

Response to Comments on the Draft Special Conditions

Public comments	EPD RESPONSES
Several commenters expressed gratitude for the meeting and indicated that the meeting was informative.	Thank you for the comment.
One commenter expressed that there was not enough time allotted for public comments and questions at the meeting and that much of the information was “above” their head.	Thank you for the feedback. EPD published a notice for public informational meeting on the water withdrawal applications on January 30, 2024. The public informational meeting was held on February 26, 2024. EPD asked that comments be submitted before March 8, 2024. EPD scheduled three hours for the public meeting and stakeholder comments. EPD also made specific time for questions throughout the technical presentation. EPD will consider modifications to the agenda for the upcoming public meeting and hearing to make sure the information is presented clearly with sufficient time for comment.
<p>One commenter expressed concern that unreasonable impacts to existing wells could be identified after the end of the proposed 10-year permit term. The commenter recommended that the fund remain in place “after the length of time of the proposed groundwater withdrawal from these wells.”</p> <p>Another commenter requested that, “[a]t minimum, the fund should exist for at least 25 years, the length of time that draft Condition C) gives the counties to construct the infrastructure to access alternative sources of water.”</p>	To address commenters’ concerns, EPD has updated the language to reflect that the mitigation fund must be in place for as long as the groundwater withdrawal is occurring.
<p>One commenter asked about the scientific basis of using a 5-mile radius.</p> <p>One commenter asked whether the 5-mile radius captured the entire area of 10 feet of impact, and, if not, recommended that the area be changed to encompass that.</p> <p>One commenter asked why 10 feet was chosen as the limit for “unreasonable impact.”</p> <p>Several commenters asked for a definition of “unreasonable impact.”</p>	<p>The geographic area within the 5-mile radius of the highway interchange roughly corresponds to a hydrologic model’s simulated 10-foot drawdown contour, meaning that entities with Floridan wells within that designated area could potentially experience an impact of 10 feet or more of Floridan drawdown at their wells, not to exceed 19 feet at full permit production capacity. The 5-mile radius fully captures the entire area of 10-foot drawdown. This area is therefore the focus of potential impacts and associated mitigation measures.</p> <p>In the Regional Water Planning context, groundwater availability is evaluated by looking at the amount of water that can be withdrawn without reaching specific thresholds of local or regional impacts. One of these thresholds is a 30-foot drawdown interference between two neighboring wells. In reality, competent well</p>

	<p>drillers or pump installers tend to set pumps at least 50 feet below water surface. Therefore, the 30-foot threshold used in the Regional Water Planning work is already a conservative measure. Here, all of the simulated impacts are less than 30 feet. EPD used the 10-foot drawdown threshold to more conservatively assess potential impacts to be mitigated.</p>
<p>Several commenters requested that the 5 mile radius be expanded (some to 10 miles, some to the entirety of Bulloch, Bryan, and Effingham counties).</p>	<p>See the response to the last comment. Simulated impacts beyond the 5-mile radius are not considered to be significant and simulated impacts within the 5-mile radius are not considered substantial, particularly in light of common well construction practices. EPD chose to be very conservative in setting the threshold for potential mitigation.</p>
<p>Several commenters recommended that the radius be defined from each well, not from the intersection.</p>	<p>The circle with a 5-mile radius from the intersection roughly captures where EPD’s modeling indicates the area where an impact of 10 feet or more (but no greater than 19 feet) drawdown in groundwater level may occur. The modeling simulated drawdown that may be caused by all four of the proposed wells operating simultaneously and the resulting simulated drawdown contours reflect anticipated conditions as all wells are expected to operate simultaneously. Therefore, the drawdown contours and the related radii are not associated with any individual well.</p>
<p>One commenter recommended that “EPD be clear in its language that the protections apply to residential wells.” Several commenters noted that residential wells may be inconsistently permitted and requested that the language be modified to allow the mitigation fund to cover those wells.</p>	<p>The permit language has been updated to require that the mitigation fund address any potential impacts to existing Floridan aquifer wells within a defined area. These existing wells may be residential wells and do not have to be permitted.</p>
<p>Several commenters requested clarification about who could conduct investigations to confirm impacts to wells and who would pay for the investigation. One commenter requested that the mitigation fund cover the expense of the investigation to confirm impacts to existing wells. Another commenter expressed that the burden should be on the permittees to disprove an adverse effect if one occurred in the “expected zone of impact.”</p>	<p>Only water well drillers or pump installers licensed in the State of Georgia may investigate alleged impacts to existing wells. The investigator will determine if there have been impacts to well pump operations caused by the permitted withdrawals. While EPD requires reimbursement of mitigation measures, the detailed working of the funds, and whether it extends to covering investigations, is the responsibility of the permittees.</p>
<p>One commenter state that “a streamlined process for addressing expected unreasonable impacts should be created.”</p>	<p>The permittee is responsible for developing the process for reviewing impact claims and addressing those claims through the mitigation fund.</p>
<p>Several commenters requested additional information about the mitigation fund, including who would pay for impacts to affected subdivision wells, residential wells, and agricultural wells. One commenter requested additional information about how much industrial users would contribute to the fund (and when those industrial contributions would be provided), how much governments will pay to the fund, and how much money would come from taxes. Several comments indicated that they believed that funds other than taxpayer money should be used for the mitigation fund.</p>	<p>The mitigation fund will be developed by the permittees and must meet the minimum requirements set in the permit. All forms and procedures associated with mitigation fund implementation must be made transparent to the stakeholders (see permit condition 6(c) in the Bryan County permit and 6(b) in the Bulloch County permit). Specific questions about fund operations should be directed to the permittees.</p>

