MCPB
Item No. 3
Date: 10/10/2013

Clarksburg Limited Master Plan for the Ten Mile Creek Watershed - Worksession No. 2

Valdis Lazdins, Chief, Area 1, valdis.lazdins@montgomeryplanning.org, 301-495-4506
Mary Dolan, Chief, Functional Planning & Policy, mary.dolan@montgomeryplanning.org 301-495-4552
Frederick Vernon Boyd, Planner/Coordinator, Area 3, fred.boyd@montgomeryplanning.org 301-495-4654

Completed: 10/3/2013

Description

The County Council directed the Planning Board to prepare an amendment to the 1994 Clarksburg Master Plan by October 2013. The Planning Board held the public hearing for the Ten Mile Creek Area Limited Amendment to the Clarksburg Master Plan and Hyattstown Special Study Area on September 10 and September 12. The Planning Board held the first worksession on September 26.

Staff Recommendation

Discuss and provide guidance to staff with respect to issues raised by testimony and questions from the Board. Board members should bring their copies of the Public Hearing Draft Limited Amendment to the worksession.

Summary

The second worksession on the Limited Amendment will concentrate on land use and zoning issues. The accompanying issues matrix, which summarizes oral and written testimony and offers planning staff's response to issues raised in testimony, has been revised to reflect decisions made by the Planning Board as well as additional information.

The worksessions are organized as follows:

September 26, 2013	Worksession 1: Water Quality, Analytical Work and the Rationale for Protection, Land use options raised in testimony
October 10, 2013	Worksession 2: Transportation, Land Use and Zoning (Options, East of I-270, including Historic District, and West of I-270), Parks, Implementation
October 24, 2013	Approval to transmit Planning Board Draft

Clarksburg Limited Amendment Public Hearing – September 10 and 12, 2013

Summary of Testimony (~~9/25~~10/3/13) Note: This table may be supplemented as new information is available prior to the 10/~~10~~24/13 Planning Board Worksession.

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
Plan Concept	Make no changes to the 1994 plan		1994 Master Plan-represents the correct balance between community building, county housing policy, economic development and environmental protection. (Robert R Harris and many other individuals)	The County Council requested that we consider how to achieve both goals. Their concern was based on earlier failed attempts by a task force and a working group of agencies and stakeholders to avoid any changes to the plan by using the regulatory process.	Concur with staff
Plan concept	Make significant changes to the master plan.		Do not defile the last clean watershed in the county for development of no lasting significance and certain harm. (Royce Hansen)	The Public Hearing Draft balances the community building needs with a reasonably small risk to the watershed. All the key resources are protected and the development footprint is minimized. A substantial amount of new forest will be planted and the streams restored where damage has occurred.	Concur with staff
Environment E-1	Water Quality of Ten Mile Creek		New development in the TMC watershed will seriously degrade the chemical and physical quality of TMC. (Save Ten Mile Creek Coalition, Audubon Naturalist Society, Sugarloaf Mountain Association, Livable Clarksburg Coalition, MD Native Plant Society,	The State and the scientific literature recognizes that ESD cannot be expected to prevent all negative impacts from development, and that high-quality watersheds are best protected by an approach that both limits development and uses ESD. This rationale is at the core of the staff recommendations. ESD is now required and will be used for any new development in TMC. ESD is intended to mimic the hydrology of wooded land and to	Concur with staff

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			Montgomery Countryside Alliance, Boyds Citizens Association, Seneca Creek Watershed Partners, Coalition for Smarter Growth, Neighbors of Northwest Branch, and many other individuals)	treat and infiltrate about 90% of the rainfall in an average year (up to the 1-year storm). Planning-level modeling done by the M-NCPPC consultant shows some potential impacts to stream hydrology for development under the 1994 Plan, and fewer potential hydrological impacts for a recommended reduced development footprint in subwatersheds 110 and 111, along with the protection of key forest resources. ESD is intended to improve hydrological performance, but there is no expectation by state and local environmental agencies that it will prevent all negative impacts to stream biological health, particularly in high-quality watersheds. (See response to E-3.) Maintaining hydrology similar to wooded land for up to the 1-year storm is expected to significantly reduce the risks of stream channel erosion and sedimentation. Many pollutants in stormwater will be filtered and reduced by ESD practices. Exceptions to this are mobile pollutants such as road salt and to a degree nitrogen, which ESD practices will transmit directly to groundwater.	
E-2	Water Quality in Ten Mile Creek		None of the scenarios in the draft master plan will serve to protect Ten Mile Creek because, in all scenarios, TMC will degrade below water quality standards. (Ephraim	See the responses to E-1, E-3, and E-11, and E-21.	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			King)		
E-3	Biological Health of Ten Mile Creek		New development in the TMC watershed will seriously degrade stream biological health and will result in the loss of TMC as one of the last 3 known larger-sized reference streams in western M.C. (Save Ten Mile Creek Coalition, Audubon Naturalist Society, Sugarloaf Mountain Association, Livable Clarksburg Coalition, MD Native Plant Society, Montgomery Countryside Alliance, Boyds Citizens Association, Seneca Creek Watershed Partners, Coalition for Smarter Growth, Neighbors of Northwest Branch, and many other individuals)	Stream biological health is highly dependent the amount of disturbance in the watershed. As yet there have been no watershed-scale studies that have assessed the biological impacts of ESD. Although ESD is a significant improvement over older SWM, MDE made no assumptions regarding specific biology responses to ESD, and set no biological performance standards for ESD. The State and the scientific literature recognize that ESD cannot be expected to prevent all negative biological impacts from development. TMC development, under the 1994 master plan, in subwatersheds 110 and 111 may disqualify TMC from its current status as a reference stream based on selection criteria for reference streams in the County. The reduced development footprint and enhanced natural resource protection of the staff recommendations may result in TMC remaining a reference stream based on those criteria, and by limiting negative impacts to the stream's biology. (See also the response to comment E-4.)	
E-4	Biological Health of Ten Mile Creek		TMC is a pristine stream and the best quality watershed in the County, and is the model and standard against all other streams are judged. (Save Ten Mile Creek Coalition, and many other individuals)	(See response to E-10.) All streams in the County ~~that~~ have been negatively impacted by some human activity. But some relatively undeveloped watersheds in the County, including TMC, are still in good to excellent condition compared with other streams. According to DEP, TMC is not the best quality watershed in the County, but it is ~~definitely~~	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				considered one of the best. As such it is one of a number of high-quality streams in the County that are used as reference streams to compare with other more degraded streams. This allows us to compare changes in reference stream conditions that are not related to development impacts, such as climate change. Staff recommendations help reduce the development footprint to a level that reduces the risk of losing TMC as a reference stream.	
E-5	Biological Health of Ten Mile Creek		TMC will degrade from a Good to Excellent rating for stream biological health, to Fair or Poor. (Save Ten Mile Creek Coalition)	This conclusion is based on a misapplication of a regression analysis done by DEP in 2003, which looked at the statistical relationship between impervious cover and stream biological health. The regression line that DEP calculated cannot be used (the way STMCC is using it) to predict a specific stream condition score from an imperviousness value without also stating the confidence interval for the estimated regression score (a +/- range of values) about the estimate. The purpose of the regression line is to show the general statistical downward trend in stream condition with increasing impervious cover.	
E-6	Biological Health in Ten Mile Creek		Subwatershed 206 is currently in Fair condition. With proposed improvements to stormwater proposed by Peterson/Tanger, and the removal of negative agricultural impacts, along with targeted retrofits	There is no basis for an assertion that using ESD will improve the biological health of subwatershed 206 to a specified degree because it cannot erase the impact of all existing uses. If enough currently poorly-controlled existing development is retrofitted, then some improvement in stream health could be expected. But whether the improvement would be sufficient, especially in light of	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			and restoration work, the biological health condition of this subwatershed will improve into the "Good" category. (Soltesz, Peterson/Tanger)	the degree of grading needed and 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. (Peterson	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~~ aquatic 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. The Army Corps of Engineers, in a few relatively rare cases at the local development level, regulates some ephemeral streams that meet certain criteria. Local jurisdictions can, however, be more stringent than federal or state agencies, in protecting natural resources. Because of the unusually sensitive and high-quality nature of TMC, staff recommendations regarding ephemeral streams are appropriate.	
E-8	Water Quality and Quantity of Little		New development in the TMC watershed will seriously degrade	The Little Seneca Reservoir (LSR) provides ~~drinking~~ supplemental (release-type) water ~~supply~~ to augment Potomac River flows in	Concur with staff

