



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, SAVANNAH DISTRICT**  
**100 W. OGLETHORPE AVENUE**  
**SAVANNAH, GEORGIA 31401-3604**

CESAS-RD-C  
SAS-2015-00235

25 March 2025

**MEMORANDUM FOR RECORD**

**SUBJECT:** Supplement to the Department of the Army (DA) Environmental Assessment and/or Statement of Findings for file number: SAS-2015-00235

**1. Permittees:**

a. Address: Mr. Hugh "Trip" Tollison  
Savannah Harbor-Interstate 16 Corridor Joint Development Authority  
131 Hutchinson Island Road, 4th Floor  
Savannah, Georgia 31421

Mr. Pat Wilson, Commissioner  
Georgia Department of Economic Development  
Technology Square, 75 5th Street, N.W., Suite 1200  
Atlanta, Georgia 30308

**2. Background:**

a. On October 4, 2022, Savannah District, Corps Regulatory Division (Corps) issued DA Permit SAS-2015-00235 authorizing the construction of an Electric Vehicle Original Equipment Manufacturing (EVOEM) facility, which would manufacture and distribute fully electric vehicles. The project would result in the loss of 221.36 acres of wetland, 763 linear feet of intermittent stream and 1.58 acres of ditch.

b. In June 2018, the applicant submitted a DA application requesting authorization to fill 92.6 acres of wetland, 833 linear feet of stream and 0.62 acre of ditch to construct a gas-powered automobile Original Equipment Manufacturing (OEM) facility. In July 2018, the Corps issued a Joint Public Notice (JPN) requesting comments on the proposed impacts/project. During the evaluation of the application, the applicant reduced the proposed impacts to wetlands from 92.6 acres to 62.3 acres. In 2019, the Corps prepared an Environmental Assessment (EA), Section 404(b)(1) Guidelines Evaluation, Public Interest Review (PIR), and Statement of Findings (SOF) associated with the proposed impacts. The EA also included an evaluation of effects to threatened and endangered species (per Section 7 of the Endangered Species Act (ESA)) and historic properties (per Section 106 of the National Historic Preservation Act (NHPA)). Based on these analyses and evaluations, the Corps determined that the project at that time would not have a significant impact on the quality of the human environment. On July 10, 2019, the Corps initially proffered a DA permit to the applicant stating if they agree with the terms and conditions of the permit, to sign, date, and return the signed

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permit to the Corps. Upon receipt, the District Engineer would validate the permit, and the impacts would be authorized. However, the applicant never signed the initial proffered permit, therefore the Corps never authorized the impacts requested in the 2018 DA application.

c. In May 2022, the applicant submitted a new DA application requesting impacts to 221.36 acres of wetland, 763 linear feet of intermittent stream and 1.58 acres of ditch associated with the construction of an electric vehicle OEM (EVOEM) facility. The applicant contended that since the time of the Corps' initial proffered permit to the submittal of the new DA application, *"the auto industry has continued to shift its focus towards production of electric vehicles and many leading auto manufacturers goals to cease building petroleum powered cars. The transformation of the automotive industry towards electrification requires construction of much larger and complex OEM facilities designed specifically for production of electric vehicles. Because the previously proposed project, which accommodates gas-powered automobile production, does not accommodate the requirements for an EVOEM assembly facility, revisions to the site plan were required."* As a result, the Corps published an new JPN, with a 30-day comment period, soliciting comments from the public on the updated project. Further, the Corps prepared a new EA, Section 404(b)(1) Guidelines Evaluation, PIR, and SOF associated with the updated impacts. The new EA also included an evaluation of effects to threatened and endangered species (per Section 7 of the ESA) and historic properties (per Section 106 of the NHPA). Based on these analyses and evaluations, the Corps determined that the new project would also not have a significant impact on the quality of the human environment. On October 4, 2022, the Corps issued the DA permit for the new project authorizing the impacts.

d. The authorization expires on October 4, 2027.

e. Previous permit modifications: ☒ Yes ☐ No

f. Has the authorized work commenced? ☒ Yes ☐ No

All authorized impacts have been completed in accordance with the DA permit.

### 3. Re-Evaluation of Potential Effects to Municipal and Private Water Supply:

a. During the Corps' evaluation of the original permit, and in accordance with 404(b)(1) regulations found at 40 Code of Federal Regulations (CFR) 230.50, we determined that the project would result in negligible impacts on municipal and private water supplies, and that no water withdrawal permits would be required from the Georgia Department of Natural Resources, Environmental Protection Division (Georgia

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EPD). This determination was made in reliance on the information provided by the Permittees during our review of their DA application. It should be noted that during the evaluation of both the 2018 and 2022 DA applications, Georgia EPD did not express any concerns regarding water supply. However, in July 2024, the Georgia EPD Watershed Protection Branch published four draft groundwater withdrawal permits for Bryan County and Bulloch County (Georgia EPD permit Nos. 016-0013 and 016-0014) associated with this project. Specifically, Bulloch County applied for two Floridan aquifer wells sited in Bulloch County, requesting up to 3.125 million gallons per day (mgd) on an annual average and Bryan County applied for two Floridan aquifer wells sited in Bulloch County, requesting up to 3.500 mgd on an annual average. Further, Georgia EPD anticipated a drawdown of the aquifer in response to the above water withdrawals.

b. Our regulations at 33 CFR Part 325, Appendix A (permit form and special conditions) stipulate that the Corps, at its discretion, may reevaluate a permit decision at any time the circumstances warrant (33 CFR 325.7(a)). Circumstances that could require reevaluation include, but are not limited to, (1) failure to comply with the terms and conditions of a permit; (2) information submitted in support of a permit application proves to have been false, incomplete, or inaccurate, and/or (3) significant new information surfaces that this office did not consider in reaching the original public interest decision. The regulations dictate no timeline or process for reevaluation of a permit.

c. Based on the publication of the Georgia EPD draft permits, the Corps determined that new information had surfaced regarding the effects the project may have on municipal and private water supplies as evaluated under 40 CFR 230.50 and 33 CFR 320.4, and that reevaluation of our permit decision regarding our effects determination for water supply was warranted per 33 CFR 325.7(a).

On August 23, 2024, the Corps informed the Permittees of the above and requested they provide an assessment of effects (AOE) the project may have on municipal and private water supplies, including whether the anticipated drawdown of the Floridan aquifer would result in any drainage of aquatic resources.

d. Ms. Sydney Bacchus Comment Letters: On August 19, 2024, September 3, 2024, and January 1, 2025, Ms. Bacchus provided comment letters expressing concerns regarding the potential direct, indirect and cumulative adverse impacts the project could have on the Floridan aquifer. Ms. Bacchus contends that the groundwater model used by Georgia EPD to evaluate the water withdrawal permits is “not a reliable model” because it:

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*i) fails to include an analysis of the cumulative adverse impacts from all of the other groundwater withdrawals in the region; ii) predicts an “impact area” of only a 5-mile radius centered around the proposed 4 new wells; iii) fails to consider preferential flow through karst conduits that occur throughout the entire extent of the regional, karst, Floridan aquifer system; iv) assumes no cumulative vertical flow through the “thick, clayey” lower permeability layers above and below the Floridan aquifer, in response to pumping, when that vertical flow is known to occur throughout the entire extent of the regional, karst, Floridan aquifer system, resulting in the dewatering of “aquatic sites;” v) assumes no cumulative horizontal flow through the county-line boundaries of Bulloch County, in response to pumping, that will increase saltwater intrusion in Bulloch, Bryan, and Effingham Counties, and other coastal counties and barrier islands, and will increase the decline of Georgia’s coastal marshes; vi) assumes no cumulative dewatering of “aquatic sites,” including wetlands and streams; vii) assumes no cumulative “taking” of federally listed marine/aquatic species (e.g., shortnose sturgeon and South Atlantic Distinct Population Segment (DPS) of Atlantic sturgeon), or the irreversible destruction of designated habitat for those species; and viii) assumes no cumulative “taking” of federally listed upland species by the cumulative dewatering of the surficial aquifer, is known to occur in response to groundwater withdrawals throughout the entire extent of the regional, karst, Floridan aquifer system, resulting in the premature decline and death of longleaf pine trees and other native species of pine trees that are required for the survival and recovery of the federally endangered redcockaded woodpeckers.*

Ms. Bacchus also states that the DA permit was “issued prematurely, without any consideration by the Corps of the direct, indirect, or cumulative adverse impacts of the source of water for that proposed **HYUNDAI MEGA-SITE**” (emphasis in original) and contends that an Environmental Impact Statement should have been prepared to evaluate the cumulative impacts the project may have on water supply.

e. Permittee Response to Corps Request for AOE and Ms. Bacchus Comments: By letter dated December 19, 2024, the Permittees’ agent provided the following responses:

Regarding the Corps’ request for an AOE on the potential drawdown of adjacent aquatic resources, the Permittee states,



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*The evaluation conducted as part of the EPD water withdrawal permit process considered potential impacts to surface water bodies (which includes wetlands). A copy of the EPD power point documenting this condition was provided in the 20 September 2024 response. The attached slides from that document depict a schematic of the Floridan Aquifer. The schematic depicts the condition in coastal Georgia where the Floridan aquifer is overlain by a thick confining unit, or aquitard, that acts as a hydraulic barrier between surface waters, such as wetlands, creeks, rivers, and ponds, and the Floridan Aquifer. While modeling completed by EPD indicated that entities with Floridan wells within 5 miles of the Interstate 16/Highway 280 interchange could potentially experience an impact of 10-19 feet or more of Floridan drawdown at their wells, the upper confining unit/hydraulic barrier is 285-320 feet thick in southern Bulloch County and unbreached (USGS Professional Paper 1807, Revised Hydrogeologic Framework of the Floridan Aquifer System in Florida and Parts of Georgia, Alabama, and South Carolina, published April 2015, revised March 2016). Due to the hydrogeologic conditions in the area of the proposed wells, and coastal Georgia in general, there is no hydraulic connection between nor is there any prospect that withdrawals from proposed Bryan and Bulloch wells will have any impact to the Savannah River, the Ogeechee River, the Okefenokee National Wildlife Refuge, creeks, wetlands or other surface water bodies. Additionally, the sites selected for the four wells consist of upland area only and no direct impacts to wetlands will occur during construction of the wells.*

Corps Evaluation of Applicant's Response: The Corps is satisfied with the applicant's response. Regarding direct effects the wells would have on aquatic resources, the wells would be installed in the upland and not within aquatic resources. Indirectly, there are aquatic resources located within the 5-mile drawdown radius. However, as assessed by Georgia EPD, there is no hydraulic connection between these surface waters and the Floridan aquifer due to a confining layer. Thus, the Corps does not anticipate any indirect drainage of aquatic resources associated with the operation of the 4 wells either. Further, the Permittee has stated that the utility lines required to transmit the water to the Hyundai site would not impact aquatic resources either.

