

April 7, 2021

Dear Mayor Nevill and Warrenton Town Council:

For more than a year, Citizens for Fauquier County (CFFC) has been studying the Warrenton Comprehensive Plan so we could share our best thinking with you and help educate the public about the plan. CFFC's members come from Warrenton and all over the county.

Our work on the plan represents the collective efforts of our volunteer board which includes individuals who have served on Town Council, the Fauquier County Board of Supervisors, town and county planning commissions, and various local, state and federal transportation, environmental, and agricultural organizations.

Population Growth

CFFC believes that growth is essential to any thriving community, and strongly supports Fauquier County's service district strategy of concentrating growth in selected areas including Warrenton. But the growth targeted should be at a level that makes fiscal sense, and enhances rather than diminishes quality of life. While CFFC supports certain aspects of the draft comprehensive plan, it focuses on excessive population growth without regard to the profound impacts the proposed land use mix, scale and density will have.

The plan envisions 2.16% annual population growth, which translates to a 54% increase in population over the 20-year course of the plan -- approximately 5,400 additional residents. This population increase greatly exceeds that of any 20-year period in the town's history, and the need for this level of targeted growth is unsubstantiated.

The plan's fiscal model omits certain big-ticket costs necessitated by that level of residential growth, yet it includes tax revenue from new businesses that the town's consultants say the marketplace is "not robust enough" to support. In short, the fiscal gains projected by the model are unrealistic. We hope the town's plan to pay for these gaps in revenue is not reliant on annexation of commercial properties outside of town, as annexation would create additional costs and obligations with long-term consequences unexplored in the plan.

CFFC's Five Fixes

After hundreds of hours of analysis, CFFC recommends the following five fixes to improve the plan:

- Tap the brakes on population growth by embracing incremental development. Reduce the mixed-use footprint, and phase in the mixed-use districts gradually.
- Cap building heights at four stories, consistent with Warrenton's small-town character. The plan's emphasis on five-to-seven story buildings is simply out of scale.

- Eliminate cut-through streets and high-speed bypasses through neighborhoods, along parks, and through conservation easements.
- Reserve more industrial land for jobs. The plan shrinks the town's inventory of large unused industrial lots from more than 90 acres to zero to accommodate still more residential mixed-use.
- Prioritize infrastructure improvements to benefit existing neighborhoods before creating new neighborhoods. Current needs include sidewalks, lighting, traffic calming, affordable water/sewer hookup, and improved storm water management.

Listen to the Citizens

It is, of course, an obligation of elected officials to carefully consider what citizens have said they want. Consider the following:

- The vast majority of respondents to the Town's "Comprehensive Plan: Your Vision" survey initiated in 2016 wanted Warrenton to remain a small town.
- Most of the 120 respondents to a 2019 survey preferred 2-3 story building heights in the Character Districts.
- 57 out of 64 commenters in the July 2020 hearing testified against the plan. The number one comment was against the overall amount of potential growth (36 commenters).
- 106 out of 108 commenters in the March 2021 hearing testified against the plan. Concern about town size was one of the most prevalent comments.

CFFC's analysis considers these views and is based on statements and documents drafted by the town and its consultants. We do not think these comments are based on "scare tactics" and "misconceptions" associated with "special interest groups" as recently suggested by a Town official. We have not embellished or taken liberties with the town's published information. We invite you to contact us directly if you have questions about our work products.

Thank you for this opportunity to comment. We hope you will consider seriously our recommendations for improving the draft comprehensive plan, and that you will respect your constituents' overwhelming desire for Warrenton to retain its small-town qualities while reserving land for job growth. Additional information is attached as part of our recommendations.

Respectfully,

Kevin Ramundo

CFFC President

Les Cheek

Las Chuk

CFFC President Emeritus

CFFC Recommends the Following Five Simple Fixes to the Warrenton Comprehensive Plan

1. Tap the breaks on the population growth rate.

The plan would convert close to a quarter of all the land in town to mixed-use, while removing the density restriction (floor area ratio) in the existing comp plan. This could easily result in more than the 50% population growth rate to which residents have objected.

- ✓ Reduce the mixed-use footprint. Not every Character District needs to have mixed-use.
- ✓ Embrace incremental development and **phase in** the mixed-use districts. Select one or two districts for mixed-use. The plan can be amended to add mixed-use into more of the Character Districts in the future if the model proves successful.
- ✓ Use mixed-use as an incentive for redevelopment in areas that need the most attention. Start with the Broadview Overlay District. Do not start with the large greenfield parcels.
- ✓ Rebalance the districts. Do not create residential-heavy mixed-use districts unless the underlying zoning is residential (e.g., the residential parcels in the Health and Wellness District). Allow some mixed-used, but the predominant use should emphasize the current use of the land.