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
	Seneca Reservoir		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 Society, Montgomery Countryside Alliance, Boyds Citizens Association, Seneca Creek Watershed Partners, Coalition for Smarter Growth, Neighbors of Northwest Branch and many other individuals)	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 MD ~~USGS~~ Geological Survey show that the water quality of the 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~~ about one ~~third~~ half full at this time, with decades of service left before they will need dredging, at current sedimentation rates. Future increases in sediment inputs, however, could shorten the time it could take for the forebays to fill. ~~-~~In addition, the most recent sedimentation accumulation ~~studies~~ study by the MD Geological Survey indicates very little sediment accumulation outside of the forebays, with only about a 3% loss of reservoir capacity ~~so far~~as of 2010. In July 2013, WSSC environmental	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				staff ~~has~~ reviewed the M-NCPPC consultant modeling results and ~~has~~ verbally 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. At the 9/26 Worksession, WSSC staff reiterated that the reservoir currently meets State water quality standards, and emphasized that the reservoir should be protected from sediment and nutrient inputs from new development. To do this, WSSC staff stated the importance of protecting the reservoir watershed through sound land use planning and management, limiting new impervious cover, protection of natural resources, providing environmental buffers, and the use of ESD. At the 9/26 Worksession, DEP staff echoed these points, and added that the reservoir is not an emergency drinking water supply, but serves to help maintain minimum flow in the Potomac River in times of severe drought. Because of the reservoir's limited role in a much larger system, proposed development in the reservoir watershed does not threaten the region's drinking water supply. DEP staff also added that if Ten Mile Creek is protected, the reservoir will be protected for its intended purpose, and indicated	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				that the proposed actions in the draft plan that protect resources from development combined with the use of ESD where development does occur would serve to protect Ten Mile Creek.	
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.)	
E-10	Water Quality and Biological Health of Ten Mile Creek		We can't get the high reference-stream quality of TMC back once it is allowed to degrade. (Save Ten Mile Creek Coalition, and many other individuals)	We agree. In the case of a reference stream like TMC, the extent of the planned development footprint should, as much as possible, reduce the risk of losing TMC as a County reference stream by limiting disturbance and using ESD. (See response to E-3)	
E-11	Water Quality and Biological Health of Ten Mile Creek		Science points to no development in TMC. (Save Ten Mile Creek Coalition, and many other individuals)	Science points to no development in TMC if the only goal is to avoid all negative impacts to natural resources and stream biology due to new development. In addition, science suggests that if development in a high-quality watershed is also an important goal, then the approach should be to limit development as much as possible, in combination with ESD. This recommendation is based on the expectation that ESD will not prevent all impacts to receiving ecosystems, especially to stream	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				biological health. (See response to E-21.)	
E-12	Water Quality and Biological Health of Ten Mile Creek		In such a sensitive area as TMC, allowing the maximum density possible would be risky. (Priscilla Borchardt)	Staff recommendations focus on reducing development in TMC from the levels recommended in the 1994 master plan, which will help reduce risks.	
E-13	Water Quality and Biological Health of Ten Mile Creek		Critical headwaters of TMC would be destroyed by development. In particular, the most sensitive and highest quality portions of TMC, subwatersheds 110 and 111 will be ruined. (Save Ten Mile Creek Coalition)	(See responses to E-1, E-3, E-8, and E-18.)	
E-14	Water Quality and Biological Health of Ten mile Creek		Neighborhoods between Rte. 121, West Old Baltimore Road and Clopper Road, bordering Little Seneca Lake in Black Hill Regional Park are not included in any studies of water quality. Water quality and protection of ground water supply (Cheryl Imperatore)	Those areas do not fall within the TMC Limited Master Plan Amendment study area, as defined by the County Council and this plan does not change land use or zoning there. The areas drain directly to the lake and not to the free-flowing part of the Creek which is most directly affected by the proposed development. (See response to E-18.)	
E-15	Water Quality and Stream Biological compared to other		The County has had successes in maintaining high quality streams in Upper Paint Branch and Upper Rock	Staff has recommended a similar strategy for TMC. As a result, successes similar to those seen in Upper Paint Branch and Upper Rock Creek can be reasonably expected in TMC.	Concur with staff