Regarding Ms. Bacchus assertion that the model used by Georgia EPD was not reliable, the Corps Regulatory Program regulates the discharge of dredged and fill material per Section 404 of the Clean Water Act, 33 USC 1344. Groundwater withdrawals is regulated by the State of Georgia under OCGA 12-5-90 and Rules for Groundwater Use 391-3-2. Thus, we have no authority over nor expertise in groundwater. Although the 404(b)(1) Guidelines, 40 CFR Part 230, dictate that the Corps evaluate the effect the authorized discharge of dredged or fill material would have

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on private and municipal water supply, it does not grant the Corps the authority to restrict or approve groundwater withdrawals. The Corps cannot add special conditions limiting the amount of groundwater withdrawn from the aquifer to the DA permit. To do so would exceed the scope of our authority. Further, the Corps has no authority to dictate how the State implements its groundwater withdrawal program, nor the analyses completed when issuing water withdrawal permits. However, the DA permit was conditioned in that the Permittee is required to obtain and comply with all applicable Federal, state and local authorizations required for the authorized activity, including those that relate to groundwater withdrawal.

Modeling completed by Georgia EPD indicates a maximum drawdown of 19 feet in the Floridian aquifer within a 5-mile radius of the wells. On October 7, 2024, Georgia EPD issued the 4 water withdrawal permits with special conditions designed to mitigate the effects the wells will have on the aquifer. Therefore, given the analyses completed by Georgia EPD and the issuance of the groundwater withdrawal permits, the Corps has determined that the wells would have a long-term minor effect on private and municipal water supply.

Regarding cumulative impacts, as defined in 40 CFR 1508, cumulative impacts are effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from actions with individually minor but collectively significant effects taking place over a period of time. The Corps completed a cumulative impacts analysis per our regulations as a part of the 2022 EA. The analysis evaluated the cumulative effect the project would have on wetlands, streams, water quality and aquatic species within the Lower Ogeechee River Basin and United States Geological Service, Georgia Hydrologic Unit Code (HUC) 03060202. Given that the wells are located in the upland and there would be no drainage of nearby aquatic resources (i.e., wetlands, streams, rivers, etc.), the cumulative impacts to aquatic resources associated with the installation and operation of the wells would also be considered minimal as determined in the 2022 EA.

Regarding cumulative impacts to water quality, as stated above, the wells would be in the upland and would not result in drainage of nearby aquatic resources. Therefore, it is not anticipated that the installation and operation of the wells would result in more than minimal impacts on water quality in the nearby aquatic resources. Further, the Corps does not have any authority over water quality. Just as with the effects to water supply, Regulatory is bound by the 404(b)(1) Guidelines, 40 CFR Part 230, to assess the potential effects the discharge of dredged and/or fill material may have on water quality but has no authority over the water quality itself. Georgia EPD's Watershed Protection

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Branch establishes water quality standards for Georgia's waterbodies, conducts monitoring throughout the state, and conducts an assessment of monitored waterbodies' compliance with water quality standards. Although a 401 water quality certification must be issued by the State prior to any Corps authorizations, ultimately, the Corps has no authority over the creation, update, or enforcement of the State's water quality standards, nor is it involved in the review processes for such actions. Based on Georgia EPD's response to the public's comments on the water withdrawal permits, its review included "*the need, proposed use, source's ability to provide water, potential impacts, necessary mitigations and all of the other factors set forth in the Groundwater Use Act (GUA) and its implementing regulations*", which include assessing the potential effects the water withdrawal would have on the water quality within the aquifer.

Regarding cumulative impacts to water supply, Georgia EPD's review included an evaluation on the aquifer's ability to provide water. This review concluded that there will be effects to the aquifer and as such special conditions on the permits were recommended to reduce these effects. On October 7, 2024, Georgia EPD issued the 4 water withdrawal permits with special conditions designed to mitigate the effects the wells would have on the aquifer. By issuance of the water withdrawal permits, Georgia EPD has determined that the proposed water withdrawals were acceptable and in compliance with the GUA.

Regarding potential effects the operation of the wells would have on threatened and endangered species, as stated above, 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. Dewatering the Ogeechee River, the Savannah River, or the Okefenokee National Wildlife Refuge is not anticipated. Therefore, species that use those surface water bodies as their habitat would not be affected by water use from the Floridan Aquifer. Given the lack of connection between the aquifer and these surface waters, the Corps has determined that the wells would have no effect on threatened and endangered species.

Ms. Kristen Stampfer, Coastal Communities United (CCU): On March 3, 2025, Ms. Stampfer expressed the following concerns regarding the effect the wells would have on the Floridan Aquifer and requested,

*"The USACE focus on the following five key issues:*

*1. Significant Groundwater Withdrawals and need for Environmental Impact Statement*

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- 2. Flaws in the State's Antiquated Groundwater Modeling that Require USACE to Require More Current and Accurate Approaches of Assessing Groundwater Impacts from the Proposed Project*
- 3. Cumulative Impacts Analysis*
- 4. Regulatory Guidance for USACE Processing Department of Army Permits*
- 5. Public Review and Comment Required for Updated Project Information*

Regarding the Corps' response to key issues 1, 2, and 3, refer to Section 3.e above.

Regarding key issues 4 and 5, Ms. Stampfer expresses concerns that there has *"been no update to the public and no corrected public notice"* since the Corps began its reevaluation process. Per 33 CFR 325.3, the Corps is required to issue a public notice when processing a new DA application, however per 33 CFR 325.7 there is no such requirement in the regulation for a permit reevaluation or modification. Regardless, the Corps is neither processing a new DA application nor a permit modification, thus the issuance of another JPN is not required. We are only reevaluating our effects determination as it relates to private and municipal water supply. However, during that reevaluation, comments from the public have been submitted to the Corps and we are addressing those as well.

Ms. Stamper concludes that,

*"The change in scope from the 2019 404/EA (gas-powered) to the 2022 404/EA (EV facility) should not have been a permit modification, but an entirely new permit. . . . Without an updated Joint Public Notice (JPN) and a public review and comment period, USACE does not have an accurate account of the significant objections to the authorized activity, including all of the irate public comments provided at the public meeting that GA EPD held in Brooklet, GA on August 13, 2024, related to the proposed groundwater withdrawals for the Mega Site."*

As stated in Section 2 above, a new application was submitted in 2022 and as a result another JPN was published soliciting public comments. Further, the Corps completed a new EA, Section 404(b)(1) Guidelines Evaluation, PIR, and SOF associated with the 2022 (new) DA application. This EA also included an evaluation of effects to threatened and endangered species (per Section 7 of the ESA) and historic properties (per Section 106 of the NHPA). Regarding public comment, the Corps was made aware of the public comments from the Georgia EPD meeting as they were provided to the Corps by the Permittee. Those comments were in response to the draft groundwater withdrawal permits that as discussed above are the sole jurisdiction of the Georgia EPD. In addition, the Ogeechee Riverkeeper (ORK), has dedicated an entire section of its

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website to this project, including publishing the Corps' reevaluation letter, as well as provided interviews to numerous local media outlets stating that the Corps is reevaluating the effect the project would have on water supply. Further, Ms. Bacchus has provided numerous comment letters summarizing the public's objections to the water withdrawal permits. Thus, Ms. Stampfer's concern that without a JPN the Corps is not aware of the public's concerns is misplaced. It should be noted that the majority of the comments from the Georgia EPD meeting and even those from Ms. Bacchus and Ms. Stampfer are about the Georgia EPD's water withdrawal permits and analyses, and not directed at activities the Corps regulates (i.e., the discharge of fill material into the waters of the U.S.).

**4. Determination:** The Corps has reviewed all pertinent information and concluded that DA permit SAS-2015-00235 would have a long-term minor effect on private and municipal water supply. All other previous determinations for this permit evaluation are still valid and the impacts on the environment as a result of this permit have been evaluated and found to be insignificant.

