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Working Together to Protect the Ogeechee, Canoochee and Coastal Rivers

November 1, 2023

Via E-Mail

Karen Saunds, Grant Specialist
Coastal Regional Commission of Georgia
ksaunds@crc.ga.gov

Re: Comments on DRI # 4082 - Bulloch County Regional Water Supply

Dear Ms. Saunds:

Ogeechee Riverkeeper's ("ORK") mission is to protect, preserve, and improve the water quality of the Ogeechee River basin, including the Canoochee River and the coastal and tidal rivers of Liberty, Bryan, and Chatham Counties. ORK works with local communities to share and collect information on the ecological and cultural importance of rivers and streams throughout the Basin, and use that information to amplify the voices of those who speak for the watershed. One of ORK's primary roles is as watchdog on new land development projects throughout the watershed that could pose a significant threat to water quality.

ORK offers these comments on the two wells planned to provide Bulloch and Bryan counties with more than 3 millions gallons per day of new groundwater supply. Our concerns fall into two categories: negative aquifer impacts and specific issues with the application materials. The significant increase in groundwater withdraws from the Upper Floridan Aquifer will place additional pressure and strain on this already struggling resource. Without careful and comprehensive planning for this Development of Regional Impact (DRI), any permitting or decision making body must be exceedingly cautious before allowing such large withdrawal activity. Additionally, the permits and information available in the Development of Regional Impact submission does not sufficiently address or explain some of the most pressing concerns that this project could have on the region's people, municipalities, economy, and water resources.

Without a comprehensive understanding of the full range of potential impacts that then inform both the decision of whether to permit and, if permitted, operational conditions and requirements that are informed by a full scientific understanding of potential impacts, this proposed project poses serious risk to an already-strained Floridan Aquifer that is crucial for regional livelihood. As such, ORK calls on any and all decision makers to allow this project only after comprehensive studies have shown the long-term health of the aquifer to not be negatively impacted.

1. Background

The Upper Floridan Aquifer (UFA) is a vital but vulnerable resource for Coastal Georgia. It is the main source of water that supports Coastal Georgia's economy and population. From agriculture to business and industry to its residents, the region's ongoing health and prosperity are directly linked to the UFA. A healthy UFA is essential to Coastal Georgia's long-term population and economic growth.

Salt water intrusion into the UFA and a falling water table directly threatens the region's growth. As water demand has grown with Coastal Georgia's population and economic growth over the last half-century, natural recharge has not been able to keep up. As a result, salt water intrusion has negatively impacted coastal communities while inland wells dry up and require deeper drilling. Increased salinity levels negatively impacts the water's usability for human consumption, agriculture, and industrial use. Likewise, the need for new and deeper wells is a difficult expense that many rural and agricultural water users cannot bear.

Reduced pumping, water conservation, and other measures are necessary to maintain the UFA for future generations. In response, the Georgia Department of Natural Resources (GA DNR) created and has utilized the Coastal Georgia Water & Wastewater Permitting Plan for Managing Salt Water Intrusion since 2006 (the "2006 Plan" or the "Plan").¹ Through a combination of pumping restrictions and reductions, conservation measures, and water source diversification, the Plan seeks to support the aquifer by reducing pressure from increasing demand. Further, the Plan calls for ongoing monitoring to continually assess the effectiveness of the Plan's measures.

The continued population and economic growth over the last two decades in Coastal Georgia highlights the ongoing need to protect the UFA. In Bryan, Bulloch, Chatham, and Effingham counties, population grew between 10,000 and 50,000 people in each county between 2010 and 2020, with Chatham growing by over 30,000.² Bryan and Effingham counties saw some of the highest rates of population growth during that same period, with Effingham growing 24% and Bryan County being the fastest growing county in Georgia at a rate of 48%.³ In addition, the 2022 announcement of the Hyundai Motor Group of America's Mega-Site brings new industrial development, with estimates of between 40,000-70,000 new jobs over the next two decades.⁴ Finally, the recent⁵ and potential future⁶ expansion at

¹ Georgia Department of Natural Resources. "Coastal Georgia Water & Wastewater Permitting Plan for Managing Salt Water Intrusion" (2006 Plan). June 2006. Available at:

https://www1.gadnr.org/cws/Documents/saltwater_management_plan_june2006.pdf

² University of Georgia - Carl Vinson Institute of Government. "Population Change in Coastal Georgia". At page 22. Available at: <https://waterplanning.georgia.gov/document/document/projections-and-demographics-coastal-georgia/download>

³ *Id.* at pg. 23.