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
	Watersheds		Creek through limiting development, open space requirements, and imperviousness caps. (Save Ten Mile Creek Coalition)		
E-16	Water Quality and Biological Health compared to other watersheds		As with Clarksburg Stages 1-3, the Watts Branch has declined in stream health despite assurance from the developers. High sediment and bacteria loads in the stream have resulted in WSSC relocating the Potomac water intake away from Watts Branch. (Save Ten Mile Creek Coalition)	(See the response to E-8.)	
E-17	Stream Gauge Data		Data from stream gauges shows that under current conditions, peak flows in TMC are flashy and that storms can be much more intense than ESD design storms. (Cathy Wiss)	In a sensitive, high-quality watershed like TMC, this is another reason for recommendations that combine limiting development footprint and imperviousness in key areas, with the use of ESD.	
E-18	Ground-water		New development in the TMC watershed will seriously degrade ground water quality and quantity in TMC and the Piedmont Sole Source Aquifer. (Save Ten Mile	It is important to note that, like surface water, groundwater generally flows in response to surface topography, and mimics the flow patterns of surface streams within a watershed. As a result, even if there were any groundwater impacts on the east side of TMC, it would not affect the existing wells on the west side of	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			Creek Coalition, Audubon Naturalist Society, Sugarloaf Mountain Association, Montgomery Countryside Alliance, Boyds Citizens Association, and many other individuals)	TMC, much less the other portion of the Piedmont Sole Source Aquifer, which includes many watersheds that are all geo-hydrologically separated from TMC. In the case of potential development in TMC, any new development will be on public water and sewer, including replacement of many existing septic fields in the area that will significantly reduce any ongoing groundwater contamination from existing septic systems. Reports from various owners of existing wells in the western portion of the County of reduced flows have been and will continue to be mostly drought-related, and will not be adversely affected by the potential new development in the eastern portion of TMC.	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
E-19	Ground-water		The TMC watershed is critical to the Piedmont Sole Source Aquifer. Unwise development threatens this resource and the 62% of the up-County population on well water. (Save Ten Mile Creek Coalition)	(See response to E-18.)	
E-20	Water Quality and Sewer Service		Proposed sewer service will seriously degrade water quality and stream health in TMC. (Save Ten Mile Creek Coalition, Audubon Naturalist Society, and many other individuals)	According to the Chesapeake Bay pollution model used by EPA, groundwater pollution for septic systems is greater overall than that associated with sewer lines. Any new development in TMC will be on public sewer, will remove many of the existing septic systems, and provide better groundwater protection than new developments on septic systems. In addition, most typical stream valley impacts from gravity sewer lines will be limited in TMC because the sewage will be collected and pumped over to the adjacent sewer system in the Cabin Branch watershed.	
E-21	Science basis of recommendations		Recommendations in the plan amendment should be science-based. (Save Ten Mile Creek Coalition, and many other individuals)	From the beginning of the planning process for the TMC master plan amendment, M-NCPPC staff has followed the Council's request to base recommendations on the best scientific knowledge available, and the best planning-level modeling feasible in the short time-frame available for this plan. It is important to note, however, that staff was also directed to weigh community-building goals in its recommendations as well. Staff recommendations considered the results of an extensive review of	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				the scientific literature on the relationships between land use, land cover, development, traditional stormwater management, hydrology, and ESD on the physical, chemical, and biological health of streams on ~~a~~ local and watershed scales. Staff recommendations also considered the results of planning-level hydrologic modeling, a spatial analysis of natural resources, a pollutant loadings analysis, and DEP findings~~, and the findings from the review of the scientific literature~~.	
E-22	Science Basis of Recommendations		None of the proposals under review by the Planning Board are based on the best science available, and all of them would lead to degradation of the creek. (Save Ten Mile Creek Coalition)	(See response to E-11 and E-21.)	
E-23	Science Basis of Recommendations		Staff attempts to justify major downzoning for the Pulte property on claims about forest conservation, wildlife protection, and other objectives that are beyond the scope of the water quality analysis work prescribed for the master plan study. (Robert Harris)	Staff was directed by the County Council to base the planning analysis and recommendations on science. Because ~~water~~ stream quality and stream biological health (which is used as an indicator of overall water quality) are influenced by everything that exists and occurs in a watershed, all aspects need to be considered to fulfill the Council's directions. This has also been the case for other master plans for decades. (See the responses to E-21 and E-53.)	
E-24	Natural Habitats		The natural habitats and environment of	According to the spatial analysis of natural resources done in support	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			TMC should be preserved. (Save Ten Mile Creek Coalition, and many other individuals)	of the plan amendment, under the 1994 master plan, most development would occur on agricultural open land. Some upland and interior forests outside of stream and wetland buffers, however, would be impacted. The staff recommendations, which utilize a reduced development footprint, would further minimize negative impacts to existing forest.	
E-25	Climate Change		There is no consideration of the increasing intensity of drought cycles or severe weather patterns. (Save Ten Mile Creek Coalition)	Studies by the Interstate Commission on the Potomac River Basin indicate that, given climate change trends, it is likely in the future that storm events may increase in intensity and frequency, possibly combined with droughts of increased severity. At present, the imperfect understanding of the highly complex and difficult to predict nature of climate in general, and climate changes over long periods of time makes it difficult to assess the potential future role of climate change as part of this limited master plan amendment. The planning-level modeling done so far, however, indicates that using ESD, there will not be significant reductions in flow to TMC or the Little Seneca Reservoir. (See response to E-8.) So if climate change in the future has an adverse effect on TMC and the reservoir, it will be similar to that which would have resulted under existing conditions.	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
E-26	Impervious Cover		Paved areas in new development will serve as funnels of damaging runoff during storms that are larger than the one-year design storm required by ESD regulations. (Save Ten Mile Creek Coalition)	(See responses to E-1 and E-33.)	
E-27	Impervious Cover		A key question left open is the net overall amount of impervious surface for the watershed in the recommended option. (Save Ten Mile Creek Coalition)	Estimated impervious cover for the overall TMC watershed and its subwatersheds are projected to be approximately 7.8% if all properties develop per the proposed plan.	Concur with staff