PREPARED BY:



Sarah E. Wise  
Lead Biologist, Coastal Branch

3/20/25

Date

REVIEWED BY:



Ellen M. Spicer  
Assistant District Counsel  
Savannah District

3/20/2025

Date

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SUBJECT: Supplement to the Department of the Army Environmental Assessment  
and/or Statement of Findings for file number: SAS-2015-00235

REVIEWED BY:

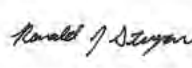
  
Jason D. O'Kane, PMP  
Chief, Regulatory Division

March 20, 2025

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Date

APPROVED BY:

  
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Date: 2025.03.25 11:29:14 -04'00'

Ronald J. Sturgeon, PMP  
Colonel, U.S. Army  
Commanding

25 March 2025

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Date

## Reevaluation of the Corps' Kia Hyundai Permit Decision Regarding the Effects Determination on Municipal and Private Water Supplies

Wise, Sarah E CIV USARMY CESAS (USA) <Sarah.E.Wise@usace.army.mil>

Fri 8/23/2024 11:49 AM

To: ttollison@seda.org <ttollison@seda.org>

Cc: O'Kane, Jason D CIV USARMY CESAS (USA) <Jason.D.Okane@usace.army.mil>

 1 attachments (227 KB)

2024 08 23 Kia Hyundai Permit Reevaluation Letter.pdf;

Good morning Trip! Please see the attached letter regarding the Corps' decision to reevaluate the permit decision regarding our effects determination on municipal and private water supplies. If you have any questions, please call or email me.

V/R,  
Sarah E. Wise  
Team Lead, Coastal Branch  
Regulatory Division  
U.S. Army Corps of Engineers, Savannah District

100 West Oglethorpe Avenue  
Savannah, Georgia 31401-3640  
912-652-5550 (desk)  
912-652-5995 (fax)

Thank you in advance for completing our Customer Survey Form. This can be accomplished by visiting our web site at <https://regulatory.ops.usace.army.mil/customer-service-survey/>, and completing the survey on-line. We value your comments and appreciate your taking the time to complete a survey each time you interact with our office.



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, SAVANNAH DISTRICT**  
**100 W. OGLETHORPE AVENUE**  
**SAVANNAH, GEORGIA 31401-3604**

**AUGUST 23, 2024**

Regulatory Division  
SAS-2015-00235

Mr. Hugh "Trip" Tollison  
Savannah Harbor-Interstate 16 Corridor Joint Development Authority  
131 Hutchinson Island Road, 4th Floor  
Savannah, Georgia 31421

Mr. Pat Wilson, Commissioner  
Georgia Department of Economic Development  
Technology Square, 75 5th Street, N.W., Suite 1200  
Atlanta, Georgia 30308

Dear Mr. Tollison & Mr. Wilson:

I am writing in reference to Department of the Army (DA) permit SAS-2015-00235 proffered on October 4, 2022. The project site is located south of the intersection of Georgia Highway 280 and Interstate 16, in Ellabell, Bryan County, Georgia (Latitude 32.1584, Longitude -81.4533). The permit authorized permanent impacts to 221.36 acres of wetland, 763 linear feet of intermittent stream and 1.58 acres of ditch associated with the construction of an Electric Vehicle Original Equipment Manufacturing (EVOEM) facility, which would manufacture and distribute fully electric vehicles.

During our evaluation, and in accordance with 404(b)(1) regulations found at 40 Code of Federal Regulations (CFR) 230.50, we determined that the project would result in negligible impacts on municipal and private water supplies, and that no water withdrawal permits would be required from the Georgia Department of Natural Resources, Environmental Protection Division (Georgia EPD). This determination was made in reliance on the information you provided during our review of your application. However, in July 2024, the Georgia EPD Watershed Protection Branch released four draft groundwater withdrawal permits for Bryan County and Bulloch County (Georgia EPD permit Nos. 016-0013 and 016-0014) associated with this project. According to Georgia EPD, Bulloch County has submitted an application for two Floridan aquifer wells sited in Bulloch County, asking for up to 3.125 million gallons per day (mgd) on an annual average and Bryan County has also submitted an application for two Floridan aquifer wells sited in Bulloch County, asking for up to 3.500 mgd on an annual average. Further, Georgia EPD anticipates a drawdown of the aquifer in response to the above water withdrawals.

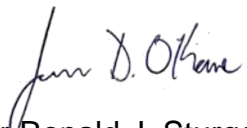


Our regulations stipulate that this office may reevaluate a permit decision at any time the circumstances warrant (33 CFR 325.7(a)). Circumstances that could require reevaluation include, but are not limited to, (1) failure to comply with the terms and conditions of a permit; (2) information submitted in support of a permit application proves to have been false, incomplete, or inaccurate and/or (3) significant new information surfaces which this office did not consider in reaching the original public interest decision (33 CFR Part 325, Appendix A).

Based on the release of the Georgia EPD draft permits, the Corps has determined that new information has surfaced regarding the effects the project may have on municipal and private water supplies, and that reevaluation of our permit decision regarding our effects determination for water supply is warranted. To aid in our reevaluation, please provide an assessment of effects the project may have on municipal and private water supplies, including whether the anticipated drawdown of the Floridan aquifer would result in any drainage of aquatic resources. This assessment should include any groundwater and surface water modeling/data that has been collected regarding this issue. Please note, should the Corps determine that the project would result in additional impacts to aquatic resources, the Corps may modify the permit to include special conditions to compensate for these impacts pursuant to 33 CFR 325.7(b).

Please acknowledge receipt of this letter within 10 days confirming that you will provide us with the requested information.

If you have any further questions or concerns pertaining to this matter, please feel free to call Sarah Wise, Lead Biologist, Coastal Branch, at (912) 652-5550 or by email at [sarah.e.wise@usace.army.mil](mailto:sarah.e.wise@usace.army.mil).



For Ronald J. Sturgeon, PE  
U.S. Army  
Commanding



**Savannah Harbor-Interstate 16 Corridor  
Joint Development Authority**

BRYAN • BULLOCH • CHATHAM • EFFINGHAM

September 3, 2024

Colonel Ronald J. Sturgeon, USA  
United States Army Corps of Engineers,  
Savannah District  
100 West Oglethorpe Avenue  
Savannah, Georgia 31401

Dear Colonel Sturgeon:

RE: Department of the Army Permit SAS-2015-00235

The purpose of this letter is to inform you and your staff that the Savannah Harbor Interstate 16 Corridor Joint Development Authority (JDA) and the State of Georgia Department of Economic Development (State) are in receipt of your letter dated August 23, 2024.

The JDA and the State in partnership with the Georgia Environmental Protection Division will provide the necessary assessments of the Floridan aquifer withdrawal plans as soon as possible.

Once the requested information is ready, we will submit electronically to Sarah Wise, USACE Savannah District Lead Biologist.

Please feel free to contact me should you need more information, or have any additional questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'HTollison'.

Hugh "Trip" Tollison  
Secretary/Treasurer



GEORGIA DEPARTMENT OF ECONOMIC DEVELOPMENT

PAT WILSON  
COMMISSIONER

US Army Corps of Engineers  
Savannah District/Regulatory Division  
Attention: Mr. Jason D. O'Kane  
Ms. Sarah Wise  
100 West Oglethorpe Ave.  
Savannah, GA 31402-0889

September 20, 2024

Subject: Department of the Army (DA) permit SAS-2015-00235

Dear Mr. O'Kane & Ms. Wise:

In response to your letter dated August 23, 2024 regarding the above referenced permit, the Georgia Department of Economic Development ("GDEcD") and Savannah Harbor-Interstate 16 Corridor Joint Development Authority ("JDA") provide the following information to aid in your reevaluation:

- Simulated Drawdown- Bryan/Bulloch Proposed Withdrawal
- Slides presented at Georgia EPD public meetings held on February 26, 2024 and August 13, 2024
- Draft Special Conditions on the Water Withdrawal Permits
- Responses to Comments on Draft Special Conditions
- Draft Groundwater Permits for Bryan and Bulloch Counties

The above listed information can also be accessed via the Georgia Environmental Protection Division website at: [Water Withdrawal Permitting | Environmental Protection Division \(georgia.gov\)](https://www.georgia.gov/water-withdrawal-permitting)

Of note, the applicants for the permits for groundwater withdrawals were both Bryan and Bulloch counties, not GDEcD or the JDA. Additionally, the Bryan and Bulloch applications were for withdrawals to support the Hyundai Metaplant project as well as other development in the region. Accordingly, the Georgia Environmental Protection Division analyses assessed the entire requested amount, which is more than the amount to be used by just the Hyundai Metaplant project.

We greatly appreciate your assistance with this project. If you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,

Pat Wilson  
Commissioner  
Georgia Department of  
Economic Development

Trip Tollison  
Savannah Harbor- Interstate 16  
Corridor Joint Development Authority

July 8, 2024

**Notice of Public Meeting Regarding Draft Groundwater Withdrawal Permits for**

**Bryan County and Bulloch County**

This notice is to announce that the Georgia Environmental Protection Division (EPD) Watershed Protection Branch has released draft groundwater withdrawal permits for Bryan County and Bulloch County and will host a public meeting and hearing to seek comments from the public on these draft permits. The draft groundwater withdrawal permits have been released for public comments on EPD websites at <https://epd.georgia.gov/water-withdrawal-permitting> and <https://epd.georgia.gov/watershed-protection-branch-public-announcements>.

Bulloch County has submitted an application to EPD for two Floridan aquifer wells sited in Bulloch County, asking for up to 3.125 million gallons a day (mgd) on an annual average. Bryan County has submitted an application to EPD for two Floridan aquifer wells sited in Bulloch County, asking for up to 3.500 mgd on an annual average. The cumulative total of 6.625 mgd on an annual average will be used to provide water to the Bryan County Mega-Site and associated development.