<p>One commenter wanted to know what the process would look like (in person or online), whether there would be assistance for the applicant, whether the funds would be limited, and whether the applicants would have a co-pay or deductible.</p> <p>A commenter wanted to know the criteria for establishing the impact, and whether current well owners would need specific information about their existing use and performance as a baseline prior to these proposed wells going into operation.</p> <p>One commenter asked what amount of water pressure would make someone eligible for the mitigation fund.</p>	
<p>One commenter requested a full, detailed list of all possible fixes to address impacts to existing Floridan wells, as well as a mechanism to allow for issues not explicitly included in that list.</p> <p>Several commenters requested that all manner of adverse impacts, including crop loss, property damage, and the loss of trees, be covered by the fund. Commenters also requested that the fund “fully indemnify” those affected and cover the cost of water while the adverse impacts were being addressed.</p> <p>One commenter stated that the proposed withdrawals would result in significant tree mortality throughout the area.</p>	<p>As shown by the simulation results, impacts to the Floridan Aquifer in the vicinity of the four proposed wells are in the form of water level drawdowns not likely to exceed 19 feet. In this region, plants are not using Floridan aquifer water unless irrigated by Floridan aquifer water. Therefore, EPD is not anticipating effects to plants, including trees, from the Floridan aquifer withdrawal.</p> <p>EPD does not require the permittee to “fully indemnify.” EPD requires that the mitigation funds be used to address issues to wells caused by water level drawdowns, e.g. the need for lowering a pump to access water. The permittees may decide to address additional issues beyond this.</p>
<p>One commenter stated that 25 years to plan, install infrastructure, and start pulling from alternative water sources was a long deadline. Several commenters requested that the deadline be shortened and that the process be expedited.</p> <p>One commenter indicated that there is an interconnection to supply surface water to the Bryan County Mega-Site available in the next three to five years, and “[t]his interconnection draws into question whether a 10-year permit-term for these four wells is necessary at all.”</p> <p>One commenter said that alternative water sources should be identified before further consideration of this permit. The commenter said that, “[r]ather than creating a fund to mitigate negative impacts to neighbors and community, priority must be placed on alternative water sources.” The commenter recommended that this be part of the regional water planning process.</p>	<p>EPD has maintained the 25-year deadline to cease groundwater withdrawals, though the permittee may choose to utilize an alternative water source more quickly.</p> <p>There are two major reasons affecting the timing of an alternative water source. First, EPD does not have the authority under these groundwater withdrawal permits to require a third party to cooperate in providing a surface water or other alternate water source solution, and that cooperation will certainly be necessary. It will take adequate time to secure that cooperation and to plan, design, construct and implement operations of such a complicated infrastructure. Second, securing funding for the infrastructure development also needs time. Nevertheless, the alternative water source could successfully replace the groundwater withdrawals before the 25-year deadline.</p> <p>EPD encourages surface water usage in the coastal area as part of a long-</p>

	<p>term solution to water supply challenges in the region and supports the timely development and use of alternative water supplies. EPD is not aware of any interconnection capable of providing the necessary amount of water within a three- to five- year timeframe.</p>
<p>Several commenters identified the Savannah River as an alternative water source that should be considered instead of the Floridan aquifer.</p> <p>Several comments asked about why alternative water sources, such as the Ogeechee River and the Savannah River, were not being considered.</p> <p>One commenter stated that “alternate water sources exist now but were deemed too costly compared to the option of withdrawing groundwater from Bulloch County. Cost should not be a factor given such consideration in this delicate matter.” The commenter noted that surface water from the Savannah River had been identified as a potential alternative in engineering reports submitted with the applications.</p>	<p>The Savannah River has been considered as a potential alternative source. The permittees may consider any non-Floridan aquifer water, including groundwater, surface water, and reuse water, as an alternative source of water. This includes the Savannah and Ogeechee Rivers.</p> <p>Cost is not a consideration in the permitting process.</p>
<p>One commenter stated that an impact of a lowering of water levels in wells by 19 feet is a “significant impact” and “should not be allowed.”</p>	<p>A simulated drawdown of 19 feet is at the center of the cone of depression and would take place in the midst of the four proposed wells at full permit capacity. EPD’s simulation also shows a potential drawdown of 15 feet at one well owned by a third party in the vicinity. EPD considers a drawdown of 30 feet as a conservative metric, so 19 feet drawdown is a permissible drawdown amount.</p>
<p>One commenter requested clarification about whether the fund would be renewed when the permit is renewed and whether the fund would exist (and if so, for how long) after the permitted wells are no longer being used. The commenter also wanted to know whether the fund would be contributed to in advance or on a need-to-fund basis and what would happen if the impacts required greater monetary reimbursement than the fund contains.</p>	<p>The fund will continue as long as the permittees continue to withdraw groundwater under the permit, even if the permit is renewed. The fund must be established before any withdrawals occur. The permit holders are responsible for ensuring adequate funding to meet the permit requirements.</p>
<p>One commenter noted that the language in the permit regarding the 25-year deadline “has no teeth.” The commenter suggested that EPD include “clear language directing a strict adherence to milestones, along with resulting actions should milestones go unmet.”</p> <p>One commenter requested that, “aspirational requests here be converted into requirements for the applicants. Rather than ‘strongly encourag[ing]’ the counties to plan for alternate sources of water, EPD should ‘require[]’ this planning and eventually construction and conversion. Similarly, rather than state the planning ‘should be</p>	<p>EPD has updated the language in the permit to remove references to “strongly encourage” and instead inserted clear requirements. The changes to the permit language reflect the requirement to replace all of the permitted Floridan Aquifer groundwater withdrawals with surface water or an alternative water source by the 25-year deadline.</p>