2. Cap the recommended building heights at four stories consistent with Warrenton's small-town character.

Five to seven story buildings are out of scale with small town Warrenton and are not of the human scale strived for in the plan. While a few buildings in Warrenton exceed 4 stories as granted through special permits or the public/church building exception, the plan's recommendation for more tall/mid-rise buildings is not a goal shared by CFFC nor the majority of the public polled on this point.

- ✓ Base the plan's recommended building heights on the by-right maximum heights that currently exist (generally 45' or 35'). Note this is already higher than most of the actual building heights in town.
- ✓ Retain the building heights in the Transition Zones as identified in the draft comp plan.

3. Eliminate cut-through streets and high-speed by-passes through neighborhoods, along parks, and through conservation easements.

✓ Remove the proposed street connections shown in the Future Land Use Map, and transportation projects #22 & 30 on the Proposed Project table.

- ✓ Convert the above connections into paths exclusively for bicycles and pedestrians. This will create multiple benefits aligned with plan's goals to: 1) preserve neighborhoods; 2) increase walkability; 3) promote health: 4) increase vitality; 5) get people out of cars. And we won't have to finance additional traffic calming.
- ✓ Focus the Timber Fence project on the creation of a neighborhood collector road, not a high speed town bypass. (The Comp Plan uses outdated traffic data. Even before COVID, traffic levels from Lee Highway through West Shirley Avenue dropped 1000 2000 vehicles per day.)
- ✓ Remove the Southern Bypass from the plan. No data supports the need for this route. Forward-thinking communities are removing bypasses, not adding them.

4. Reserve more industrial land for jobs.

The plan shrinks the town's inventory of large lots that can be dedicated to industrial uses from over 90 acres to zero, and allows the primary use of that land to become dense residential, creating an out of proportion and unassessed impact on the Town.

- ✓ Set aside a substantial portion (such as 2/3) of the industrial land in New Town for office or campus/educational use.
- ✓ The Makers District is a good concept. Unfortunately the only land set aside for the makers' industrial activity is already largely developed (see Makers Overlay District). Many industrial and artisan operations are not compatible with residential use. Devote a portion of the large greenfield industrial parcel along Falmouth Street to industrial-only uses for the Makers.
- ✓ Large greenfield industrial sites may still rezone their lots using the existing I-PUD ordinance. This allows mixed uses while ensuring an emphasis on industrial use, and provides better impacts mitigation.

5. Prioritize Infrastructure Improvements to benefit Existing Neighborhoods before Creating New Neighborhoods.

Revitalizing a town is less about what you can attract from the outside and more about how you support your own community. A well-maintained community encourages citizens and local businesses to stay and flourish, and as a result will attract new business opportunity.

✓ Prioritize the building of basic community improvements: sidewalks, lighting, traffic calming, affordable water/sewer hookup, and improved stormwater management, in our existing neighborhoods before adding mixed-use to all the Character Districts.

FISCAL IMPACT MODEL AND SUSTAINABILITY ANALYSIS

To evaluate "fiscal sustainability" of changes in land use, Town consultants developed a *Fiscal Impact Model* to forecast which of four growth scenarios would result in enough extra revenue after 20 years to pay for a town wish list of "amenities." Consultants determined that none of the scenarios could generate the \$20 million price tag of the amenities, so they used a \$12 million goal instead.

The four growth scenarios range from a Base Scenario with "very little" growth, to a high growth scenario with 310,000 sq ft of new commercial space, 360 new hotel rooms and 2,100 new housing units. Scenarios are based on 20 year population rate increases of ~8%, 20%, 30% or 50%. The Model forecasts that the scenarios would generate \$5.6 million, \$10.0 million, \$14.6 million or \$18.5 million in extra revenue, respectively, in order of lowest to highest growth.

Because consultants used a \$12 million amenity goal, the two lower growth scenarios appear to result in losses, when in fact all scenarios demonstrated financial gain. Unfortunately, the model does not include all the costs required to implement the higher growth scenarios.

WHAT ARE THE CONCERNS REGARDING THE FISCAL MODEL?

The advertised fiscal advantages of the higher growth scenarios are quickly lost when accounting for all expenses and assumptions.