On February 26, 2024, EPD hosted a public informational meeting to discuss results from technical assessments and draft special conditions in potential water withdrawal permits. EPD has presented these results and provided a regional overview of the impact on the Floridan aquifer. EPD has made available an interactive map, which shows the potential modeled impact at specific locations, such as at residential or agricultural wells. This information continues to be available on EPD's website at: <https://epd.georgia.gov/water-withdrawal-permitting>.

Since the February 26, 2024, meeting, EPD has received comments and questions on the proposed groundwater withdrawals, the potential impacts, mitigations necessary to address the impact, and ways to improve the special conditions. EPD has prepared responses to these comments, revised the special conditions accordingly, and drafted water withdrawal permits incorporating these special conditions. A copy of the response to comments documented is available on the EPD website at <https://epd.georgia.gov/water-withdrawal-permitting>. In this public meeting and hearing, EPD will seek public input on the draft permits.

The meeting will be held on:

**Meeting DATE: August 13, 2024**

**Meeting TIME: 6 P.M. to 9 P.M.**

**Meeting LOCATION: Southeast Bulloch High School, Auditorium**

**9184 Brooklet-Denmark Highway, Brooklet, Ga 30415**

In addition to the meeting, stakeholders may choose to send written comments to EPD. Written comments may be sent to [EPDComments@dnr.ga.gov](mailto:EPDComments@dnr.ga.gov) or mailed to Environmental Protection Division, Watershed Protection Branch, Suite 1470A East Tower, 2 Martin Luther King, Jr. Dr., Atlanta, GA 30334. The comment period closes on **Tuesday, August 20**. Please include the words "Groundwater Applications for Bryan County Mega-Site" in the subject line to help ensure that your comments will be forwarded to the correct staff.



# Public Meeting and Public Hearing on Draft Bryan/Bulloch County Groundwater Withdrawal Permits


Georgia EPD  
Water Supply Program  
August 13, 2024



# Public Meeting vs. Public Hearing

- There will be two sections of EPD's public engagement process this evening:
  - A public meeting, in which EPD staff will reiterate results of technical assessments, address key comments and questions from the previous public involvement process, and **answer additional questions** from the audience
  - A public hearing, in which EPD will **receive comments** from the public; these will be addressed through the public participation process; EPD will not answer questions in this section

# Outline of Public Meeting

- Geologic background information
- Proposed groundwater withdrawal
  - Draft permits at 
- Technical assessments
- Key questions and answers
  - A professional well driller's perspective
- Additional questions from the public

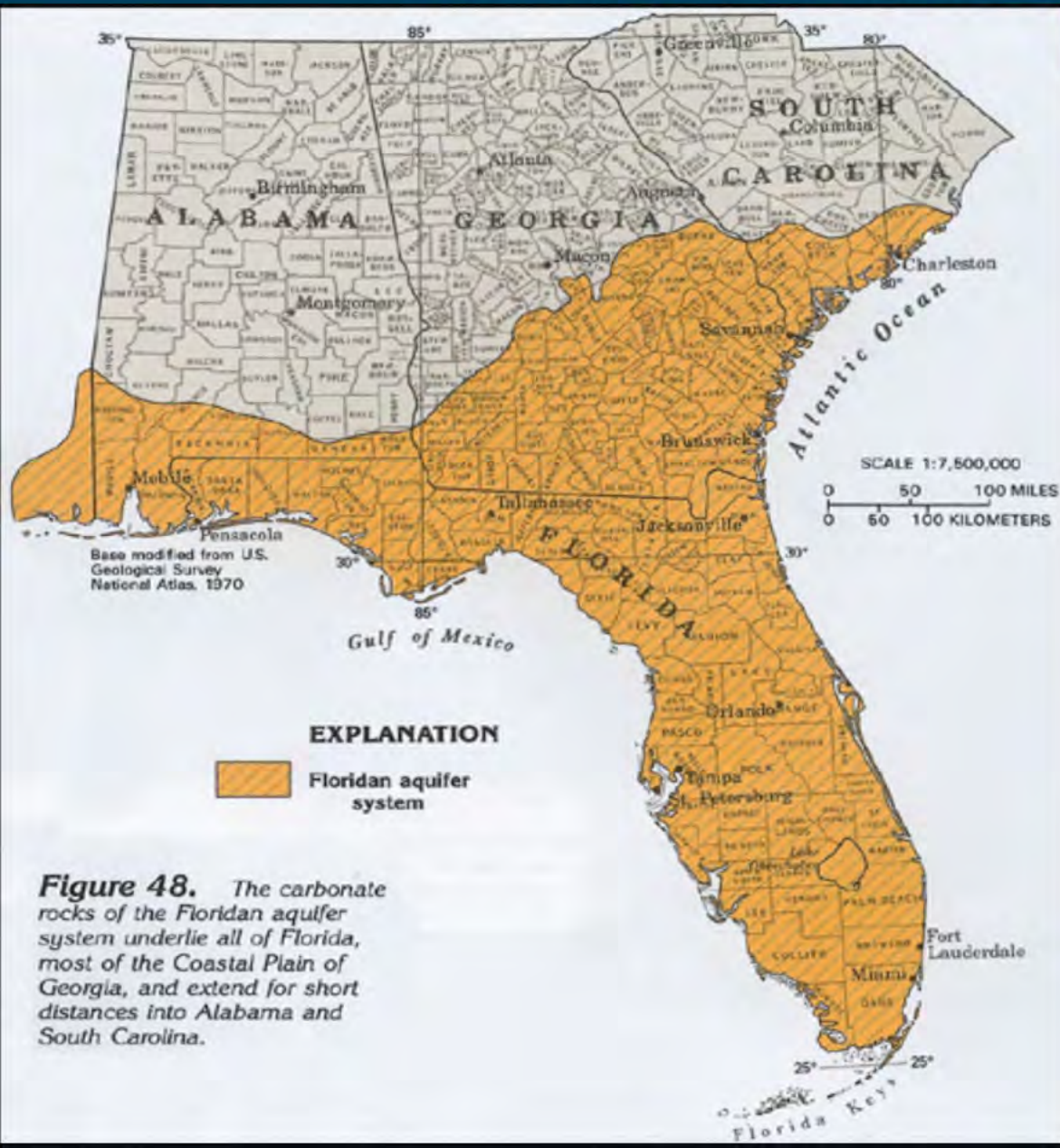


# Geologic Background Information

- The Floridan Aquifer
  - Map of entire aquifer
  - Schematic of the coastal Floridan Aquifer
  - Depth of aquifer and the confining unit
  - Saltwater encroachment in the HHI area
  - Recharge area of the Floridan Aquifer



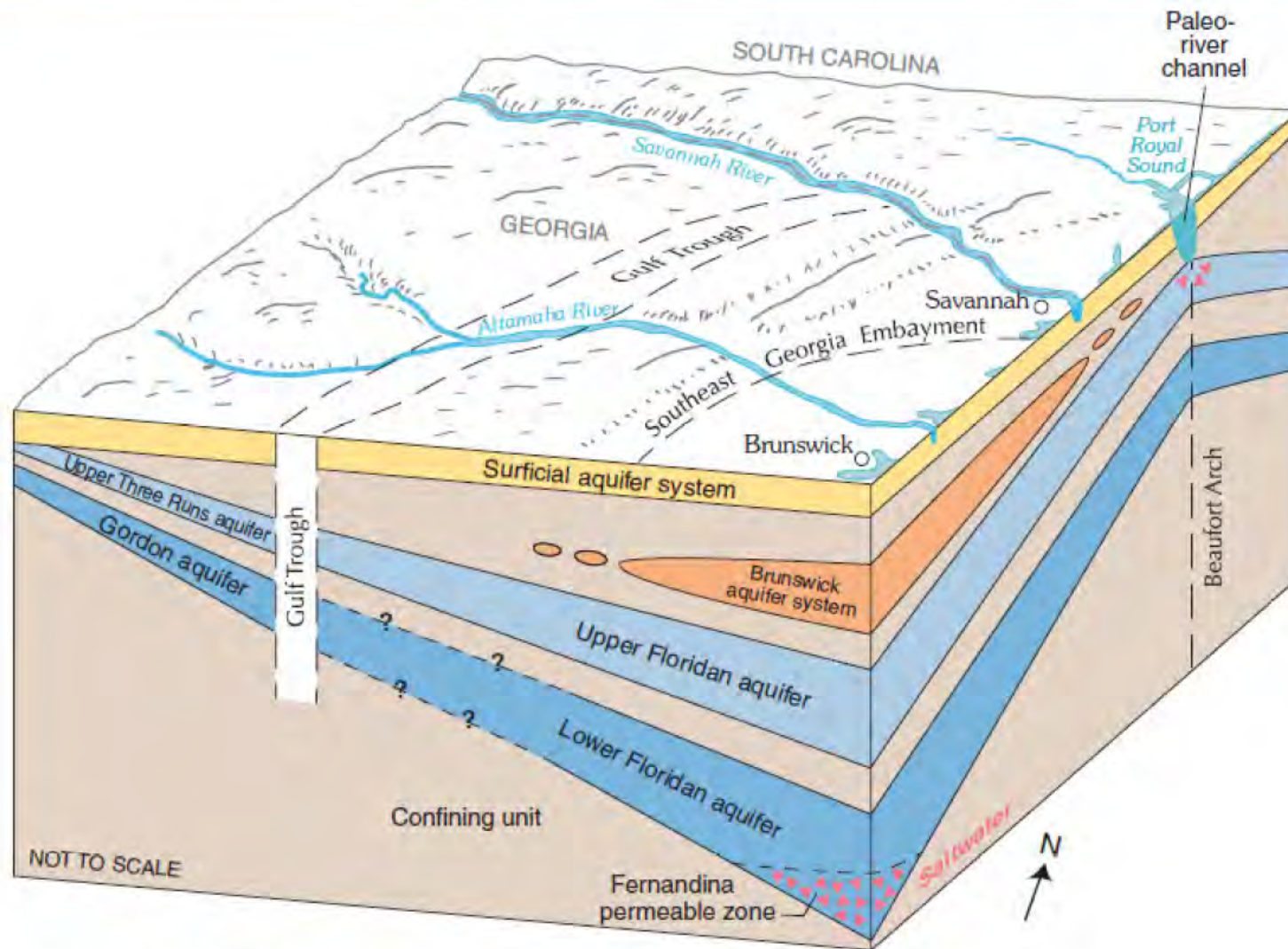
# Extent of Floridan Aquifer



**Figure 48.** The carbonate rocks of the Floridan aquifer system underlie all of Florida, most of the Coastal Plain of Georgia, and extend for short distances into Alabama and South Carolina.