<p>premised’ on making alternate sources of water available, the planning ‘must achieve making sufficient surface waters (or other alternatives) available.’”</p> <p>One commenter stated that the “alternate water sourcing plan should have the specifically stated goal of “fully offsetting” these permitted withdrawals as they relate to the Bryan County Mega-Site and other industrial and commercial growth.” The commenter went on to request that EPD clarify the reduction goals.</p>	
<p>One commenter asked whether Bulloch and Bryan residents would be the ones to pay for the studies and projects to install new infrastructure to the plant to use surface water.</p> <p>One commenter raised concerns about the level of growth coming to the area and whether there would be sufficient infrastructure in place to accommodate that growth.</p> <p>One commenter asked about who would cover the costs of the extra infrastructure needed for the Bryan County Mega-Site.</p>	<p>The types of concerns expressed, as they related to payment for infrastructure development and associated financial implications, are outside of EPDs’ regulatory authority.</p>
<p>Several commenters noted concerns with saltwater intrusion.</p>	<p>Saltwater intrusion into the Floridan aquifer in Bryan and Bulloch County isn’t a concern because the saltwater is entering the Floridan aquifer off the northern shore of Hilton Head Island. Should pumping conditions lead to additional pressure on the aquifer, chlorides entering the Floridan aquifer will follow the groundwater gradient of the Floridan aquifer toward the City of Savannah and the cone of depression there. This is not a fast process; current modeling indicates it would take more than 100 years for chlorides to reach the cone of depression below the City of Savannah. At that point in time, chlorides would then be captured in the wells that are causing the cone of depression and would not travel beyond the cone of depression below Savannah.</p>
<p>One commenter asked whether desalination could be an alternative solution long-term.</p>	<p>Theoretically, desalination can also be an alternative solution.</p>
<p>One commenter asked why they had been unable to install a large well for irrigation purposes due to potential saltwater intrusion, while these permit applications were being considered.</p>	<p>The wells subject to this permit are in the Coastal Green Zone. A farm water use permit in the Coastal Green Zone is possible but the proposed well must also meet all other relevant requirements for approval.</p>
<p>One commenter expressed concern that there could be a shortage of drinking water in Southeast Georgia due to the water amounts requested for the Bryan County Mega-Site. The commenter requested EPD consider “a more sensitive threshold for when contingencies should be put into action.”</p>	<p>EPD’s technical assessment indicates limited impact on the Floridan Aquifer (19 feet of drawdown at the center of the cone of depression, reduced to roughly 10 feet of drawdown 5 miles from the center, and further reduced beyond 5 miles from the center) and its users. As</p>

	<p>explained above, this level of drawdown is not unreasonable. As a conservative measure, EPD requires that the applicants set up a funding mechanism to mitigate impacts caused by the permitted withdrawals.</p> <p>The Floridan Aquifer will not go dry, but there is a potential for individual homeowners with wells that have well pumps set close to the top of the groundwater level in the Floridan aquifer to have the groundwater level drop below those well pumps. In these cases, per permit requirements, a fund will be set up to help individual homeowners reset their well pumps further down into their wells, so the well pumps have sufficient freeboard to accommodate fluctuating groundwater levels in the Floridan aquifer.</p>
One commenter asked whether land would be purchased by EPD or another entity or whether people would be assisted with relocation when the groundwater is depleted.	There are no plans for EPD to purchase land, and we are not aware of plans by another entity to purchase land. EPD does not see the potential for depletion of the Floridan Aquifer due to the proposed withdrawals.
One commenter recommended EPD engage with the local agricultural communities “to understand their requirements for freshwater access and supply” before EPD makes any final decisions.	EPD has received comments from stakeholders within the farming community, will respond to these comments, and will continue to engage stakeholders and listen to their concerns.
One commenter stated that the withdrawal required further study. The commenter indicated that EPD had not completed a detailed aquifer study in Evans County.	EPD’s technical assessment covers the entire Floridan Aquifer in coastal Georgia including Evans County. The simulated potential drawdown in Evans County as a result of pumping at the maximum permitted amount requested ranged from approximately 1.5 feet to approximately 4 feet.
Several commenters recommended that the permit applications be denied.	There is no legal basis for denying these permit applications provided that certain conditions are included consistent with Georgia requirements.
Several commenters raised concern with the process and asked why water was not discussed earlier. One commenter indicated that the Hyundai plant had nearly been built and expressed concern that, given how far along that process was, their comment may not be relevant. Other commenters indicated concerns that their comments would not be considered.	EPD officially begins its reviews of water withdrawal applications when such applications are received. EPD does consider stakeholders’ comments.
One commenter expressed concern about potential unintended adverse impacts to the Ogeechee and Savannah rivers, particularly as those adverse impacts could affect two endangered species of sturgeon. The commenter noted that “[w]ater temperature, dissolved oxygen concentrations, and river discharge are all important factors to sturgeon spawning/recruitment and survival. Proposed groundwater withdrawals associated with Hyundai Mega-Site may indirectly affect these parameters.”	The Floridan Aquifer is overlain by a confining unit. It does not have a hydraulic connection with the Savannah River, the Ogeechee River, or the Okefenokee National Wildlife Refuge. There is not the prospect of dewatering the Ogeechee River, the Savannah River, or the Okefenokee National Wildlife Refuge. Species that use those surface water bodies as their habitat are not affected by water use from the Floridan Aquifer.