⁴ Hofstadter & Associates, Inc. "Preliminary Engineering Report for Countywide Water System for Bulloch County Georgia" (Preliminary Engineering Report). August 2023. At page 5.

⁵ "Port of Savannah Expansion, Georgia." *Ship Technology*. December 15, 2020. Available at: <https://www.ship-technology.com/projects/port-of-savannah-expansion-georgia/>

⁶ Georgia Ports Authority. "Port of Savannah to grow capacity by 60 percent." February 24, 2022. Available at: <https://gaports.com/press-releases/port-of-savannah-to-grow-capacity-by-60-percent/>

See also "Savannah's port files plans for huge expansion. This time on an island." *Atlanta Constitution-Journal*. October 4, 2023. Available at:

<https://www.ajc.com/politics/georgia-plans-a-third-cargo-container-terminal-for-busy-port-of-savannah/A7HR3RR5OBHVHBAWZ3EX72BCRU/>

the Port of Savannah promises additional growth. All of this growth will be accompanied by water demands far above what was considered in the GA DNR's 2006 Plan.

2. Comprehensive Groundwater Assessment and Renewed Regional Water Planning Needed

Prior to any large-scale increase in groundwater withdrawals in Coastal Georgia, the State of Georgia and local decision makers must fully consider and sufficiently plan for the long-term health of the Upper Floridan Aquifer (UFA). Ogeechee Riverkeeper calls on the Georgia Department of Natural Resources (GA DNR) and Georgia Environmental Protection Division (GA EPD) to fully model the groundwater impacts that all four of the planned Bulloch County wells will have on the UFA. Likewise, ORK asks the GA DNR, GA EPD, and local elected officials and decision makers to pause any permitting related to new, large groundwater until after comprehensive region-wide water planning sufficiently protects Coastal Georgia's water resources for generations to come.

First, the State of Georgia should fully assess the long-term impact on the UFA from the total groundwater withdrawals planned for supplying the Bryan County Mega-Site. The GA DNR's 2006 Plan advises that justification of need and ongoing monitoring are required for the areas where these wells will be located. At minimum, these steps must be considered. However, due to the significant withdrawals proposed and the extremely close proximity to a more restrictive zone per the 2006 Plan, additional assessment should be undertaken. This should include, but not necessarily be limited to, impacts to surface water flows and availability, the water table, impacts to residential and agricultural wells, net increases on water withdrawals in the area, increased pressure on Red and Yellow Zone salinity levels, impacts to the aquifer recharge rate, and the need to extend either the Red or Yellow Zones established in the 2006 Plan.

Further, this analysis should include not just the two wells to be owned by Bulloch County but also the two wells to be owned by Bryan County⁷ as well. Due to their overlapping purposes of supplying the Bryan County Mega-Site, these two projects should be considered together in the State of Georgia's analysis. Assessing these parallel and essentially simultaneous projects separately could overlook the cumulative impacts that two large withdrawal requests will have on the UFA, the area's water table, and the impacts it will have on water users. As such, ORK asks that this analysis includes all of the four wells to be located near the Bulloch-Bryan County Line.

Second, ORK urges the region's elected officials and decision makers to join with the State of Georgia and begin a renewed and effective comprehensive water planning process. Coastal Georgia's water resources have been under strain for decades. The 2006 Plan was the first step in beginning to address this strain and the region's long-term water demands. The Plan itself identifies the need to utilize and prioritize alternative sources of water to reduce pressure on the UFA. Nearly two decades later and at the precipice of a steep and continuous increase in water demand, now is the time to comprehensively plan for how the region's long-term water resource needs will be met and sustainably managed.