- USGS HA 730-G Groundwater Atlas of the United States – Floridan Aquifer System

# Schematic of Floridan Aquifer





# Map of Groundwater Recharge Areas

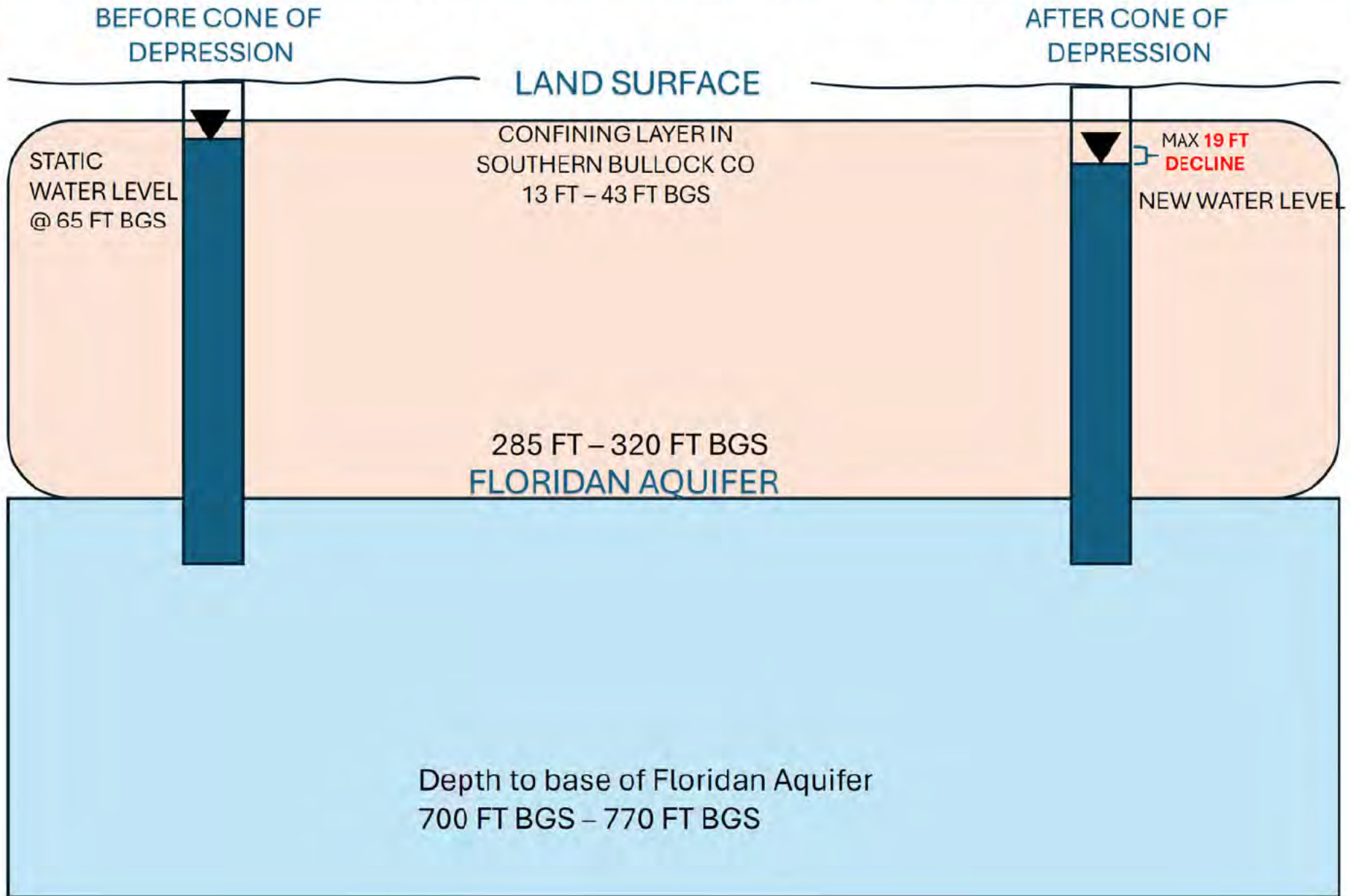


- USGS HA 730-G Groundwater Atlas of the United States – Floridan Aquifer System

# Geologic Background Information (continued)

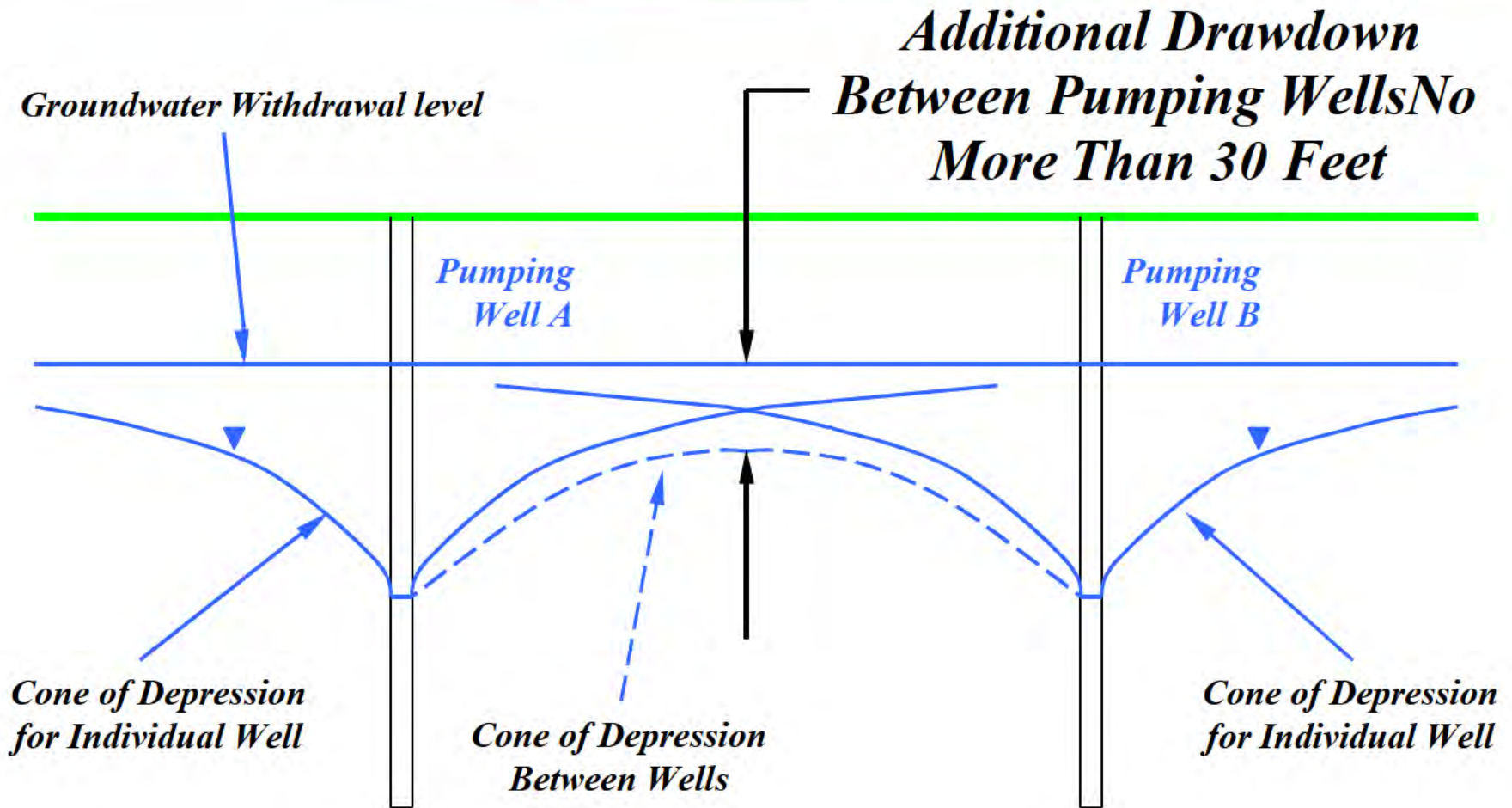
- A groundwater withdrawal
  - Local cone of depression resulting from the withdrawal
  - Schematic on drawdown
  - Schematic on interference between adjacent wells
  - Threshold used in Regional Water Planning