<p>The commenter said that, “Section 9 of the ESA prohibits the take of endangered species, without a special exemption. Any effects from an action can take an endangered species; it does not have to be confined solely to direct impacts from the groundwater withdrawals. For example, if water withdrawals for the project cause reductions in the dissolved oxygen concentrations or increases in temperatures in the Ogeechee and/or Savannah River(s), and those reductions “harm” an ESA-listed species or designated critical habitat, the project may be in violation of the Section 9 of the ESA.”</p> <p>One commenter stated that the proposed withdrawals threaten to dewater both the Ogeechee and Savannah Rivers, as well as the Okefenokee Swamp and the Okefenokee National Wildlife Refuge (ONWR).</p>	
<p>One commenter indicated that the Environmental Assessment required by NEPA conducted by the Army Corps found that the project would have negligible effect on private and municipal wells and on the environment and surrounding areas. The commenter indicates their disagreement with the conclusion that the project impacts are negligible.</p> <p>One commenter stated that, “[t]he federal NEPA document (EA prepared by USACE) does not accurately capture the full proposed action, and therefore does not meet the legal sufficiency for the action by the state. The EA by USACE states there will be no impacts to potable water supplies and no associated withdrawal permits submitted to EPD. This is not true, and this represents a major insufficiency in the USACE EA being able to serve as the GEPA document for the full action being undertaken by the state agencies.”</p>	<p>EPD permits are not subject to NEPA review. EPD does not rely on NEPA documents in reviewing these water withdrawal applications. Instead, EPD conducts its own independent state regulatory review.</p>
<p>One commenter stated that, “the allowance of such a large amount of water to be withdrawn just over the line in the green zone by a requirement taking place in the yellow zone is a CLEAR indication of your failure to properly regionally plan and conserve water on the current uses now.”</p>	<p>The color-coded zones have been established to identify levels of impact and to adopt different permitting approaches accordingly. This has been documented in the existing coastal permitting strategy. In fact, water levels in the Savannah Cone of Depression have improved over the past decades through the implementation of the strategy. The current coastal strategy does allow for physical inter-zonal transfers of water. The Coastal Georgia Regional Water Planning Council is directly engaged in water planning in the region and has been working closely with EPD on developing and conserving water resources across the region.</p>
<p>One commenter recommended that, “to ensure the pristine Floridan Aquifer waters are available for future generations to use for drinking water and agriculture, industrial and commercial water needs must be met through surface water and other non-groundwater sources.”</p>	<p>EPD reviews permit applications for a reasonable use at the time of the request.</p>