E-28	Impervious Cover		The Staff Draft plan analysis that assumed 15% imperviousness for the County property is erroneous. Staff acknowledges that the County property will remain largely if not totally undeveloped. (Robert Harris)	No specific plans are available for the County property. The 1994 plan established an impervious cap of 15% for the property and the Public Hearing Draft recommends an 8% cap.	
E-29	Impervious Cover		Staff and its consultants should be using Effective Impervious Cover estimates instead of Total Imperviousness Cover. (Peterson)	Effective Impervious Area (EIA) (impervious area directly connected to a receiving water body) is very difficult to accurately and consistently measure due to different degrees of impervious cover disconnection, and it excludes areas that can still have negative environmental impacts (such as previously natural areas that are developed and now drain to stormwater management facilities).	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				As a result, EIA does not take into account the impacts that supposedly "disconnected" impervious areas can still have on watershed and stream health. EIA is used in some parts of the Country, but usually for retrofitting existing impervious cover in already degraded watersheds in order to improve biological health, not for allowing more development in sensitive high-quality watersheds because of the use of ESD. The few places in the Country that do allow impervious limit credits for stormwater BMPs or ESD practices are mostly small towns in a few states. These towns have limited growth boundaries and clear development goals within those boundaries. In these cases, the idea behind the credits is to lower the impacts of the development that would otherwise exceed imperviousness limits, not to prevent all additional environmental impacts from the extra development. Because even ESD cannot prevent all environmental impacts from development, some degree of environmental trade-offs are being made in such cases to accommodate additional development considered to be important to the future of the towns. In watersheds known to be sensitive, high-quality watersheds, however, allowing a greater development footprint in exchange for additional stormwater	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				management is not a recommended policy. For these reasons, and because Total Impervious Area (TIA) is easily measured and is a statistically valid indicator of overall development impacts, TIA is generally used to measure impervious levels for watershed protection strategies such as imperviousness limits. This is consistent with the County and State ~~policy~~ policies of not granting credits for the use of BMPs towards meeting imperviousness limits in specially designated high-quality watersheds or critical areas.	
E-30	Imperviousness Caps		A 6% imperviousness cap will be effective in protecting TMC and will be sufficiently protective of the streams, and allow some additional development. (STMCC Proposed Option #6) (Save Ten Mile Creek Coalition)	Imperviousness caps are strategies to lower the risk of negative impacts from development in high-quality watersheds, but there is no way to predict exact environmental outcomes. A 6% imperviousness cap may lower the risk to TMC in the opinion of some, but it must be kept in mind that there are other goals in the 1994 master plan that need to be factored in. The statement that a 6% imperviousness cap is a "proposal that will allow some additional development to occur" is true, but the question is will the additional development possible under a 6% cap allow for enough development to meet the community-building goals of the master plan. At the current overall imperviousness level of about 4.1 % for TMC, it is it is very doubtful that an additional 1.9% imperviousness would allow for the development to meet other important master plan goals.	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
E-31	Imperviousness Caps		Cap imperviousness at current levels. This is the only way to ensure that TMC is not degraded by development. This is consistent with all the science and County experience. (Save Ten Mile Creek Coalition)	This option would not allow any new development in TMC, and no community-building goals for Stage 4 in the master plan would be realized. This would suggest that the County purchase all land within the TMC watershed. (See responses to E-11 and E-21.)	
E-~~3~~32	Development on Farm Fields		Most of the Pulte development would be located on existing farm fields. The master plan analysis ignores the fact that the current farming itself produces significant adverse impacts to the stream, which impacts would be eliminated with development using ESD. (Robert Harris, Soltesz)	Developing on open fields is better than clearing forest for development. But even if almost all of the new development in TMC is on agricultural open land, there is no assurance of zero negative environmental impacts on stream condition and biological health. We do know from about 20 years of stream monitoring that even with about 50% of TMC in agricultural open land, the stream still remains a County reference stream in the "good" to "excellent" range for stream biological health. Because of this we can say that although agriculture does have some negative impacts on streams, in Montgomery County those impacts are relatively minor, especially compared with more developed parts of the County. The opinion of the State and the scientific literature is that for high-quality streams, an approach that combines limiting development and using ESD is recommended.	Concur with staff
E-33	Environmental Site Design		ESD regulations only require controlling up to the 1-yr storm, and will not control larger storms. (Save Ten Mile Creek	Controlling stormwater, as required, up to the 1-year storm will control most of the rainfall events (approximately 90%of storms are less than that modeled) that occur in an average year. Though when only storms up to the	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			Coalition, and many other individuals)	1-year event are controlled, runoff from larger storms will bypass ESD practices. ~~This will result in greater negative impacts than if the land were forested.~~ Developers do have the option in some cases, as determined by DPS, of going beyond the 1-year storm control requirement ~~by controlling larger storms, such as a 2-year storm~~. Doing this has the potential to provide some degree environmental protection beyond ESD, but is not required to meet State and County ESD standards.~~would somewhat increase the performance of ESD, but would still leave greater storm events uncontrolled. Avoiding the potential negative environmental impacts from larger storms that are uncontrolled by ESD is another reason to limit the total development footprint in addition to ESD, especially in sensitive, high-quality watershed like TMC.~~	
E-~~1~~34	Environ-mental Site Design		The decline of Little Seneca Creek from "excellent" to "fair" despite BMPs in Stages 1-3 provide proof that engineered BMPs do not compensate for forest destruction and indiscriminate grading of land. (Anne Ambler, President, Neighbors of Northwest Branch)	The stormwater management approach in Stages 1-3 was a combination of older methods and ESD-type practices. In Stages 1-3, mass grading was also used. Biological monitoring does show that ~~significant~~ stream biological degradation in Stages 1-3 has occurred. In TMC full ESD will be used, in conjunction with grading that is staged in 20 acre increments. Although this new approach is expected to have fewer negative impacts to stream biology, a decline in stream biological health with ESD is still expected (see response to E-3). This is why the staff recommendations are consistent with MDE and the	Concur with staff