# Schematic on Drawdown





# Schematic on Drawdown Interference



# Proposed Groundwater Withdrawal

- Four wells in Bulloch County
  - Two wells with a withdrawal of 3.5 mgd for Bryan County
  - Two wells with a withdrawal of 3.125 mgd for Bulloch County
  - For the purpose of Bryan County Industrial Mega-site and associated development
  - Perspective: an agricultural irrigation operation may involve a water use of 1,000 gallons per minute (or about 1.44 million gallons per day) – In other words, the proposed withdrawal is about the capacity of several farm operations



# Technical Assessments

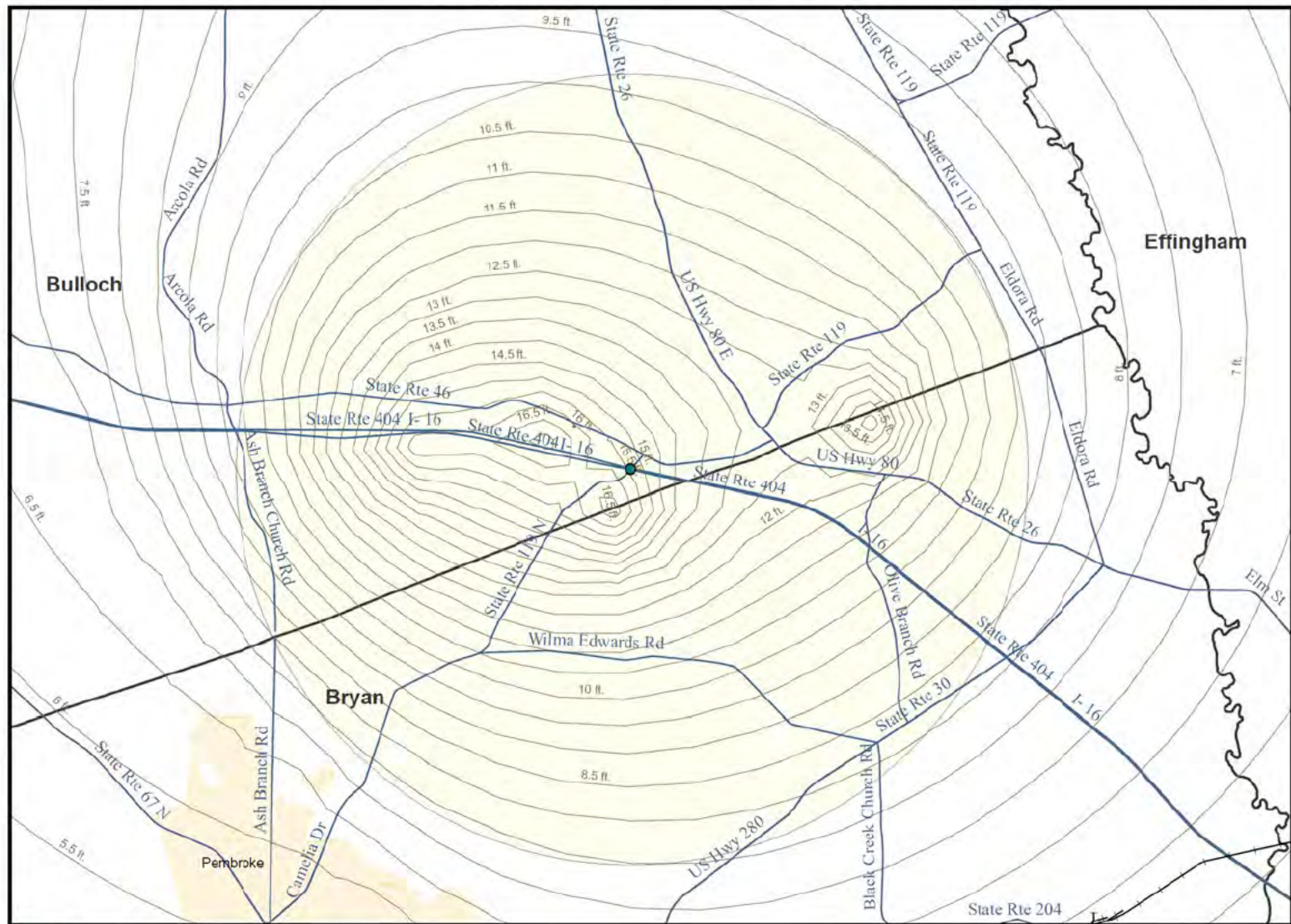
- Coastal Sound Science Initiative (CSSI) groundwater model developed by USGS, Georgia, and South Carolina
- Independent review and verification performed within EPD's different units
- Results of EPD's assessments available on EPD's water withdrawal website at:  
<https://epd.georgia.gov/water-withdrawal-permitting> (third bullet)



# Key Questions and Answers

- What are the hydrologic impacts of the proposed water withdrawal?
  - A local cone of depression with a maximum 19 feet of drawdown at the center, with the drawdown diminishing to about 10 feet 5 miles from the center, and diminishing further away from the center (results available on EPD website:  
<https://epd.georgia.gov/water-withdrawal-permitting>)  
(third bullet)
  - A 0.2-0.5 feet of water level drawdown at Hilton Head Island

## Simulated Drawdown from Proposed Withdrawal - 5 Mile Radius from Midpoint of I-16 / Hwy 119





# Key Questions and Answers (continued)

- What is and what is not regarding impacts:
  - A drawdown in nearby Floridan wells – **yes**
  - Total dewatering of a well – **no**, unless one's pump is set inappropriately close to water surface in the Floridan well
  - Dewatering of surface water bodies such as the Savannah River, the Ogeechee River, or the Okefenokee Swamp – **no**
  - Impacts on endangered species in these water bodies – **no**

# Key Questions and Answers (continued)

- What is and what is not regarding impacts:
  - Impacts on health of trees or plants – **no**, not from the proposed withdrawal
  - Saltwater intrusion all the way to Bryan and Bulloch Counties – **no**
  - Impact on Hilton Head Island – **yes**, an additional 0.2-0.5 feet of drawdown in water level; and the impact will be mitigated



# Key Questions and Answers

- Mitigating measures that will take place:
  - Mitigation funding will be established as required by Special Condition 6
  - Mitigation criteria and implementation to be determined by the permittees
  - What is the perspective of a licensed well driller
    - Typical setting of pumps below water surface in a well
    - How long does it take to reset a pump?
    - How much does it cost to reset a pump?

# Key Questions and Answers

- Mitigation measures that will take place:
  - Alternative sources of water (for example, surface water from the Savannah River, etc.) will be developed to replace Floridan water no longer than 25 years

# Key Questions and Answers

- Why 5 miles?
  - The circle with 5-mile radius roughly corresponds to the area with a 10-foot drawdown
  - The mitigation mechanism can be more inclusive
- Why 25 years?
  - To allow for coordination among entities
  - To allow for permittees to pursue funding opportunities



# Questions from the Public

- Comments and questions received from the last public engagement process (on Special Conditions) have been address and answered
  - The response document has been posted on EPD website: <https://epd.georgia.gov/water-withdrawal-permitting> (first bullet, third sub-bullet)
- Additional questions from the public?



# Public Hearing

- The public meeting is now concluded
- Public Hearing portion
  - to receive comments on the draft groundwater withdrawal permits
- Comments received at tonight's hearing as well as those submitted in writing will be addressed by EPD once a final determination has been made on permit issuance

# Public Hearing

- Please come up to the microphone
  - Please clearly state your name for the record
  - Please limit comments to 3 minutes
- Comments of a lengthy technical nature should also be submitted in writing.
- If you'd like to write down your comments, printed comment forms are available and can be placed in the box on the outside table.

# Public Comments

- Written comments may be sent to [EPDComments@dnr.ga.gov](mailto:EPDComments@dnr.ga.gov)
- Include “Groundwater Applications for Bryan County Mega-Site” for reference.
- The comment period closes on Tuesday, August 20, 2024.



# Georgia EPD Contacts

- Anna Truszczynski, Chief Watershed Protection Branch, [anna.truszczynski@dnr.ga.gov](mailto:anna.truszczynski@dnr.ga.gov)
- Jennifer Welte, Assistant Branch Chief, [jennifer.welte@dnr.ga.gov](mailto:jennifer.welte@dnr.ga.gov)
- Bill Frechette, Manager Groundwater Withdrawal Permitting Unit, [bill.frechette@dnr.ga.gov](mailto:bill.frechette@dnr.ga.gov)
- Christine Voudy, Assistant State Geologist, [christine.voudy@dnr.ga.gov](mailto:christine.voudy@dnr.ga.gov)
- John Ariail, Geologist, Groundwater Withdrawal Permitting Unit, [john.ariail@dnr.ga.gov](mailto:john.ariail@dnr.ga.gov)
- Thanh Vo, Geologist, Groundwater Withdrawal Permitting Unit, [thanh.vo@dnr.ga.gov](mailto:thanh.vo@dnr.ga.gov)
- Wei Zeng, Manager Water Supply Program, [wei.zeng@dnr.ga.gov](mailto:wei.zeng@dnr.ga.gov)

January 30, 2024

**Notice of Informational Meeting Regarding Groundwater Withdrawal Applications for the  
Bryan County Mega-Site**

This notice is to announce that the Georgia Environmental Protection Division (EPD) Watershed Protection Branch will host a meeting to provide information on the technical analysis and modeling assessment of the potential groundwater impacts from the requested groundwater withdrawals for water supply to the Bryan County Mega-Site.