<p>One commenter questioned the statement in the applications submitted by the permittees that the wells would be for a nonconsumptive use. The commenter stated that the use should be defined as consumptive.</p>	<p>The applications that EPD received are for consumptive use of water and EPD has been reviewing the applications accordingly.</p>
<p>One commenter requested that future impacts be considered in the special conditions and in the future withdrawal permitting decision. The commenter specified that, “[t]hese considerations should include, but not be limited to, documentation of effective water conservation at the Bryan County Mega-Site and other industrial and commercial locations expected to receive this water, the importance and necessity of using these waters for industrial and commercial uses as it compares to the needs for future human consumption, public use, and agricultural or farm use, the physical and chemical nature of impairment of the aquifer that adversely affects future availability and fitness, and the long-term probable severity and duration of impairment under foreseeable conditions.”</p>	<p>EPD assesses information presented in the applications. The review process involves assessing whether the amount of withdrawal requested is reasonable, whether the source has the capacity to provide the requested amounts, whether there are impacts to the resources or other users, and what mitigation measures can be put in place to mitigate such impacts.</p>
<p>One commenter requested that EPD clarify the activities and situations addressed in the permit condition about transferring or moving already permitted groundwater limits. The commenter asked whether EPD intends “to limit physically transferring or moving groundwater into the ‘Savannah Cone of Depression’? Or is EPD intending to address a different activity?”</p>	<p>There is no transferring of permit limits without EPD’s approval. The current coastal strategy does allow for physical inter-zonal transfers of water. The commenter mentioned the Savannah cone of depression. EPD will not accept permit limit transfers from farther from the Savannah Cone of Depression to closer to the center of the Cone of Depression. EPD has been managing water withdrawal on the coast using coastal permitting strategies to address the Savannah Cone of Depression area. Starting in 2025, EPD will host a series of stakeholder discussions to support the development of a new coastal permitting strategy. This new strategy will be developed to rebalance demand and supply and rebalance surface water and groundwater sources.</p>
<p>One commenter requested that EPD “include references to the ‘EPD policy and permitting requirements’ that exist at the time of issuing the withdrawal permit.”</p>	<p>This is EPD’s standard practice. The permit expressly states that the permit is issued in accordance with Georgia laws.</p>
<p>One commenter requested that EPD more clearly define the area of the “Savannah Cone of Depression.” The commenter wanted to know if the Savannah Cone of Depression includes any areas where past groundwater withdrawals have reduced the groundwater level? The commenter requested more specific geographic terms in permit conditions.</p> <p>A commenter asked that all “EPD policy and permitting requirements” be identified and made public before moving forward.</p> <p>A commenter asked for more detailed geographic limits for the green, yellow, and red zones. The commenter wanted to know how far (how many miles) these zones are</p>	<p>Information on Savannah Cone of Depression can be found at EPD website https://epd.georgia.gov/water-withdrawal-permitting under the link to slides presented in the February 26, 2024, public meeting. The Savannah Cone of Depression reflects the effect of current water uses.</p> <p>Coastal permitting strategy and studies leading to it can be found at https://epd.georgia.gov/coastal-water-study. State regulations on permitting of groundwater withdrawal can be found at https://rules.sos.ga.gov/gac/391-3-2 and the Groundwater Use Act is codified in OCGA 12-5-90 et seq.</p>

from the cone of depression. The commenter also wanted to know what the distance from the cone of depression “scientifically best represents” the areas where withdrawals should be limited.	Delineation of zones can be found in the Coastal Permitting Strategy at https://epd.georgia.gov/coastal-water-study (last link).
One commenter requested that “EPD to require the applicants to submit the Initial Joint Annual Report before any groundwater withdrawal permit is issued.”	EPD cannot require an entity to submit something required by a permit condition before that permit is issued.
One commenter requested that the permit require that the Initial Joint Annual Report be made publicly available upon submission to EPD.	The report will be available to the public on the permittees’ website.
One commenter requested that EPD make explicit the “ramifications of non-submission (or inadequate submission) of the Initial Joint Annual Report”. Another commenter wanted to know the consequences for Bryan and Bulloch counties if they do not submit the annual report. Specifically, the commenter wanted to know if EPD would limit the water withdrawal or revoke existing permits.	A failure to comply with a permit condition is a violation of the permit and is subject to compliance/enforcement actions. EPD ‘s authority to modify or revoke a permit, when it is deemed necessary, is when the groundwater use or withdrawal is not in compliance with the terms of the permit or when there is an unreasonable adverse effect upon the water uses or users in the area, except with respect to farm use permits.
One commenter raised concern over the vagueness of the phrase “solid, firm and feasible front-loaded timetable” and “urges EPD to emphasize the importance of this portion of the Initial Report.” Another commenter wanted to know how “solid, firm, and feasible front-loaded timetable” would be measured and whether there was a defined deadline or timetable. The commenter also wanted to know whether there would be cut-off dates or consequences for not following the timetable. The commenter wanted to understand what the mechanisms were to ensure things were moving at a reasonable timeframe.	This language has been removed from the permit.
One commenter suggested that, “the following topics be included as additional items that must be included in the Initial Joint Annual Report: candidate and potential surface waters; candidate and potential alternative sources of water; a ranking or prioritization of these water resources in terms of readiness of deliverability; a ranking or prioritization of what areas/users will be served by non-groundwater sources; and the ‘Goals and Milestones’ discussion” referenced in a different permit condition.	Thank you for the suggestions. Many of these are now to be included in the report.
One commenter requested that EPD clearly define the reporting frequency for the Annual Reports and 3-Year Reports, particularly when the two overlap.	EPD simplified the reporting requirements to require only an annual report in which the permittees demonstrate progress to identifying and using an alternate source.
One commenter requested that EPD set explicit expectations for the level of detail in the required reports.	EPD has updated the permit language to specify what must be included in the initial report and subsequent reports.
One commenter spoke in support of the growth coming to the area.	Comment noted.