The model omits millions of dollars in infrastructure capacity expansions (sewer, water, roads, intersections, etc.) necessary to accommodate the high growth scenarios. All costs to the local government that vary with growth levels should be included in the model.

Water and sewer costs were omitted from the model because the town's Water and Sewer Fund cannot be used to pay for amenities; however that does not mean that the town and ultimately the citizens bear none of those costs. A sustainability model should account for all the costs to the local government.

The "Base Scenario" was portrayed as the "no change" scenario. However the consultant omits projects that have already been approved, resulting in a lower growth rate in the Base Scenario than will be realized by the existing comprehensive plan. This created a false impression about what growth and benefits would accrue under our existing Comprehensive Plan.

1) Costs Omitted from the High Growth Mixed-Use Scenarios:

- Transportation-related costs:
 - The town's cost share of building the Timber Fence Bypass and the Southern Bypass.
 - o Intersection improvements and additional lanes needed for more traffic.
 - Road connections between neighborhoods.

- Larger facilities and new land for Public Works to service a larger public.
- \$7.8 million in water production and storage capacity increases.¹
- Millions of dollars in sewage treatment plant expansion projects, beyond the already funded MBBR conversion, to increase capacity to 3.0 MGD or higher.^{2,3}
- Myriad projects/studies listed in the Plan, including the price of expanding the town's
 economic development program which the consultant flags as critical to recruiting the jobs
 relied on in the highest growth scenario.
- Loss of future proffers⁴ and the detailed traffic impact assessments that accompany rezoning requests.

2) Omitted Costs and Revenues Associated with All Growth Scenarios:

- Extension of the Timber Fence Parkway to Waterloo Road.
- All BPOL revenues.⁵
- All tax revenue and service costs associated with the Walker Drive PUD. 6 Its omission hurts the results of the Base Scenario the most.
- The cost of Tax Increment Financing.
- 3) <u>Unknown Effect of Major Modeling Assumptions.</u> The model relies on "guesstimates" for two critical calculations which have a direct impact on the model's results:
 - The Proportional Share of the Expenditure Allocation
 - The model uses building square footage to determine what proportion of town expenditures goes to residences versus businesses. But it is land use, not square footage, that is the primary driver of town services (compare a restaurant to a storage unit, or a multi-family home to the same sized single family home).
 - Efficiency Adjustments for Economies of Scale
 - This is an estimate, not a hard number -- as such it should display a margin for error, and show the effect of that margin for error on the ultimate results.

¹ Well #4, \$400,000; clearwell storage, \$2.6 million; extension of the Warrenton Reservoir dam, \$4.9 million.

² Cost estimates vary widely between town documents, but range from \$3 million to over \$13 million.

³ The highest growth scenario may require more aggressive and expensive I&I repair work than other growth scenarios. I&I must be held to 800,000 gpd to accommodate the sewer plant capacity needs of the highest growth scenario.

⁴ The Walker Drive PUD proffers (tallied at well over \$1M with the splash pad) could be lost if the owners may simply reapply under a new mixed-use ordinance.

⁵ CFFC brought this omission to the Town's attention--the consultant agreed they were in error and corrected it.

⁶ Consultants omitted the PUD because it was approved prior to adoption of the new Comp Plan, but also omitted the growth and benefits of the PUD from the Base Scenario.

4) Business growth targets may not be realized.

- The consultants affirm in writing that the market is not robust enough to support the industrial occupancy goals of the high growth scenario (*Fiscal Sustainability Analysis* p.11). Without these jobs:
 - o increasing our population to the extent proposed will dilute our work:live ratio;
 - o the economic gains in the highest growth scenario will not be attained.
- Warrenton's population boomed 44% from 2000-2010. Based on the promoted theory that
 rapid growth creates wealth, we should have benefited mightily. But in a workshop,
 consultants cautioned that Warrenton's size even after experiencing 44% growth was
 probably too small to trigger this effect. Is 50% growth over 20 years going to create what
 44% growth in 10 years could not?
- The dollar gains in the model rely on an unrealistic 100% business occupancy rate.
- 5) <u>Reliance on Ponzi Scheme Financing.</u> The higher population growth scenarios require expensive increases in water and sewer capacity that would be financed by tap fees. Incentivizing growth to obtain tap fees to pay for the growth only creates a short term illusion of wealth in exchange for the enormous, long term liabilities of maintaining and repairing a larger system.
- 6) <u>It's not free just because the County pays for it.</u> This "fiscal sustainability" analysis ignores the cost of schools, county park and recreation facilities, library services, county cost sharing for state road network, and court services, all of which will increase with higher populations. These costs affect Warrentonians too.