Bulloch County has submitted an application to EPD for two Floridan aquifer wells sited in Bulloch County, asking for up to 3.125 million gallons a day (mgd) on an annual average. Bryan County has submitted an application to EPD for two Floridan aquifer wells sited in Bulloch County, asking for up to 3.500 mgd on an annual average. The cumulative total of 6.625 mgd on an annual average will be used to provide water to the Bryan County Mega-Site.

EPD has run multiple hydrologic models to determine the impacts expected from these Floridan aquifer withdrawals. EPD will present these results and provide a regional overview of the impact on the Floridan aquifer. EPD will also make available an interactive map, which will show the potential modeled impact at specific locations, such as at residential or agricultural wells.

In addition, EPD has prepared draft special conditions for the groundwater withdrawal permits for stakeholder comment. These proposed draft special conditions may be found on the EPD website at: <https://epd.georgia.gov/water-withdrawal-permitting>.

The meeting will be held on:

**Meeting DATE: February 26, 2024**

**Meeting TIME: 6 P.M. to 9 P.M.**

**Meeting LOCATION: Southeast Bulloch High School, Auditorium**

**9184 Brooklet-Denmark Highway, Brooklet, Ga 30415**

In addition to the meeting, stakeholders may choose to send written comments to EPD. Written comments may be sent to [EPDComments@dnr.ga.gov](mailto:EPDComments@dnr.ga.gov) or mailed to Environmental Protection Division, Watershed Protection Branch, Suite 1470A East Tower, 2 Martin Luther King, Jr. Dr., Atlanta, GA 30334. The comment period closes on **Friday, March 8**. Please include the words "Groundwater Applications for Bryan County Mega-Site" in the subject line to help ensure that your comments will be forwarded to the correct staff.

# Georgia EPD – Floridan Aquifer Groundwater Resource Information

Christine Voudy, Georgia EPD



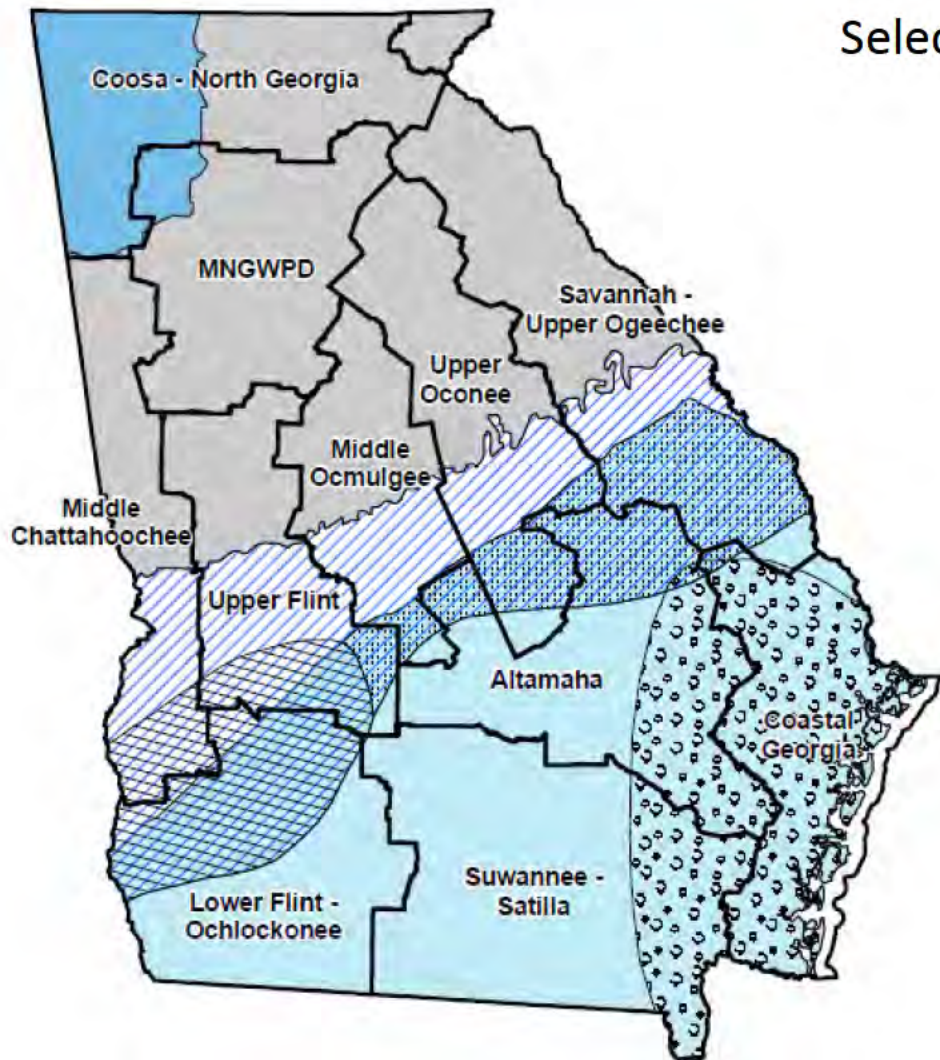


# Overview of Presentation

- Brief summary of historical Floridan aquifer challenges in Coastal Georgia
  - Salt-water encroachment into wells on Hilton Head Island, South Carolina
- Bottom Line - There is not an issue of saltwater encroachment in the Bryan/Bulloch area
- Simulation results of potential impacts to Floridan Aquifer from Bryan/Bulloch proposed withdrawals
- Special conditions to address impacts
- Summary and conclusions

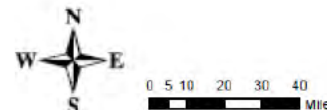
# Water Planning Regions and Georgia's Aquifers

Select aquifers were prioritized for assessment.



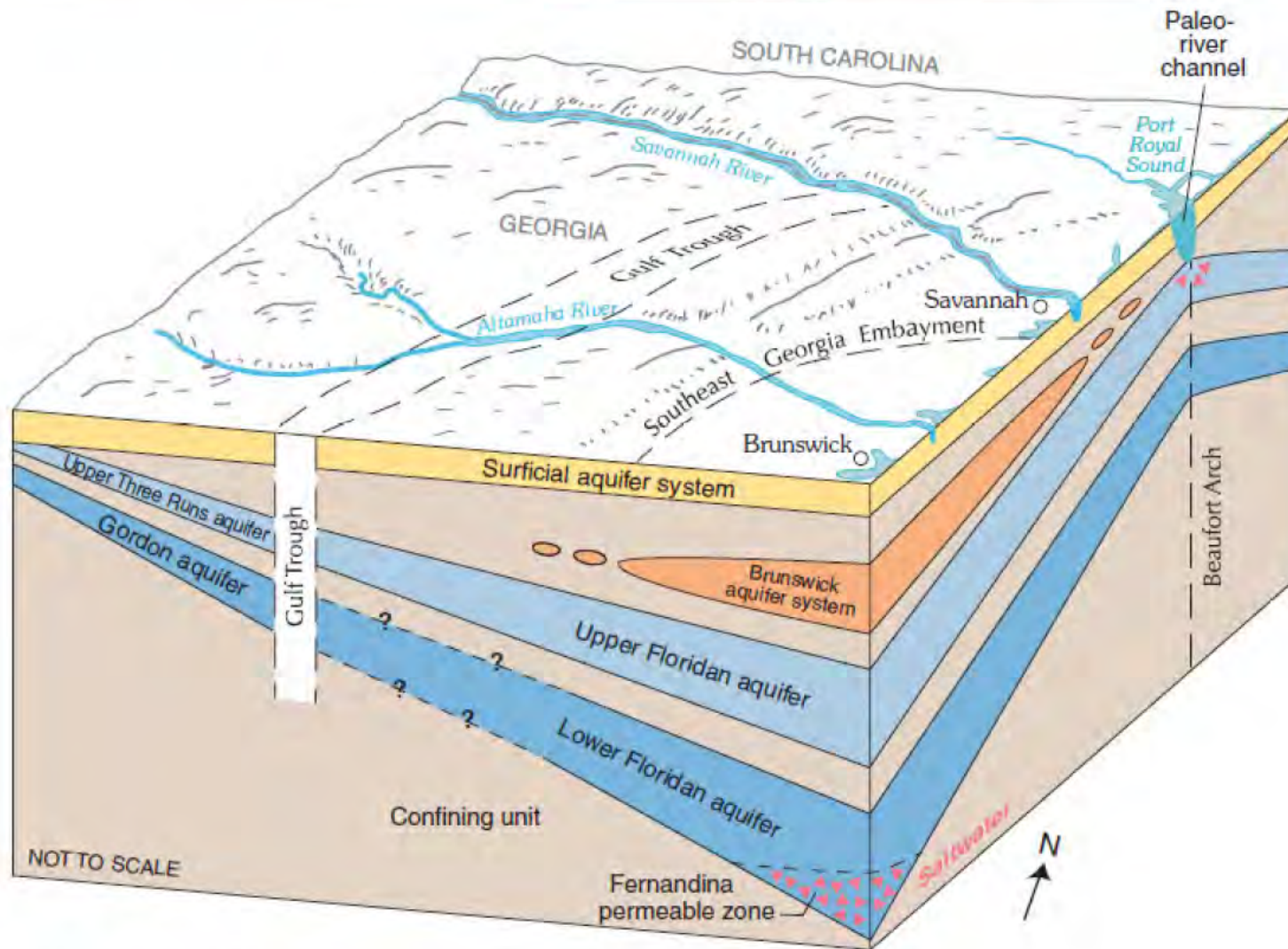
## Legend

- Water Planning Regions
- Brunswick Aquifer System
- Claiborne and Clayton Aquifers
- Cretaceous Aquifer System
- Crystalline-rock Aquifers
- Gordon Aquifer System
- Paleozoic-rock Aquifers
- Upper and Lower Floridan Aquifers