<p>One commenter made a complaint about air quality and noted that, “[f]or 6 months, we had ash and fires burning non-stop, I live 3.5 miles from the site and everyday all of my outside furniture was covered in ash, we have already seen a dramatic increase in dust, and fog and dirt storms from this site, so I ask who is monitoring the air quality.”</p>	<p>EPD has responded to all complaints regarding open burning and fugitive air emissions coming from the site. EPD has worked with the local government and operators to restrict open burning, to ensure proper permitting and to reduce fugitive emissions through dust control measures such as increased use of water trucks and tackifiers. EPD has executed two consent orders at the site for Air Quality Control Violations. In addition, EPD continues to make periodic site visits to ensure that dust control measures are continuing to be implemented.</p>
<p>Several commenters raised concerns about the impact of the development on quality of life.</p>	<p>This is outside EPD’s regulatory review. The local governments are responsible for local economic development and zoning decisions.</p>
<p>One commenter requested that EPD model not just the requested 6.625 MGD, but also all of the water necessary to support the project and the anticipated growth in the region. The commenter requested EPD include all proposed, approved, and announced wells in the region, including projections of anticipated use.</p> <p>One commenter stated that, “EPD should REQUIRE that all private wells affected by your highly trusted water table model should be lowered or re-drilled to provide the same submersion level that they currently have prior to the new 6.2MGD wells being approved. I believe EPD should REQUIRE that these wells be lowered or redrilled CONCURRENTLY with the approval of the new wells. Not AFTER the impact has been realized and citizens are left with no water for their homes or their crops while various government agencies review their applications and decide if they want to reimburse them or not.”</p>	<p>In reviewing a permit application, EPD assesses whether the intended source can provide the amount of water requested in the application. EPD also assesses whether the proposed water use would have any unreasonable impact on the resource and other known users. EPD does not assess speculated amount of water use. EPD encourages this commenter to participate in the regional water planning process.</p> <p>Based on results from modeling, EPD does not anticipate unreasonable adverse impacts on existing wells. The mitigation funding mechanism is a conservative measure in spite of the assessment. A preemptive and large-scale mitigation is not warranted.</p>
<p>One commenter disputed EPD’s assessment that saltwater intrusion would not be an issue in the Bulloch/Bryan County area. The commenter requested EPD implement quarterly salinity testing at the new wells and quarterly salinity testing in multiple existing wells closer to the coast and Hilton Head Island. The commenter requested that these tests results be made public and that the new wells be capped and permanently closed if any increase in salinity is ever detected.</p> <p>A commenter requested that the annual report include goals and deliverables and that the report be submitted quarterly, if not more often.</p>	<p>A standard groundwater withdrawal permit does require periodic monitoring of specific conductivity, which can serve as a proxy for salinity.</p> <p>EPD believes annual reporting frequency is sufficient.</p>
<p>One commenter requested that Hyundai be, “required to use 50% MINIMUM reclaimed or recycled waters for its industrial processes” and that, “these improvements and requirements should not be at the taxpayer expense.”</p>	<p>EPD encourages permittees to consider reclaiming or recycling water; these permits include reuse as a possible alternate water source to the groundwater withdrawals.</p>

<p>One commenter stated that the reason Effingham County had a decrease in water usage was because the data were “based on a period when many residents left temporarily in desperation due to unbreathable air.”</p>	<p>Comment noted.</p>
<p>Several commenters raised concerns about the possibility of sinkholes as a result of the water withdrawals.</p>	<p>The source of the proposed groundwater withdrawal is the Floridan Aquifer, which is several hundred feet below land surface and is overlain by a confining unit. The drawdown assessed (up to 19 feet) would not cause dewatering in any portion of the Floridan Aquifer simply because the water levels before and after the withdrawal would both be higher than the confining unit. There is no reason to think that the lowered water level in the Floridan Aquifer (still above the top of it) would cause the formation of sinkholes within the aquifer itself or in the layer of material above the confining unit.</p>
<p>One commenter asked the purpose of the groundwater requested in the permit applications. The commenter also asked whether the system could be modified to use less, what the permittees plan to do with the water after it’s been used, and why the water cannot be reused or pumped back into the ground.</p>	<p>The water will be used for public water supply. The permits provide that the groundwater withdrawals will be reduced commensurate with the amount of alternative water sources provided to the user, with a complete cessation of groundwater withdrawals from the Floridan Aquifer within 25 years of the date of the permit. The groundwater withdrawal permits do not regulate placement of the water after use or require reuse. The county has received a NPDES discharge permit from EPD. There is no request from the permittee to inject treated wastewater back to the groundwater aquifer, which would need an Underground Injection Permit (UIC).</p>
<p>One commenter indicated that EPD should coordinate with USFWS and NOAA NMFS regarding “the adverse effects from those proposed groundwater withdrawals on federally endangered and threatened species and their habitat.” The commenter stated that the proposed withdrawals would, “jeopardize the survival and recovery of numerous federally endangered and threatened species.”</p>	<p>Because of the lack of a hydraulic connection between the Floridan Aquifer and the surface water bodies, a withdrawal from the Floridan Aquifer does not have any implications on the referenced species that utilize such surface water bodies as habitats. Despite that, EPD is in communication with the USFWS and is planning to hold technical discussions with USFWS to better understand their concerns.</p>
<p>One commenter asked what the “green zone” was.</p>	<p>Within the 24 coastal counties, Chatham County and the southern half of Effingham County are in the Red Zone, Bryan and Liberty Counties are in the Yellow Zone, and the others are in the Green Zone. This delineation has been determined based on the level of impact on saltwater encroachment from pumping water from the Floridan Aquifer in these counties, the Red Zone being where the greatest impact on saltwater encroachment would be anticipated and the Green Zone being where less impact on saltwater encroachment would be anticipated.</p>

