

January 21, 2024

RE: Consideration of proposed changes related to Water Supply Plan, CPA2023-00008

Dear Local Planning Agency Members & County Staff,

Firstly, let me say that it is a most welcome improvement to see the proposed changes related to Water Supply Plan: CPA2023-00008 incorporate, as requested on multiple occasions in multiple venues, ***“strike-through and underline format with a brief explanation of the changes”***. (Staff Report, p. 3 of 3) Additionally, the relevant ordinances included help the public evaluate suggested benefits, as well as specific, adverse impacts. Bravo!

Similarly appreciated are the applicable **statutory references** that apply to Lee Plan Policy and the Ordinances (LDC), are also appreciated. These format changes are welcome, could not be timelier, nor emerge at a more important juncture than with this particular, proposed amendment. At stake is the continuation of **potable water supply and future natural resources** for existing residents; hence, the “fate” of the future of East Lee, Lehigh Acres, and Lee County proper, literally hangs in the balance.

As detailed in the Staff Report,

“Chapter 163, Part II, F.S. requires the County to incorporate the Work Plan into the Lee Plan after the South Florida Water Management District (the District) approves a regional water supply plan or its update [December 8, 2022]. According to state guidelines, the Work Plan and the Lee Plan must address existing water supply facilities, level of service standards, the development of traditional and alternative water supplies, service delivery, conservation, and reuse programs necessary to serve existing and new development for at least a 10-year planning period.

F.S.163.3177(1) directs that the comprehensive plan shall provide for “balanced” development of the area and community commitments to implement

the plan. To this end, “coordination” of the “elements” demands consistency and necessitates data.

The Staff Report (p. 2 of 3) asserts in the proposed amendments (6.):

“To the extent necessary to maintain internal consistency after making changes described in Paragraphs 1 through 4 above, revise the Intergovernmental Coordination Element to ensure coordination of the comprehensive plan with the South Florida Water Management District’s LWCWSP [s.163.3177 (6) (h) 1., F.S.]”

This effort entails “coordinating the adopted comprehensive plan with the plans of school boards, regional water supply authorities, and other units of local government providing services but not having regulatory authority over the use of land, with the comprehensive plans of adjacent municipalities, the county, adjacent counties, or the region, with the state comprehensive plan and with the applicable regional water supply plan”.

Continuing, F.S.163.3177(3)(a) requires, “The comprehensive plan must contain a capital improvements element designed to consider the need for and the location of public facilities”, including “correcting existing public facility deficiencies, which are necessary to implement the comprehensive plan. The components must cover at least a 5-year period.”

Deficiencies in the public facilities in Lee County abound in the aftermath of Hurricane Ian, including exceeding allowable emissions of dioxin and furan standards during the annual compliance testing at the Waste to Energy Incinerator. This violation and settlement necessitated payment into the “Water Quality Assurance Trust Fund”. Innumerable, unaccounted for Sanitary Sewage Overflows and other storm-related pollution incidents, many with public facility connections, similarly threaten the future continuation of Lee County’s “water supply”, yet remain unaddressed.

Inexplicably, the Staff Report as proposed today **intends** to incorporate the SFWMD Water Supply Report through proposed amendments, without considering public facility pollution impacts forementioned to water supply or increased cost burden to residents through mandatory connections if required by state or federal regulations. In effect, CPA2023-00008 would through a language change of POLICY 20.3.2, specifically require Buckingham community residents to connect to “central water services”, eliminating the promised “voluntary” option.

The Buckingham Community, East Lee, and Lehigh Acres have been disproportionately impacted. These communities are bearing a disproportionate burden related to increased pollution risks from emissions from an aging incinerator processing increased loads of waste from natural disasters and uncontrolled growth, are experiencing water supply insecurity and water quality diminishments. These factors and "public facility deficiencies" merit importance. These water supply implications deserve as equal the attention as has been given to "new language" proposed regarding following state and federal regulations. New regulations add additional cost burden to these communities currently experiencing disproportionate impacts.