WE RECOMMEND THE FOLLOWING:

- 1. The Fiscal Model contains too many soft numbers, undisclosed inputs, and omitted costs to produce reliable results. Either:
 - > Correct and improve the fiscal model, or
 - ➤ Ignore its "results" and abandon the assumption that the 50% growth figure represents the critical mass that will result in the greatest net revenues.
- 2. Do not implement the new mixed-use areas through by-right zoning and SUPs. Retain authority to incrementally evaluate and forecast impacts by requiring rezoning for higher densities and mixed-use.
- 3. Be fully transparent about the costs of projects that are needed or under consideration to implement *Plan Warrenton 2040*.
- 4. Create land use policies that would result in a more fiscally responsible 20 year growth rate, closer to 20%. ("Tap the breaks on the population growth rate.")

TRAFFIC MITIGATION IN THE WARRENTON COMPREHENSIVE PLAN

To alleviate traffic from a targeted 50% + population growth, commercial expansion in the Character Districts, and development in Culpeper County, *Plan Warrenton 2040* envisions two new bypasses (the Timber Fence Parkway, and the Southern Parkway), and thru streets in established no outlet neighborhoods. The plan also contains policies and strategies for more multi-modal (bike, bus and pedestrian) transportation.

WHAT ARE THE CONCERNS ABOUT TRAFFIC MITIGATION?

The plan recommends new road projects based on limited and outdated traffic information, without respect for conservation easements, or acknowledgement of community opposition. The considerable history of the Timber Fence Bypass part of which was voted down by the County is ignored.

The bypasses and thru street "connections" in quiet, established neighborhoods are unsatisfactory traffic solutions that stand to permanently alter the livability of Warrenton. The need for these projects is not established.

1) Existing traffic numbers in the report are obsolete and overstated.

Based on 2015 and 2018 data, the Plan states, "The main arterials, U.S. 17, U.S. 211, U.S. 29, Broadview Avenue, and Shirley Avenue are all currently operating at or near capacity."

However, before COVID was even a factor, 2019 traffic levels from Lee Highway at Blackwell Road, all the way through West Shirley Avenue dropped 1000 - 2000 vehicles per day. In fact, traffic on Broadview and East Shirley dropped notably in 2013 and has not risen to pre-2013 levels since. Further, these "at or near capacity" traffic volumes are for the PM peak hour, not all day long.

This data is hardly justification to build the Timber Fence Bypass, a project that stands to damage residential neighborhoods and businesses, or to create a Southern Bypass that would compromise conservation easements.

2) <u>Future traffic levels are not even forecasted, yet the Plan designates both bypasses as creating Significant Economic Development which increases chances of state funding.</u>

The criteria for determining which road projects would create economic benefit is not established or described. The need for these bypasses relative to other road projects should be backed up with data and modeling, not arbitrary designations.

¹Lee Highway (from Blackwell to Winchester) average daily traffic volumes dropped from 28,000 to 26,000; Broadview dropped from 33,000 to 32,000; West Shirley dropped from 19,000 to 17,000; East Shirley remained unchanged from 12,000. VDOT 2018 & 2019.

3) <u>The Timber Fence Bypass would ruin the livability of hundreds of nearby homes, property</u> values, and our biggest park. ²

Why is the town more concerned about shaving a few minutes off the drive time for commuters who, when choosing where to locate, were fully aware that Warrenton lay between their location and Northern Virginia?

4) Adding cut-thru streets in established quiet neighborhoods impairs livability and is in conflict with other aspects of the plan.

The Plan says it includes strategies "in more established areas...to protect existing residential neighborhoods from cut-through traffic." Yet it advances multiple new cut-thrus that would do just that. Some of the affected neighborhoods are Old Alexandria Pike, Warren Estates (Fisher Lane), Stuyvesant Acres, Northrock, and Moorhead.

The Plan does not identify what connectivity benefit to the community at large is worth changing the character and livability of these specific neighborhoods. Cut-thru traffic makes neighborhood streets noisier and more dangerous. Trying to ameliorate this by spending money on traffic calming is counter-intuitive.

5) <u>Forward-thinking cities are removing their bypasses</u>. The Congress for New Urbanism observes that there are no examples of a neighborhood that improved when a highway or bypass was cut through it. And they find that "as we slow things down, value gets added." Lastly, remember Strong Towns' words of caution: "Our transportation investments are not creating wealth, they are destroying it."