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				scientific literature in recommending an approach that reduces the development footprint, combined with ESD.	
E-35	Environmental Site Design		Current recommendations place too much faith on Environmental Site Design (ESD) to address stormwater and protect stream health from development. (Save Ten Mile Creek Coalition)	The plan recommendations go beyond ESD to protect key resources and promote stream restoration. (See responses to E-1, E-3, and E-8.)	
E-36	Environ-mental Site Design		Developers have promised that a mix of conventional and ESD-type BMPs would maintain the high quality of the creek, but the creek has declined. (Save Ten Mile Creek Coalition)	(See the response to E-34.)	
E-37	Environ-mental Site Design		The Staff Draft plan cherry-picks from proven measures for protecting the area in question. National, State, and local scientists, and hard-earned experience calls for sound land use planning that fully protects critical areas. (Save Ten Mile Creek Coalition)	~~As far as the M-NCPPC consultant's hydrologic modeling is concerned, it was not possible in a planning-level study to model actual site plans with complete ESD implementation and layout. That level of detail is normally part of the development review process. The modeling done had to make some simplifying assumptions about the ESD techniques used, appropriate to a planning-level analysis, and apply them equally across the watershed to allow for a first-cut comparison of the various development scenarios.~~ Staff used a variety of sound land use planning analyses and techniques to support the draft plan recommendations. These included	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				the spatial analysis of natural resources, maximizing protection of forested and open space, reduced recommended development footprints, and the use of the Rural Neighborhood Cluster zone. For more ~~R~~regarding sound land use planning in ~~critical~~ TMC~~headwater streams~~, see responses to E-11 and E-21.	
E-38	Environ-mental Site Design		The Planning Board has not been shown information that justifies a significant change from the 1994 master plan, and the analysis is not in a position to confirm that ESD regulations adopted by MDE and the County are incapable of protecting the water quality of TMC. (Soltesz)	(See responses to E-1, E-3, E-4, E-8, E-11, E-21, and E-33.)	
E-39	Environ-mental Site Design		Now that ESD is required, there is no need for any limit on development or impervious cover. ESD will prevent all negative impacts from development. (Robert Kauffman, Soltesz, and others)	(See response to E-3.) Based on State guidance and the scientific literature on ESD and development impacts to stream biology, limiting development and limiting total imperviousness, combined with the use of ESD, remain important tools for watershed protection, especially in sensitive, high-quality watersheds.	Concur with staff
E-40	Environ-mental Site Design		In all scenarios in the Staff Draft, biological health of the TMC mainstem will be in the "good" range. It is acknowledged that these results do not reflect potential	This statement misses the fact that the category of "Good" covers a range of about 20 biological health score points, which covers a wide range of biological quality. As a result, an unacceptable amount of biological degradation can occur within the "good" range. Although the analysis only used data from	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			benefits of ESD. If proposed development results in a "good" stream health rating for TMC, the development should be able to proceed. (Soltesz, Robert Harris)	traditional stormwater management, the point is that because ESD is not expected to be able to mitigate all impacts to stream biological health, a more conservative approach to watershed protection is justified.	
E-41	Environ-mental Site Design		Potential future impacts are based on faulty assumptions that I-270 will be widened, and that no stormwater management or ESD will be included in the project. (Robert Harris)	Because the widening of I-270 is planned, it must be factored into the evaluation of environmental impacts. Because much of I-270 in TMC was built on fill and with significant slopes to the west, there is inadequate room for road widening or stormwater retrofits except for within the median. This leaves insufficient room for full ESD on the remaining land. Moreover, any ESD practices would likely be on compacted fill, which significantly reduces effectiveness. The modeling -assumed that traditional stormwater practices would be applied when the road is widened.	
E-42	Environ-mental Site Design		The studies performed by M-NCPPC its consultant have not demonstrated that water quality has declined since the 1994 master plan, or protection measures have become less effective. Because ESD better protects water quality, there is no justification to recommend any land use changes at	Because of ESD, water resource protection measures have indeed improved since 1994. But it is the opinion of the State and the scientific community that although ESD does a better job of environmental protection, it was never intended to be a remedy for all development-related impacts, and there is no reason to believe that it will do so, especially in terms of stream biological health. ESD was developed to improve site design and stormwater management by improving the hydrology of developed sites. But total environmental health	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			this time. (Robert Harris)	depends on more than hydrology. There are almost no data on a watershed-scale that assesses the impacts of ESD on stream biology. Consequently, MDE made no assumptions regarding specific biology responses to ESD, and set no biological performance standards for ESD. As a result, the State and the weight of scientific opinion in the literature recommend using an approach that combines limiting development and using ESD as much as possible.	
E-43	Environ-mental Site Design		The use of treatment trains will significantly improve the effectiveness of ESD as required in the County. (Soltesz, Jody Kline)	It is the opinion of DPS staff that treatment trains are not a part of ESD, as required by the State, and therefore will not ~~significantly~~ improve the effectiveness of ESD ~~practices~~. ~~This is because~~ ESD practices are micro-scale structures that are designed to control and treat the runoff to regulatory standards from small drainage areas.~~,~~ This strategy does not lend itself to the treatment train approach, which was sometimes used with the larger-scale stormwater practices of the past. ~~compared with past practices.~~	
E-44	Environ-mental Site Design		M-NCPPC staff and their consultant have ignored the direction to consider ESD requirements and other state-of-the-art water quality protection measures that would be used by the Pulte property, and which would have affirmed the decision made in 1994 that the	Staff were directed to develop a limited master plan amendment, which involves a planning-level analysis of potential impacts and risks to natural resources. Both the hydrologic model and the pollutant loading model assumed the use of ESD with some simplifying assumptions and using Montgomery County standards. This does not include a level of hydrologic analysis that is appropriate for actual detailed site plans. Such detailed analyses are typical of the development review	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			recommended development for Ten Mile Creek would protect the water quality. (Robert Harris)	stage, not the master plan stage. The ESD design standards used in the M-NCPPC consultant's model, however, were vetted with DPS staff as consistent with State and County ESD requirements.	
E-45	Environmental Site Design		The impacts of ESD have not been demonstrated on a watershed scale. (Ephraim King, and many others)	Although watershed-scale hydrologic modeling of ESD ~~is~~ has been done, actual monitored responses to ESD on a watershed-scale, especially changes in stream biological health, are almost non-existent. This is confirmed in the scientific literature, along with the general expectation that even if ESD succeeds in mimicking the hydrology of wooded land, there will likely still be negative impacts to stream biological health, especially in sensitive, high-quality watersheds like TMC. ~~-~~These were important ~~finding~~ considerations that were factored into staff recommendations.	
E-46	Modeling Results		The analysis of individual segments or subwatersheds of TMC is misplaced. The Council's direction was to evaluate potential water quality and other environmental impacts in TMC as a whole, not to focus on individual segments. (Robert Harris)	The County Council directed M-NCPPC staff to evaluate the TMC watershed using a scientific approach, and using the best scientific information available. The only way to scientifically evaluate a watershed for existing conditions and potential impacts associated with change in land use is to evaluate subwatersheds and their individual and cumulative roles in watershed quality and health. This approach is the norm in the scientific community and literature, and has been the norm for M-NCPPC studies and master plan analyses. (See response to E-21.)	
E-47	Modeling Results		The M-NCPPC's consultant's hydrologic model is too coarse, uses	See the responses to E-~~48~~ 37 and E-53.	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			incorrect assumptions, and is not representative of the detailed site plan and specific ESD layouts possible on the sites. (Geosyntec)		
E-48	Modeling Results		The M-NCPPC consultant's existing condition model appears to grossly ~~overestimate~~ underestimate peak flow rates in subwatersheds 111 and 110. This fundamentally undermines the conclusion drawn by the M-NCPPC consultants in comparing between existing and proposed conditions models. (Geosyntec)	~~The modeling analyses done by the M-NCPPC consultants were at a planning-level. These analyses involved making some simplifying assumptions, and therefore may be expected to differ, along with modeling results, from a more detailed analysis that uses specific site plan design and ESD practice layouts.~~The actual peak flow rates in LSTM110 and LSTM111 are unknown, and predictions of peak flow rates under existing conditions are sensitive to various model algorithms and parameters, and can vary widely within the range of accepted modeling methods and parameter values. (See response to E-49.) But it is important to note that even if a more detailed hydrologic analysis shows that a specific site design and ESD layout can mimic the hydrology of wooded land, it doesn't mean that there will be no degradation of TMC and its tributaries, especially to their stream biology. (See response to E-45.)	Concur with staff