<p>One commenter stated that Bulloch and Bryan County should require Hyundai to construct a reverse osmosis facility and use municipal wastewater and captured rainfall.</p>	<p>EPD permits cannot require an action from an entity who is not a permittee.</p>
<p>One commenter stated that the public meeting and comment period was scheduled to occur before the public had sufficient information to provide comment. One example that the commenter provided was the lack of information about the amount of proposed impervious surface for the Mega-Site. The commenter states that knowing the acreage of impervious surface is critical for determining impacts to baseflow and natural recharge.</p> <p>One commenter indicated that the application was incomplete because the public notice did not include maps of the locations for the four proposed wells in relation to wetlands, the floodplain, county boundaries, and the Ogeechee and Savannah Rivers and their tributaries. The commenter also requested a map with the location of the Mega-Site in relation to wetlands, the floodplain, county boundaries, and the Ogeechee and Savannah Rivers and their tributaries. The commenter also requested the total acreage of the proposed Mega-Site and the total impervious surface for that Mega-Site.</p>	<p>The intent of the initial meeting was only to discuss draft special conditions, and EPD made relevant information available to the public before, during, and after the meeting. EPD published a notice for a public informational meeting on the water withdrawal applications on January 30, 2024. The public informational meeting was held on February 26, 2024. EPD asked that comments be submitted before March 8, 2024. EPD will provide an additional public comment period and public meeting to discuss the current draft permit.</p> <p>The information referenced by the commenter is not required by Georgia's regulations on groundwater withdrawal (391-3-2-.04, -.05, -.06, and -.07). The lack of such information does not make the applications incomplete.</p> <p>The commenter's reference to impervious surface may have more to do with the Army's regulatory review of the project under Section 404 of the Clean Water Act. Because the source of water is the Floridan Aquifer, which has a confining unit on top of it, there is no baseflow provided by the aquifer to surface water bodies. There is no recharge to the Floridan Aquifer in the studied area either. If the commenter meant to speak of the connection between surface water bodies and the surficial aquifer and wetlands, then this is again within the regulatory review by the Army under the 404 permit application process.</p> <p>EPD assesses applications for water withdrawals in the form and substance as submitted. EPD's review includes need, the proposed use, source's ability to provide water, potential impacts, necessary mitigations and all of the other factors set forth in the Ground Water Use Act and its implementing regulations. Planning of current and future water needs is a part of the regional water planning process; groundwater withdrawal permits must be consistent with the results of that process. While the size of the industrial facility or its impervious surface does have environmental implications, it is not per se a relevant factor for the review of a groundwater withdrawal application, but more relevant under other environmental regulations. For example, EPD would consider the size of a facility and of the impervious surfaces thereof in connection with an</p>

	application for an industrial stormwater discharge permit or a construction stormwater discharge permit.
One commenter noted that, “any groundwater flow models that are being used, but do not model preferential flow through fractures and other karst conduits that are extensive throughout the entire Floridan aquifer system are meaningless.”	EPD’s groundwater models have been developed and refined by professionals in USGS and engineering/geology consulting firms selected by EPD professionals through competitive procurement processes, based on the best available scientific information. The model used reflects the actual geologic conditions in this area.
One commenter stated, “drilling wells and then transitioning to surface water will cost twice as much in tax expenditures, breaching the fiduciary duty Bulloch County owes to its taxpayers, and circumventing its own rules.”	The cost in developing infrastructure is not part of EPD’s assessment of groundwater withdrawal permit applications.
One commenter said that, “[t]he baseline of the model on which the permit decision is based should be updated to include the real world conditions being observed now, and that modeling redone with the updated data to ensure an accurate depiction of the affected environment is included in EPD’s decision making process.” One commenter stated that, “the environmental impacts analysis required under the Georgia Environmental Policy Act (GEPA) has not been met.” The commenter requested “an honest and accurate review of impacts to potable water sources in a GEPA or NEPA document, and alternatives explored,” including reuse.	The baseline of the model has been calibrated against the real world data obtained from USGS long term field observations. The utilization of a model in assessing the potential impact of a water use is typically done through two scenarios, one as the background or baseline without the proposed action and the other with the proposed action. The difference in results between the two scenarios is the net impact of the proposed action. EPD’s permitting decisions are not regulated by GEPA because EPD’s permitting is not a “governmental action” as defined by GEPA. EPD’s regulatory review is independent from the NEPA process.
One commenter highlighted the importance of water conservation, including things such as leak detection, watering schedules, and low flow fixtures. The commenter recommended EPD includes water conservation in presentations.	Thank you for the comment.
Several commenters requested EPD evaluate the impact of the proposed withdrawals on their wells.	At the public meeting, EPD had a computer station where the public could come and see what the potential drawdown could be on their well. EPD also received queries through email, and EPD reviewed the impacts of the proposed wells and responded individually. Anyone who wishes to know what the modeled impact of the proposed wells would be at their location can send their address and well depth to epd.comments@dnr.ga.gov .
One commenter asked how much water Bulloch and Bryan counties used per day.	Bryan County’s existing groundwater withdrawal permit has a monthly average withdrawal limit of 1.600 million gallons per day (“MGD”) and an annual average withdrawal limit of 1.600 MGD. Bulloch County does not currently have a withdrawal permit.