Recusal(s) due to "conflict of interest" are anticipated. Full analysis of the proposed amendments and changes, policy by policy follows:

POLICY 1.4.5 deletion proposed, **Only minimal public facilities exist or are programmed.**

Public Comment:

- As the DRGR is source for potable water supply, both public and domestic self-supply sources, siting public facilities that may be incompatible should be made in relation to existing and future enhanced well heads, other water resources and factors
 - to protect past and current investiture in potable water resources
 - to address natural and man-made feature interactions (i.e. sloughs, wetlands, stormwater)
 - to safeguard, in the most restrictive sense, public health and safety, water supply, and natural resources
 - address incompatible uses that increase risk of contamination or pollution, (i.e. sanitary sewage over-flows, infiltration, depletion, air pollution deposition)
 - [see also F.S. 381.0065(e)] *"The rules [Onsite sewage treatment and disposal systems.] must consider conventional and enhanced nutrient-reducing onsite sewage treatment and disposal system designs, impaired or degraded water bodies, domestic wastewater and drinking water infrastructure, potable water sources, nonpotable*

wells, stormwater infrastructure, the onsite sewage treatment and disposal system remediation plans developed pursuant to s. 403.067(7)(a)9.b., nutrient pollution, and the recommendations of the onsite sewage treatment and disposal systems technical advisory committee established pursuant to former s. 381.00652.”

Staff explanation, [POLICY 1.4.5 deletion, Only minimal public facilities exist or are programmed.] continuing, “Additionally, to protect water resources, public water and sewer connections are encouraged within the DR/GR, therefore it is appropriate for Lee County to provide public facilities within this land use category”. (Attachment 1, p. 1 of 4)

Public Comment:

- Public water and sewer connections in the DRGR are being extended to accommodate new development and accommodate increases in density and intensifying commercial uses.
 - these increases in density and intensity are COUNTER to DRGR objectives of protecting recharge value of open space and low-density uses (i.e. 1 du/10 acres)
 - Extended public water and sewer connections have not equitably or consistently offered existing residents’ benefit
 - Scientific studies verify that modern septic systems on larger lots, >1 acre, address sewage appropriately and provide recharge
 - Limited levels of service (i.e. no public sewage connection) maintains low density, thus preserving recharge value and compatible uses (i.e. conservation, agriculture, natural resource)
 - Increasing density following increasing “levels of service” threaten natural resources (i.e. wildlife, aquifers, conservation lands) through urbanization
- Any “gains” from increasing “levels of service” are exceeded by harms from increased density and intensity of uses including:
 - including misuse of aquifer for landscape/recreation water use purposes
 - permanent conversion of agricultural lands
 - diminished agricultural capacity
 - loss of quality of life and use of property by existing residents

- exceeding road infrastructure capacity
- exceeding solid waste infrastructure capacity
- exceeding sewage infrastructure capacity
- exceeding landscape level carrying capacity with regional impacts
- gentrification

Staff explanation [POLICY 1.4.5 deletion, **Only minimal public facilities exist or are programmed.**] **continuing**, *“Allows development of public facilities in the DR/GR to protect existing water resources and expands the use of alternative water sources in accordance with the Lower West Coast Water Supply Plan’s (LWCWS`P) goals to improve water use efficiency and water quality. (p. ES-7)”*. (Attachment 1, p.1 of 4)

Public Comment:

- Use of alternative water sources to meet demand for landscape/irrigation is mandated by SFWMD.
 - Landscape/recreation is a different water use permit type than agricultural use
 - Filling up lakes for aesthetic and irrigation use depletes surficial and intermediate aquifers
 - Utilizing lakes for stormwater management and “lake utility” infrastructure has a financial incentive for developers that is harmful to surrounding property owners and the environment
 - Lake-view amenity increase price-point profit but is an ecological liability over time
 - Lakes compared to dry detention and wetlands are a safety-hazard for residents and drivers and disproportionately increase risks for “vulnerable populations” (i.e. children, disabled, elderly)
 - Current 5-year water monitoring is inadequate due to deterioration of efficacy and nutrient/metal accumulation over time
 - “Flushing” and resuspension of nutrients and pollutant in stormwater lakes are a concern in extreme precipitation, seasonal precipitation patterns and storm events

- Reclaimed water infrastructure must accompany public water and sewage infrastructure and be required for landscape/recreation use.

- Long lengths of sewage pipes “take up” water because they are porous in the rainy season adding to the load processed by wastewater facilities.
- Area of concern in East Lehigh Acres creates priority for grant awards for Alternative Water Source funding.
- Use of reclaimed water maintains the “water budget” of surface water to maintain balance and prevent unintended consequences related to deep well injection
- Alternative Water Use facilities should be sited to minimize risks of sanitary sewage overflows, incidental water uptake through pipe infiltration, provide for “redundancy” in emergencies and minimize natural resource impacts, including conservation lands

POLICY 20.3.2 (Buckingham Community Plan area) language added, [*“Connection to this expanded water service network will be on a voluntary basis”*] **for existing customers, unless required by state or federal regulations.”**

Staff explanation, [to] *“Add language to remove potential inconsistencies with state or federal regulations that may mandate centralized water service in certain areas or may restrict the availability of other water sources.”*

Public Comment:

- It is an obvious assumption that all current users of the centralized water service network in Buckingham currently are using service “voluntarily”
 - Adding language “for existing customers” confuses and obfuscates rather than clarifies
 - Intention of change is to remove “voluntary” connections to “centralized water services” language and supplant **requirements by state or federal regulation**
 - “Centralized water services” connections if required by state or federal regulations will be required
 - May be in conflict to what Buckingham Community residents have been previously guaranteed

POLICY 25.9.3, language addition, **“will support the expansion of water and sewer facilities throughout Lehigh Acres”** and deletion, “will work with Florida

Governmental Utilities Authority (FGUA) to prioritize areas for the expansion of utilities”.

Staff explanation, *“The development of centralized water and sewer facilities will provide the opportunity to bring alternative water sources to alleviate the pressure from private residential wells on the aquifer in this area (p.91-93) and develop a sustainable water strategy (p. 100).”*

Public Comment:

- Area of Concern in East Lehigh Acres necessitates comprehensive strategy to **protect existing domestic self-supply and agricultural uses** from irresponsible landscape/irrigation practices and mandate Alternative Water Sources
 - Prohibit development impacts from adversely impacting existing users relying on Sandstone aquifer recharge and draws
 - Seek funding to address Area of Concern by prioritizing Alternative Water Sources to benefit East Lehigh Acres and other existing users
 - Filling lakes in the dry season from the Sandstone and other aquifers for aesthetic and landscape/irrigation uses is unsustainable and an immediate threat
 - Depleted water supply and water quality diminishment for existing users is a current reality
 - Regulatory and policy priority must be given to existing users of domestic self-supply and agricultural uses over future landscape/irrigation draws on the aquifers
 - Policy changes must prioritize and protect existing users, per regulatory responsibility
 - Regulatory role and regulatory protection changes must align with SFWMD guidance for alternative water use and be directed toward new users without adding burden to existing users (i.e. increased costs, insecurity, diminishment)
 - Regulatory function of the Lee Plan must preserve density limits in the DRGR and open-space lands county-wide for adequate recharge to meet existing user demand

- Safeguards and acknowledgements addressing the association between density increases (lot size reductions) and improved “levels of service” (i.e. “centralized water services”, sewage) fueling development—is impacting all natural resources, including water supply resources