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
E-49	Modeling Results		Geosyntec compared M-NCPPC's consultants modeling results for both subwatersheds 110 and 111 with three other methods: 1) a USGS regression equation for ungauged watersheds in MD, 2) area-scaled continuous gauge data from the USGS gauge on TMC, and 3) Geosyntec's own modeling of the watershed. All three of these methods show significant departures from the values obtained by the M-NCPPC consultants. (Geosyntec)	Regression equations ~~are~~ for hydrologic parameters are generally not very accurate, and are typically used as a very general guides in the absence of modeling results, and not for design purposes or for verification of detailed modeling results. ~~Furthermore, without an expression of the standard 95% confidence interval for a regression estimate, a regression result is incomplete and scientifically useless. (See response to E-5.)~~ Although Geosyntec provide~~d~~s no confidence intervals for their reported USGS regression estimates~~.~~, review of the original USGS paper indicates that the 95% standard error of prediction for peak flows is +/- 78% of predicted values. This confirms the low accuracy of the USGS regression equation for peak flows. Area scaling to estimate hydrologic parameters is likewise known to provide only rough estimates, ~~be fairly inaccurate compared to good modeling,~~ and again, is typically used as a general guide in the absence of modeling results—not as a confirmation of modeling results. The degree of area scaling done by Geosyntec (from a 4.5 mi^2 watershed to 0.33 mi^2 and 0.16 mi^2 watersheds) represents a significant extrapolation beyond the gauged data used, with increased and un-quantified uncertainty associated with the results. Detailed hydrologic modeling using specific site plan designs and ESD	