WE RECOMMEND THE FOLLOWING:

- 1. The focus of a new road on the western side of Warrenton should be to provide neighborhood residents with alternative travel connections that are not available west of Broadview Avenue, better access to community parks, improved access for emergency vehicles throughout the residential and business community, and to alleviate the use of Broadview Acres as a cut-through. Not a high speed town bypass.
 - Remove reference to the Timber Fence parkway as a bypass (Remove proposed road project #20, plan p. 39).
 - Remove metric #34 (plan p. 46).

² There are no specifics on where the Timber Fence Bypass would run, but there are limited number of possibilities. Previous plans sent it past the WARF fields, across Waterloo HOA property (no acquired right-of-way), FHS Campus property (no acquired right-of-way), through Olde Gold Cup and Silver Cup and across the Fenton Farm property (outside Town limits with no acquired right-of-way).

- Revise the Timber Fence discussion on page 3 of the "Main Arterials" attachment to reflect the history of county decisions on the Parkway. Remove the discussion of Timber Fence as a U.S. 17 to U.S. 211 connector in the 3rd paragraph.
- Focus on evaluating a two lane extension of the existing Timber Fence Parkway to Waterloo Road.
- 3. Remove the Southern Bypass from the Plan:
 - Remove it from the proposed road project table (#21, plan p. 39).
 - Remove the discussion on page 4 of the "Main Arterials" attachment.
- 4. Revise the Connectivity metric (#35, p. 46) to read, "Increased number of <u>pedestrian and</u> bicycle path linkages between neighborhoods."
- 5. Create a role for neighborhood representation in evaluating transportation projects that are in the neighborhood.
- 6. Include current traffic data and basic traffic forecasts in the plan based on the build-out. Consistent with this:
 - Update the plan using 2019 data, and 5 year and 10 year traffic-look backs, to understand trends and inform the need for new road connections.
 - Include forecasted traffic for 2040.
 - Recommend a 5 year update to evaluate the unprecedented effect from the COVID pandemic on traffic volumes and patterns.

WATER

2018 amendments to the Virginia Code now require Comprehensive Plans to survey and study water availability, quality, and sustainability. § 15.2-2224.

Warrenton is served by two adjoining reservoirs and 3 wells resulting in a "safe yield" of 2.346 million gallons per day (MGD) of water. Reactivation of a fourth well may add 0.075 MGD. Growth targets for *Plan Warrenton 2040* would have the Town using 91% of its daily safe yield of water on an <u>average</u> day, but peak day demand is predicted to need 36% more water (875,570 gallons) than safe yield would supply.

WHAT ARE THE CONCERNS ABOUT WATER?

The comp plan's water supply analysis is insufficient and does not ensure water availability or sustainability for the growth projected in the new comp plan. Maximum day demand for water will exceed the system's daily "safe yield," yet the plan's water analysis does not evaluate if Warrenton has enough water storage capacity to serve the population on peak usage days, and assumes all wells can be fully operational at all times.

It would appear that the plan creates a much greater need for water than the plan divulges, given the town's recent proposal to spend millions of dollars in public funds to raise Warrenton's dam. In contrast, the comp plan says there is enough water for the next 20 years with only the reactivation of one small well.

- 1) <u>Do We Have Enough Water for Normal Peak Day Usage for the 20 year Planning Period?</u> The Comp Plan is silent on how Warrenton's water needs will be met on peak days.
- ➤ How many days a year would demand exceed safe yield?
- ➤ How many gallons of storage would we need for each of these days?
- ➤ How many days in a row can we depend on storage to meet our water needs when demand exceeds safe yield?
- > Are fire flows included?

Water Demand and Supply 1 3,500,000 3,000,000 Nax Day Demand 2,500,000 Average Day Demand Current Safe Yield + Well #4 Current Safe Yield 1,500,000 Na Day Demand Current Safe Yield

¹ Maximum Day Demand is the highest water demand of the year during any 24-hour period. Average Day Demand is the total annual quantity of water demand divided by 365.

CFFC created this graph using data from the Comp Plan to show the water supply gap.

The consultant's report states, "...the Town will need to initiate Well #4 by 2032 to meet maximum daily demand." That statement implies that Well #4 is all that is needed to close the gap between maximum and average day water demand. It is not. Well #4 would supply only 75,000 gpd. The gap between average and max day demand by the end of the planning period is 950,569 gpd.

> Do we have enough storage to meet the water supply gap in peak water use months?

