of General Services, Department of Permitting Services, Department of Technology Services, M-NCPPC, State Highway Administration, WSSC, Special Capital Projects Legislation [Bill No. 07-06] was adopted by Council May 25, 2006 and reauthorization will be requested prior to construction.