IV. Community Facilities and Services Element (a), Potable Water, POLICY 54.1.13 (new policy): **Encourage and pursue the use of funding assistance provided by the South Florida Water Management District for the development of alternative water supply and water conservation projects.**

Staff explanation, “ *Add language to encourage and pursue cost-share funding programs detailed in the LWCWSP (p.31).*”

Public Comment:

- Pursue this funding to improve lives of East Lehigh residents and existing users facing immediate scarcity
- Threats to Sandstone in the Area of Concern due to DRGR diminishment and demands from new development are immediate and catastrophic
- Costs of urbanization and urban sprawl diverts resources away from recovery areas and have historically been of little to no benefit, and of high cost for existing residents (i.e. infrastructure deficiencies, quality of life diminishment)
- Demographics of East Lehigh and areas proximate to Area of Concern indicate that residents do not have the funds to pay for utility infrastructure
- Lee County provisions do not currently address the true costs of development and the burden shouldered by existing residents facing natural resource diminishment and inadequate infrastructure
- Additional sources of funds and funding streams should be sought beyond SFWMD funding sources as currently stated (limited) in policy

POLICY 54.1.14 (new policy): **Encourage water uses that reduce reliance on the surficial aquifer system (SAS) and intermediate aquifer system (IAS) through the use of alternative water systems to meet future water demands.**

Staff explanation, "Add language to reduce the reliance on the surficial aquifer and intermediate aquifer system to manage and protect groundwater supplies (p.95 - LWCWSP)".

Public Comment:

- The surficial and intermediate aquifers are a sustainable source of preferred high-quality water for private and public potable water. Recharge of the aquifer system relies on adequate open space, including the upland portions of the DRGR protected by low density use.
 - Continued use of the surficial and intermediate aquifer system requires "wise stewardship" offering a multitude of benefits.
 - Open space and low density uses, restorative agriculture
 - Habitat for wildlife and corridor connections
 - Water quality protections of natural and enhanced systems (i.e. wetlands, green technologies, conservation)
 - Hydrologic connectivity and integrity
 - The Floridan aquifer is the only aquifer option available for most of Florida's potable water use
 - Lee County increasingly utilizing the Floridan when the Surficial and Intermediate Aquifers are superior quality sources, necessitates continued "wise stewardship"; additional Floridan use would further strain and create additional insecurity for current Floridan aquifer users statewide
 - Water of the Floridan is of "lesser" quality
 - Treatment of water from the Floridan is more costly
 - Treatment of water from the Floridan is more chemically intensive
 - Treatment of water from the Floridan generates much more wasted water
 - Use of Floridan is not available for domestic self-supply or as a "back-up" source to public supply increasing vulnerability
 - Domestic self-supply from surficial and intermediate aquifers has continued when public water supplies have failed in emergencies (i.e. Hurricane Ian)

- Use of “reclaimed water” for landscape/recreation relieves strain on the higher quality, sustainable surficial and intermediate aquifers relied upon by Lee County residents

POLICY 54.1.15 (new policy): Consider the feasibility of desalinated seawater from the Gulf of Mexico as an additional water source option.

Staff explanation, “Add language to consider the use of desalinated seawater from the Gulf of Mexico as an alternative water source as detailed in the LWCWSP (p.79)”

Public Comment:

For comparative purposes (this is premature to bring forth in policy) in assessing the “full” costs of development and growth with transparency, conduct a costs and benefits analysis, including meeting future sustainability goals, provide an economic analysis of all costs associated with desalination historically and currently, including energy demands and sources, with floor and ceiling scenarios and environmental impacts.

POLICY 55.1.2, language added, declining water levels, and harmful movement of saline water.