Formatted: Superscript

Formatted: Superscript

Formatted: Superscript

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				practices is not appropriate for planning studies, see the response to E-48. Moreover, a USGS stream gauging station is located immediately adjacent to TMC in a small tributary that is very similar to subwatersheds 110 and 111 in size and land use. It would have made more sense to use the gauge data for the smaller tributary for comparison with 110 and 111, than the gauge on the much larger TMC watershed. Using the larger watershed for comparison purposes introduces more error.	
E-50	Modeling Results		The proposed Pulte ESD design will reduce the peak flow rates during the 1 and 2-year design events below existing condition flow rates. (Geosyntec)	Although current baseflow in TMC is not what would occur if the entire watershed was forested, it is in a healthy equilibrium with the existing mix of forest and agricultural open land. As a result, the current high-quality stream biology and channel are adapted to the current hydrologic flow regime. It is important, especially in high-quality watersheds, that ESD not significantly reduce or increase baseflow, or other key hydrologic parameters. If, as claimed, proposed ESD will reduce peak flow values below existing conditions, it would do so by increasing infiltration over existing levels. If that occurs, then a corresponding increase in baseflows in TMC and its tributaries could result that ~~would likely~~could potentially be detrimental to stream biological health.	
E-51	Modeling Results		In the case of subwatersheds 110 and 111, significant design work has	(See reponses to E-37, E-38, E-39, E-42, ~~E-42,~~ and E-49.) In addition, subwatersheds 110 and 111 are located just upstream of the	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			already been completed by Soltesz for the Pulte property. It is possible to achieve stream protection using accurate existing conditions peak flows, reasonable infiltration rates, regulatory compliant recharge volumes, and appropriate ESD design assumptions. (Geosyntec, William F. Hunt)	County's reference monitoring station for TMC. Development in these subwatersheds under the 1994 master plan could potentially disqualify TMC as a County reference stream based on non-biological reference stream criteria, or because of subsequent biological decline. (See responses to E-3 and E-53).	
E-52	Modeling Results		Neither Soltesz nor Geosyntec were able to get details of the data inputs and other information that were used by M-NCPPC's consultant. Geosyntec's assessment of M-NCPPC's consultant's analysis was based only on the presented results. (Soltesz, Geosyntec)	~~Because of limited resources for the consultant work on this plan, the preparation of requested data and information would have increased consultant expenses over what was budgeted for the TMC analysis. Since that time, a~~All available information regarding the M-NCPPC's consultant's modeling has been provided to Pulte and their consultants.	
E-53	Modeling Results		The hydrologic modeling done by the M-NCPPC consultants does not support staff recommendations. (Geosyntec)	No level of hydrologic modeling can determine the effect of development on stream biological health. Because the principal environmental concern in TMC is its high-quality stream biology and its status as one of the few reference streams in the County, the question as to how much TMC would decline in stream biological health in response to development	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				cannot be determined by hydrologic modeling. Because of this, staff used a combination of different approaches including hydrologic modeling, natural resources analyses, and findings from the scientific literature, to assess the relative degree of risk to stream biological health, and to make recommendations accordingly. Differences between the planning-level analysis done by staff consultants, and the much more detailed modeling done for the Pulte property are to be expected. For planning purposes we cannot assume that any one particular stormwater concept will be implemented. In addition, that information is not available for all properties.	
E-54	Modeling Results		Infiltration rates used do not represent actual soil conditions found at the proposed subject property. (Geosyntec)	~~Without field measured infiltration rates for the all properties, any estimate is a fairly gross assumption.~~ The M-NCPPC consultant's model used a consistent method across the TMC watershed, applying infiltration rates that are consistent with the soil types on the properties, along with considerations for infiltration alterations typical of post-construction soil conditions. This was the approach that was selected for planning-scale modeling to estimate impacts from all the proposed development scenarios, whereas site-specific details would normally be evaluated for specific developments during the development review process. ~~It would be difficult to say which model is more accurate, although~~	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				~~the MNCPPC model would be more conservative.~~	
E-55	Modeling Results		The development scenarios as modeled are not consistent with local and state stormwater design requirements. (Geosyntec)	The current Micro Bioretention design used by Montgomery County does meet or exceed the minimum requirements of MDE as an ESD practice. All the assumptions used for ESD in the modeling were coordinated with the Department of Permitting Services and approximate, as much as possible, County stormwater regulations.	
E-56	Modeling Results		Model configurations do not accurately represent the proposed stormwater practices.	~~See response to E-48.~~ The approach used in this effort utilizes generally accepted practices and assumptions, including conservative criteria about BMP routing that are typically assumed by DPS for comparable analyses. Basic assumptions were reviewed with Planning staff, DPS and DEP.	
E-57	Water Quality and Biological Health of Reference Streams		Subwatershed 206 is not a reference stream and should not be considered part of a "last best stream". (Peterson)	Subwatershed 206 is not, by itself, a separate reference stream, but is an integral part of the overall TMC reference stream and watershed. Changes in subwatershed 206, and elsewhere in TMC, could lower the stream biological health of TMC, and increase the risk of eliminating TMC as a County reference stream. As a result, subwatershed 206 is considered to be an important part of any assessment of the TMC watershed. (See the response to E-4.)	
E-58	Recom-mendation Consis-tency		Staff recommends a major downzoning for the Pulte property that is inconsistent with recommendations elsewhere in the draft plan and is	Differences in staff recommendations in different parts of TMC depend on a number of factors and considerations including different community building goals, and differences in potential impacts to natural resources and stream biological	Concur with staff