Ogeechee Riverkeeper calls on the State of Georgia and the region's elected officials (including the county boards of commissioners, city mayors and councils, and other municipalities' executives) to proactively plan for its residents' and economies' long-term future. As population and industry continues to grow in the region, water will

⁷ A DRI for the two Bryan County-owned wells has not been released yet.

become an increasingly important issue. Current generations will see impacts in their lifetimes if nothing is done. ORK strongly urges proactive, collaborative, and inclusive water resource planning so that Coastal Georgia and its residents and economy can continue to thrive for generations to come.

3. Concerns with the permit application

Ogeechee Riverkeeper is also concerned about certain statements and the lack of certain information provided in the document included in this DRI Public Notice. In particular, ORK is concerned about the plans for increased withdrawals planned for the future, the lack of meaningful alternatives and conservation assessment, and the nonconsumptive designation of the water use.

First, the conflicting amount of water withdrawal being requested is somewhat concerning and is not sufficiently considered. The application and public notice related to this proposed activity generally communicate a plan to withdraw around 3.15 million gallons per day (MGD) between the two wells. However, within the Preliminary Engineering Report for Bulloch County, it notes that an additional 0.35 MGD will be requested. This significant increase in requested water withdrawal is dependent on a service delivery agreement. Further, the short-term and long-term water demand tables show that there will be an increasing water demand throughout the life of these wells. ORK asks for clarification on the total amount of water withdrawals being requested for these wells in future permitting decisions. Additionally, all permitting decisions, including assessments on aquifer impacts, should be based on the maximum amount of water requested for withdrawal. And finally, any permits issued should not automatically allow for increases in withdrawal amounts without a full re-application for water withdrawal and accompanying assessments and opportunity for public comment.

Second, the alternatives and conservation measures discussed and considered in the Preliminary Engineering Report are lacking and should be more thoroughly considered. In total, only three sentences are dedicated to the alternatives analysis. Further justification as to why these alternatives were not selected would be beneficial for both decision makers and the impacted public. This would be especially helpful in determining how cost-effectiveness was considered. The project as proposed has an 'estimated value' of \$2 million. While this does not necessarily encompass all of the cost of the project, it highlights that the project will be an expensive undertaking. It is unclear from the information provided whether any of the alternatives would be significantly more expensive than the project as proposed. Finally, a deeper analysis of the alternatives re-emphasized the need to consider regional water planning.

Third and finally, the wells' designations as "nonconsumptive uses" is highly questionable and should receive specific additional scrutiny. In Part A of the "Application for a Permit to Use Groundwater"⁸ for both wells, it is stated that these will be for nonconsumptive use. GAC 391-3-2-.02 defines "nonconsumptive use" as "the use of water withdrawn from the ground water system or aquifer in such a manner that *it is returned to the ground water system or aquifer from which it was withdrawn without substantial diminution in quantity or substantial impairment in quality at or near the point from which it was withdrawn*" (emphasis added). With much of this water's use to occur at the Mega-Site, significant quantities will be lost in the manufacturing process and not returned to the groundwater system or aquifer. As just one of many examples of a consumption use that will occur at the Mega-Site, water will be used in the vehicle's painting and will, therefore, not be returned to the groundwater system. ORK calls on the GA EPD to change this

⁸ Preliminary Engineering Report. At Appendix I.

designation and more carefully consider the impacts to the UFA that this consumptive use will cause and contribute to. If the GA EPD chooses not to change this designation, ORK requests an explanation as to how it determined that the water will be used in a nonconsumptive manner.

Thank you in advance for your time and consideration. If you have any questions regarding this letter, please contact ben@ogeecheeriverkeeper.org or 866-942-6222 x9.

Ben Kirsch
Legal Director
Ogeechee Riverkeeper