<p>Several commenters expressed general concern about impacts to the Floridan aquifer.</p>	<p>EPD has assessed the potential impact on the Floridan Aquifer at the locations of the proposed wells and beyond. Modeling shows potential impacts on water levels at 19 feet at the center of the wells but less than that away from the wells. This level of drawdown is not considered as unreasonable.</p>
<p>One commenter expressed that Bulloch County should have a referendum on this issue.</p>	<p>Comment noted.</p>
<p>One commenter asked how EPD could be sure that there were no lasting effects of the wells after the permit term.</p>	<p>EPD’s assessment is based on best available information (i.e. models and data).</p>
<p>One commenter asked whether any excess water from the permitted amount could be used in other locations.</p>	<p>In general, permit limitations are set to correspond to the water supply need. When such a need is determined properly, there should not be any excess water available for other uses at other locations.</p>
<p>One commenter asked about whether EPD will coordinate with local Development Authorities on water requirements for new industrial development and workforce housing. The commenter wanted to know how water limitations would be communicated.</p>	<p>The issue referenced is addressed during the regional water planning process. The Regional Water Plans are updated every five years. During the plan review and revision process, EPD works with the Regional Planning Council and planning contractors in developing the plans.</p>
<p>One commenter asked about efficiency requirements for the four wells and how those requirements compare to industry standards. The commenter also asked whether the counties or Hyundai would be accountable for reporting efficiency standards and plan for use and reductions.</p>	<p>The permit requires the county as the permit holder to implement and update a Water Conservation Plan, submit a Water Conservation Progress Report to EPD every five years and demonstrate an effort to increase water use efficiency. Furthermore, public water systems serving more than 3,300 people are required to participate in water loss audit utilizing an audit software developed by American Water Works Association (AWWA). Water loss audit results show the status of water supply efficiency and ways to improve efficiency. EPD’s permittees are the entities responsible for complying with the permit requirements, including reporting obligations.</p>
<p>One commenter asked for clarification on “any contract restrictions placed on the use of the wells by the initial funding source requirements.”</p>	<p>EPD does not review the initial funding source requirements for the wells. EPD has removed this language from the draft permits.</p>
<p>One commenter stated that, “[y]ears ago, EPD put forth a large effort to understand the strain on the aquifer and the lack of pressure that creates on neighboring wells, salt-water intrusion and implications to coastal water supply and systems. The result was the creation of zones to understand where aquifer water supply was endangered, threatened and safe (red, yellow, green). The intent was to minimize usage in the more threatened zones. Now it seems the intent is to be able to borrow water from the green zones. We consider inter-zonal aquifer transfers as an unfit and inequitable way a creating a water market. These waters belong to the public and locales in red &</p>	<p>The current coastal strategy does allow for physical inter-zonal transfers of water. EPD notes that the coastal strategy will be under review beginning 2025 through 2027 and invites the commenter to participate in that process.</p>

<p>yellow zones should be required to work within their means and make smarter, more resilient solutions, rather than continue to pull from neighboring communities.”</p> <p>The commenter followed up by asking whether EPD is intending, through its discussion of drilling new wells farther from the Savannah Cone of Depression and transferring permitted groundwater limits, to open the door to moving water between zones (green, yellow, and red). If this is not what EPD intended, the commenter asks for clarification for what EPD intends.</p> <p>The commenter also asked whether this was EPD’s way of introducing rule-making to allow for more zone transfers.</p> <p>The commenter asked whether EPD should create a stronger process for discouraging more inter-zonal transfers.</p>	
<p>A commenter wanted to know what the impact of HB1146 would be on the need for new wells.</p>	<p>HB1146 does not have an impact on the need for the new wells in these draft permits.</p>
<p>A commenter want to know whether EPD considers private withdrawal permit holders, as well as governmental entities, when assessing further withdrawals in the red and green zones.</p>	<p>Yes, existing permitted water uses have been included in EPD’s modeling assessment.</p>
<p>A commenter wanted to know EPD’s level of review of the joint report.</p>	<p>EPD will review all reports for compliance with the permit terms.</p>
<p>A commenter wanted to know what level of detail would be considered “sufficient to appropriately inform EPD of the project status.”</p>	<p>The permit now specifies that the reports demonstrate (1) the progress toward obtaining funding sufficient to pay for the provision of alternative water sources and (2) the extent of completion of construction and operation of the alternative water source infrastructure and the commensurate reduction in groundwater withdrawals.</p>
<p>A commenter asked why there have not been determinations of impacts per the Clean Water Act, NEPA and Endangered Species Act?</p>	<p>Groundwater withdrawals are regulated by the State of Georgia under OCGA 12-5-90 and Rules for Groundwater Use 391-3-2. There is no federal regulation specifically for groundwater withdrawals. To the extent interactions between groundwater and surface water exist because of hydraulic connections, federal laws such as the Clean Water Act and the Endangered Species Act may apply, such as where necessary to protect aquatic resources in those surface water bodies. However, with respect to proposed wells in the Bryan/Bulloch applications, there are no hydraulic connections and therefore no surface water implications. Furthermore, NEPA only applies to actions taken by the federal government, not by the State of Georgia.</p>