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			inequitable compared with the other TMC properties on the east side of I-270. (Robert Harris)	health. On the west side of I-270, recommended lower levels of development are based on the unusually high stream biological quality of subwatershed 110, and the locations of the outfalls of both subwatersheds 110 and 111 just upstream of the TMC reference station. A recent interagency workshop to begin to develop a Biological Condition Gradient (BCG) for the County found that subwatershed 110 is close to the highest quality level to be expected anywhere in the County, and hence is itself a heretofore unrecognized candidate for a reference stream. These are yet more reasons, unknown in 1994, for recommending changes to the existing master plan.	
Transportation			Current Roads cannot support existing traffic (Dick Abbott)	Many people traveling by auto in Clarksburg may occasionally experience traffic congestion as part of their trip. However, results derived from the application of the County's area-wide test (currently TPAR, and formerly PAMR) indicate that existing evening peak hour roadway traffic conditions in the Clarksburg policy area are adequate.	
Transportation			Opposes outlet malls, prior infrastructure is not complete, status of Little Seneca Hwy completion, Foreman Blvd traffic is dangerous to community, volume of traffic on residential streets (Timber Creek Lane and Foreman Blvd.)	The transportation-related infrastructure needs of new development in Clarksburg will be addressed by the application of the County's APFO (specifically TPAR and LATR). Residents may petition MCDOT to consider traffic calming and enforcement measures in order to address traffic problems on local/residential streets (e.g., "cut through" and/or speeding traffic).	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			Uncontrolled speeding (Timber Creek Lane and Foreman Blvd.) 25 mph posted. (Kevin Hutto)		
Transportation			Additional traffic congestion on 355 and secondary roads at the 270 interchange (Andrew Hencke)	Results derived from the Clarksburg Local Area Model (LAM) traffic analysis indicate that key intersections in the area (including the interchange ramp terminals at I-270 and Clarksburg Road) will perform adequately. The MD 355 Bypass will relieve traffic congestion along MD 355 through the Town Center area.	
Transportation			Intersection of Clarksburg Road and West Old Baltimore Road lines of sight are seriously limited. Traffic circle should be built now. (Christopher Arndt)	Residents may petition MDSHA and MCDOT to consider geometric improvements at this intersection.	
Land Use and Zoning/East of I-270Land Use	Town Center	Pages 32-34	No development should occur until the promised Town Center—including library and fire station—is delivered; an outlet mall in this portion of Clarksburg is inappropriate (Livable Clarksburg Coalition and others)Revisit the I-270 technological corridor	Amendment recommendations reflect recognition of Town Center's importance to Clarksburg. Town Center development proposals are likely later this year for development at a scale somewhat larger than other two village centers. Amendment recommendations for historic district and Miles-Coppola properties designed to complement Town Center development; Amendment does not endorse an outlet mall, but recommends specialty retail, employment uses and residential uses in one land use option. Other option shifts Miles-Coppola focus to residential uses, providing more households to support Town	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				Center. Clarksburg's fire station and library are in the county's Capital Improvement Program, but do not appear to be high priorities given budget constraints. It may be appropriate to add language to the Plan emphasizing the importance of timely construction of these facilities to Clarksburg's successful development.	
Land Use and Zoning/East of I-270	Town Center	Pages 32-34	Egan-Mattlyn property has previously approved NRI/FSD and Forest Conservation Plan that satisfy buffer requirements Complete stream restoration on the site should not be required Requirement to prepare a conservation management program is onerous (Vaias)	The NRI/FSD and Forest Conservation Plan for this property are associated with its current special exception use. Residential development that implements the Limited Amendment land use and zoning recommendation for the property constitute a new use that implements a new land use recommendation. As such, new submissions for a natural resource inventory and a forest conservation plan are required and must meet recommendations and guidelines approved with the Limited Amendment. Planning staff will evaluate streams on the property to determine if structural remedies, in addition to required buffer planting, are necessary. Plan's intent was to seek conservation management programs on properties west of I 270. On this property, natural vegetation can be protected through forest conservation and natural stream bank restoration. A detailed conservation management plan with permanent maintenance may be unnecessary. **Staff**	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				proposes to delete this language requiring a conservation management plan from this section.	
Land Use and Zoning/East of I-270	Town Center	Pages 32-34	Support for outlet malls (Numerous individuals)	Amendment does not address proposals for Cabin Branch, which is outside study area. It does not endorse outlet mall on Miles-Coppola properties, but recommends some specialty retail in one land use option.	
Land Use and Zoning/East of I-270	Employ-ment	Pages 32-34	Retain I-270 technology corridor employment concept	The 1994 Plan recommends eight to ten million square feet of employment space, much of which is in the Transit Corridor District straddling I-270. At the same time, significant amounts of space in Germantown and the Life Sciences Center are proposed for research, development, biotechnology and other activities. In addition, trends in office development suggest that businesses are requiring less physical space in office buildings. Reevaluating the emphasis on employment could enable a broader mix of non-residential uses in Clarksburg, reflecting the evolution of the market for employment.	
Land Use and Zoning/East of I-270	Town Center	Pages 32-34	CR Zone appropriate for Miles-Coppola properties. Option One (mixed use retail/residential) is preferred option; increase in density to 0.75 FAR and increase in height to 100 feet will enable optional method development with public benefits (Peterson	The Public Hearing Draft identifies construction of the MD 355 bypass as a major public facility, a public benefit under the CR optional method. If optional method development cannot occur at 0.5 FAR, it may be appropriate to increase density to 0.75 FAR to encourage provision of this important benefit. The appropriateness of added height can be evaluated in detail during the worksessions.	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
			Companies)		
Land Use and Zoning/East of I 270	Historic District	Pages 32-34	CRT Zone with overall density of 0.5 FAR more appropriate for historic district, which is a "focal point" for Clarksburg (Cobb, Buffingtons);	The 1994 Plan's concept sketch (p27) shows Clarksburg's civic focus to be north of the historic district, with Redgrave Place functioning as a "spine" between the proposed transit station and the civic center. The Plan also designates an area east of the historic district as a retail center, with 150,000 square feet of retail space. It proposes 70,000 square feet to 105,000 square feet of space for the historic district and describes this space as infill. Design guidelines for the historic district focus on renovation of existing buildings for residential and light commercial activities. Potential development at 0.25 FAR across the entire historic district significantly exceeds the 105,000 square feet envisioned in the 1994 Plan. If those properties now in commercial use developed to 0.25 FAR, more than 210,000 square feet of space would be available for residential or commercial development. When privately owned vacant properties are included, the potential development total rises to more than 260,000 square feet. It is likely that the Plan's design guidelines and the need to create development that is compatible with the historic district would reduce this total, and it is desirable that some space be devoted to additional housing in the historic district. Nonetheless, the recommended FAR appears, across the whole of the historic district, to provide an adequate level of development to meet the	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				objectives of the 1994 Plan.	
Land Use and Zoning/East of I 270	Historic District	Pages 32-34	Extension of public water and sewer service to historic district is critical (Darby, Cobb, Buffingtons)	It is appropriate to add language on the importance of timely extension of water and sewer service in the historic district.	
Land Use and Zoning/East of I 270	Historic District	Pages 32-34	Retain C-1 Zone for Gardner House (Cobb)	The C-1 Zone is not proposed for inclusion in the county's revised Zoning Ordinance. It would therefore be included in a broad overall map amendment that would follow approval of the new Ordinance. This Limited Amendment provides an opportunity for a comprehensive evaluation of land uses in the Historic District in the context of the Ordinance's imminent revision. The CRN Zone allows the 1994 Plan goals for the district to be realized. Gardner House should be evaluated in the larger context of the entire Historic District.	
Land Use and Zoning/West of I-270	Pulte-King properties	Pages 34-37	Developing properties at 1994 recommended levels is environmentally damaging overdevelopment (STMCC, Livable Clarksburg Coalition and others)	Limited Amendment significantly reduces densities on properties and recommends zone that requires up to 85 percent of property be preserved as contiguous undeveloped open space. Recommendation preserves undeveloped areas while adhering to 1994 Plan objectives for single-family housing, preservation through use of TDRs and creation of transition from Town Center to Ag Reserve.	
Land Use and Zoning/West of I-270	Pulte-King properties	Pages 34-37	Proposed downzoning conflicts with objectives of 1994 Plan (Harris et al)	Development under RNC Zone would consist almost entirely of single-family homes, as recommended in the 1994 Plan to meet County housing policy and contribute to a transition from	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				Town Center to Ag Reserve. Mixing residential development with open space enhances the transition. It would support agricultural preservation by absorbing TDRs. Support for Town Center may be more appropriately located east of I-270 to enhance walkability closer to retail/office uses there.	
Land Use and Zoning/West of I-270 Parks	Pulte-King properties	Pages 34-37 Pages 39-40	Area should be added to Ag Reserve or protected through Legacy Open Space (STMCC and others)	Adding this area to the Ag Reserve would eliminate its ability to contribute to preservation by absorbing TDRs. It would not meet 1994 Plan goals for creation of a single-family housing resource and a transition from the Town Center. It would add to the inventory of TDRs for transfer, increasing the potential for an imbalance between sending and receiving areas. Plan proposes significant designation of land as Legacy Open Space Natural Resource Site for protection in the most important natural areas in the watershed while still allowing for appropriate development. The forest interior area west of I-270 is one of the 20 largest in the County, and is the largest one not protected through public ownership already. A variety of preservation tools will be used to preserve the Natural Resource, including dedication of land to Parks outside the development areas on the Pulte-King properties.	
Land Use and Zoning/West of I-270 Parks	Pulte-King properties	Page 144, Pages 34-37	Confiscatory nature of park proposal. Full density should be retained to maximize use of TDRs (Weitzer)	The large majority of the parkland proposed in the Plan was previously identified in the 1994 master plan as “private conservation areas” that, if requested by the Parks Department would be dedicated as parkland at	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
				time of development. Within the Pulte-King properties, the 1994 plan identifies 322 acres of "conservation areas" and the Limited Amendment proposes 353 acres of Legacy Open Space, an increase of only 31 acres or 6% of the total Pulte-King properties. Further, the proposed Legacy Open Space Natural Resource recommendation was created to support preservation and creation of a conservation park in this high quality watershed, while not impacting the zoning and development footprint proposed in other sections of the Limited Amendment. The *Legacy Open Space Functional Master Plan* (M-NCPPC, 2001) specifically states that a Legacy Open Space designation does not alter zoning or other land use recommendations (p.13). In this case, the LOS designation was created to complement the land use and zoning recommendations for the Limited Amendment area. The Limited Amendment's land use recommendations reflect the need to balance the important goals of natural resource preservation and agricultural preservation. While the densities proposed are less than those recommended in the 1994 plan, one reason the draft proposes the RNC Zone is its TDR component, which will continue to enable the land to absorb some TDRs and contribute to farmland preservation.	

Topic	Issue	Draft Plan (page)	Testimony (Commenter)	Staff Response	Planning Board Decision
Staging	1994 Plan Staging and Implement ation	1994 Plan Pages 186-199	No stage 4 activity until development in Stages 1-3 is "complete"	Stage 4 triggers combined requirements for specific levels of development in the Town Center and Newcut Road neighborhoods with environmental monitoring in the Ten Mile Creek and Little Seneca watersheds and evaluation of best management practices in the Town Center and Newcut Road neighborhoods. In 2010, the County Council concluded that the Stage 4 triggers had been met. It decided to request preparation of this Limited Amendment, a Stage 4 option provided by the 1994 Plan. Achieving staging triggers should not be confused with "completing" build-out of development allowed in a given stage.	