Gap in Water Utility Requirements				
Total Demand (Average)	2,198,158	gpd		
Peak Factor	1.5			
Max. Daily Demand	3,297,236	gpd		
Existing Water Treatment Plant Capacity	3.4	MGD		
Additional Treatment Capacity Required (2040)	-	MGD		
Total Available Water (Conservative Estimate) Safe Yield	2,346,667	gpd		

Warrenton Comp Plan Hyperlink A.2 Water & Wastewater, p. 6.

2) System Reliability Is Questionable

Text book best practices for environmental engineers² stipulate that the safe yield should factor in system reliability safeguards to ensure functional and sustainable water supply:

Reserves Factored into the Safe Yield

Water Source	Recommended Safeguards	Plan Warrenton 2040	
Surface Water (Reservoirs)	A drought reserve equal to a 50-year drought, or the most extreme drought of record	1	0.30 MGD drought reserve equal to at least the 70-year drought event of 1998
Ground Water (Wells)	Enough water for Maximum Day Demand	*	Calculations are based on Average Daily instead of Maximum Day Demand
	with the largest well out of service	*	No reserve. Assumes no substantial operational problems at any well.

The Town's 2010 Water Supply report highlighted that, "the available supply and demand projections have a very small contingency or safety factor." Why was this not addressed in the water availability analysis for the new comp plan?

² Water and Wastewater Engineering, Design Principles and Practice, Mackenzie L. Davis, McGraw Hill, 2010.

3) Will We Trigger our Drought Plan More Often?

Warrenton's Drought Plan is triggered when storage reserves are reduced to 150 days. Warrenton has invoked its Drought Plan several times in the past. The Drought Plan was triggered in 2007--a year when Warrenton had a large 32% cushion between its Average Daily Demand (ADD) for water and its Safe Yield of available water. Water demand for <u>Plan Warrenton 2040</u> would shrink the cushion between ADD and Safe Yield to only 9%. It seems likely that stretching our water resources to this level will result in us having to invoke the Drought Plan more often.

Other communities, even in water-rich states, are subjected to routine water restrictions because of rapid growth and poor planning. Do the growth levels in *Plan Warrenton 2040* put us at risk too?

4) Omission of Certain Projects from Water Demand Projections

The consultants projected in-town water demand from 3 categories of development: uses already in place (using actual flow data from 2014-2018); site plans approved as of 2015; and new growth from *Plan Warrenton 2040* which includes 310,000 sq ft new commercial and 2,102 new residential units.

The Walker Drive PUD, for one, appears to be omitted from the water demand analysis. The town has stated that the PUD is not included in the new *Plan Warrenton 2040* growth numbers above since it is an already-approved project. The site plan for the PUD was not approved as of 2015. Therefore, it does not fit any of the categories the consultants used to estimate future demand. How does this omission affect the analysis, and are other projects omitted?

5) Does the Growth Envisioned by the Plan Create a Need to Raise the Dam or Not?

On February 16, 2021, town planners certified the Comprehensive Plan based on the consultant report that indicated Warrenton would have enough water for 20 years with reactivation of Well #4 (for \$400,000). Nowhere did the consultant report mention that the dam would need to raised.

One month later town planners passed a CIP that is expediting plans to raise the dam (for nearly \$5 million) within less than 5 years. Is the dam needed for the growth in Warrenton Plan 2040 or is it not?

WE RECOMMEND THE FOLLOWING TO ENSURE A SUSTAINABLE WATER SUPPLY:

1. Reassess Safe Yield

Institute system reliability recommendations for safe yield from wells.

2. Reassess Future Demand

- Complete an inventory of Town lots with site plans approved since 2015. Identify and include water demand projected for lots omitted from the Plan's analysis.
- Assess and evaluate peak monthly demands and compare them to the 80% State planning threshold for waterworks.
- ➤ Determine whether consecutive peak daily levels could result in a draw-down of the reservoir to the level that triggers voluntary water restrictions (150 days of storage).

3. Put Forth a Transparent Plan

- ➤ Identify how much storage is needed so water restrictions will not be necessary under dry month weather conditions.
- ➤ Be clear if raising the dam and/or adding more water storage is necessary to meet peak day water demands for the growth targets. Share those costs of the plan with the public.
- ➤ Be clear if water demand from the growth targets could invoke Virginia's 80% planning trigger for waterworks.

4. Ensure that Water Demand will not Outpace Supply

Adjust growth targets to ensure that water restrictions will not be necessary under normal dry month weather conditions.