Staff explanation, *“Add language to address declining water levels and saline intrusion as detailed in the LWCWSP. (Ch. 6 and Goals and Objectives - LWCWSP)”*

Public Comment:

- Add language to guard against and address DECLINING water quality levels due to switching to the Floridan aquifer (SFWMD Lower West Coast Water Supply 2022, p. 364)

Figures D-29 and D-30 show the spatial distribution of APPZ water quality for the 2014 and 2040 model runs, respectively. Across the LWC Planning Area, total dissolved solids concentrations in the APPZ vary between less than 3,000 mg/L in northeastern Collier County to more than 30,000 mg/L near the coast. **Figure D-31** shows the APPZ water quality difference between the 2040 final condition and 2014 final condition. Overall, there is very little difference in total dissolved solids concentrations across the LWC Planning Area, largely because no PS wellfields withdraw from the APPZ. There is one area of noticeable water quality degradation near Lee County Utilities new Green Meadows wellfield, and there are three areas of slight water quality improvement: east of Lee County Utilities Pinewoods wellfield and on either side of Lee County Utilities North wellfield. The area of water quality degradation is a direct result of the new Green Meadows wellfield coming online in the 2040 future simulation. Although the demand will be met with water from UFA wells, water quality degradation is seen in the APPZ due to an increase in lateral flow from the south. The area south of the Green Meadows wellfield has slightly higher total dissolved solids concentrations, resulting in a maximum water quality degradation of 1,000 mg/L. Water quality improvement near the Pinewoods wellfield, on the order of 300 to 600 mg/L, is a result of lateral flow in the APPZ from the east, where there is noticeably fresher water. Water quality improvement east and west of Lee County Utilities North wellfield is on the order of 200 to 500 mg/L and is a result of lateral water movement from the northern portion of the model domain, which is the known FAS recharge area for the LWC Planning Area and has significantly fresher water.

POLICY 55.1.3, language added to insert new date of adopted work plan. No comment.

VI. Capital Implements Element POLICY 95.1.1, language added to 7. Other Considerations, *state or federal regulations*.

Staff explanation, "Add language to remove potential inconsistencies with state or federal regulations."

Public Comment:

- Agree with eliminating Floridan Aquifer wells at Green Meadow plant
- There are concerns that mandated connections [per hypothetical or future state or federal regulations] for Lee County residents currently utilizing domestic self-supply, to switch to "centralized water services" if directed or required by state or federal regulations, would create undue burden for existing users at a cost of tens of thousands of dollars per household.
- Any perceived or generalized need for such a mandated connection is directly attributable to development and growth exceeding capacities (i.e.

- infrastructure, water supply, natural resources), and diminishment of natural functioning of ecosystems to handle increased pollution and nutrients compromising water quality and polluting supplies.
- “Wise stewardship” for current and future sustainable use is the most cost-effective solution
 - Rural stewardship, open lands, conservation and low density play an important role in maintaining current and future potable water supplies
- Objective criteria prioritizing where water services will go in and connection to services should be science informed, not developer driven.
 - Prioritizing septic conversion and Alternative Water Sources must consider density-nutrient loading associations through an objective, reasoned methodology and approach.
 - Age of septic systems is a consideration in assessing approach (i.e. improving or updating v. extending, requiring)
 - Premature water services enable urban sprawl and spot zoning that amplify adverse impacts on a community scale
 - Extending services inland diverts resources away from coastal “nutrient loading”, recovery and future risk areas
 - Wastewater discharges and overflows are of a massive scale, especially in catastrophic events
 - Extending water services should not create undue burden for existing residents, fund gentrification, agricultural land conversion or permanent loss of wildlife habitat for imperiled species
 - Mandatory connection could be conditioned at conveyance.
 - Limited to new users
 - Funded by impact fees, other funding sources including commercial
 - Incentivized and paid as part of the future cost of services for users
 - Improved “levels of service” benefiting existing residents, prioritized by objective criteria must enable the ability to pursue grants, funding streams - --without existing residents fearing mandated connection or excessive cost burden

In conclusion, thank you for your careful review of the public interests as stated in weighing this amendment as proposed and consideration in directing the current version to revision.

Sincerely,

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