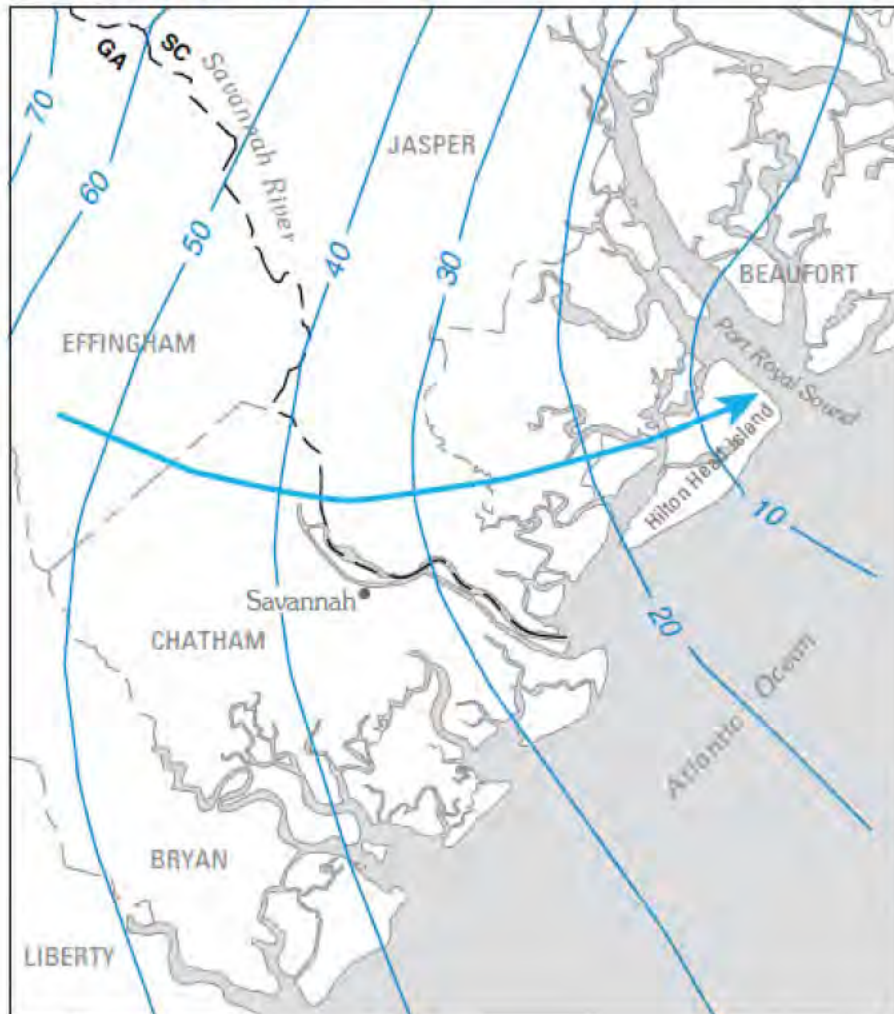


# Coastal Georgia Aquifers

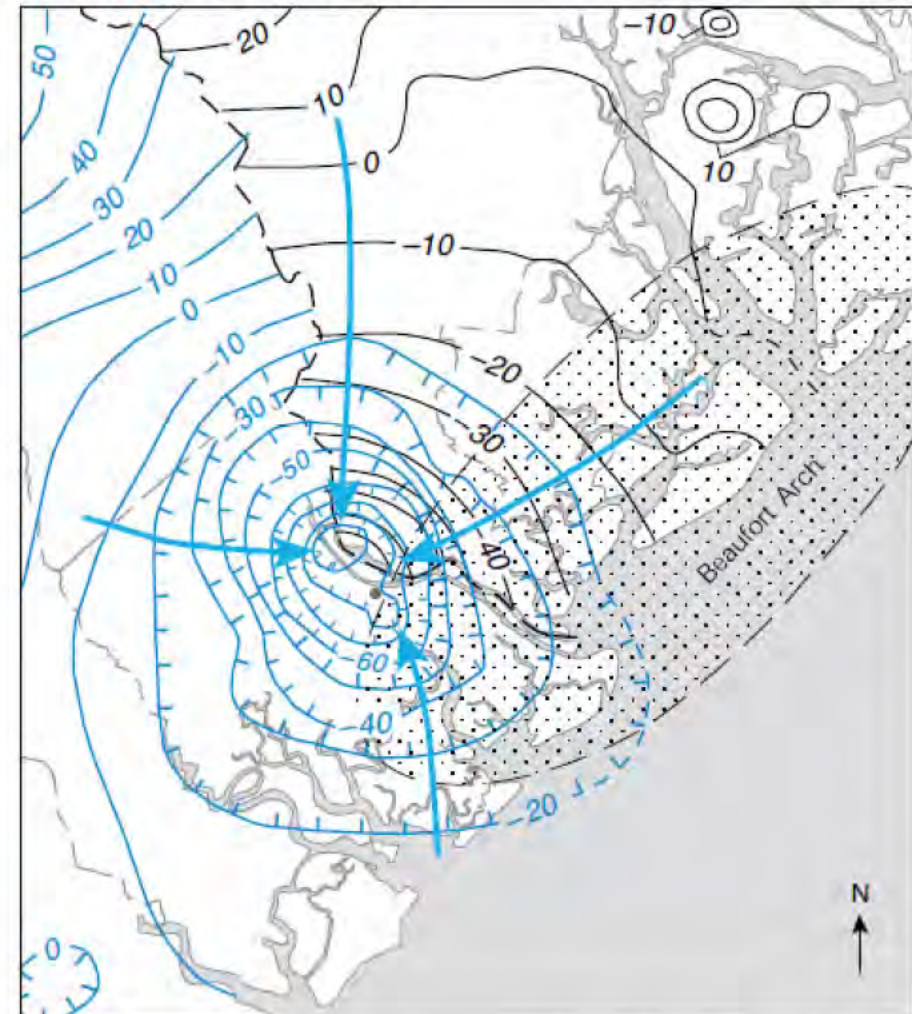


# Upper Floridan Potentiometric Surface

**A. Predevelopment**



**B. May and September 1998**



Base from U.S. Geological Survey  
1:100,000 and 1:250,000-scale data

USGS SIR 2006-5058

0 5 10 15 MILES  
0 5 10 15 KILOMETERS

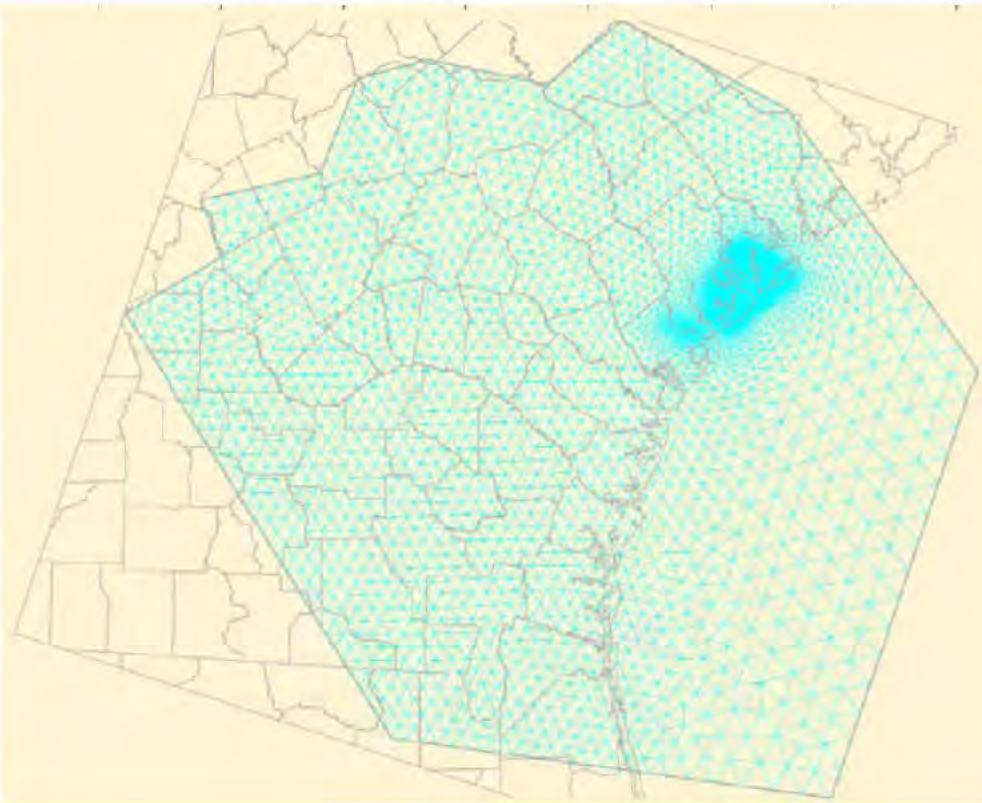


# Coastal Sound Science Initiative (CSSI)

## Hydrologic Modeling

- CSSI model refined from the SHE model

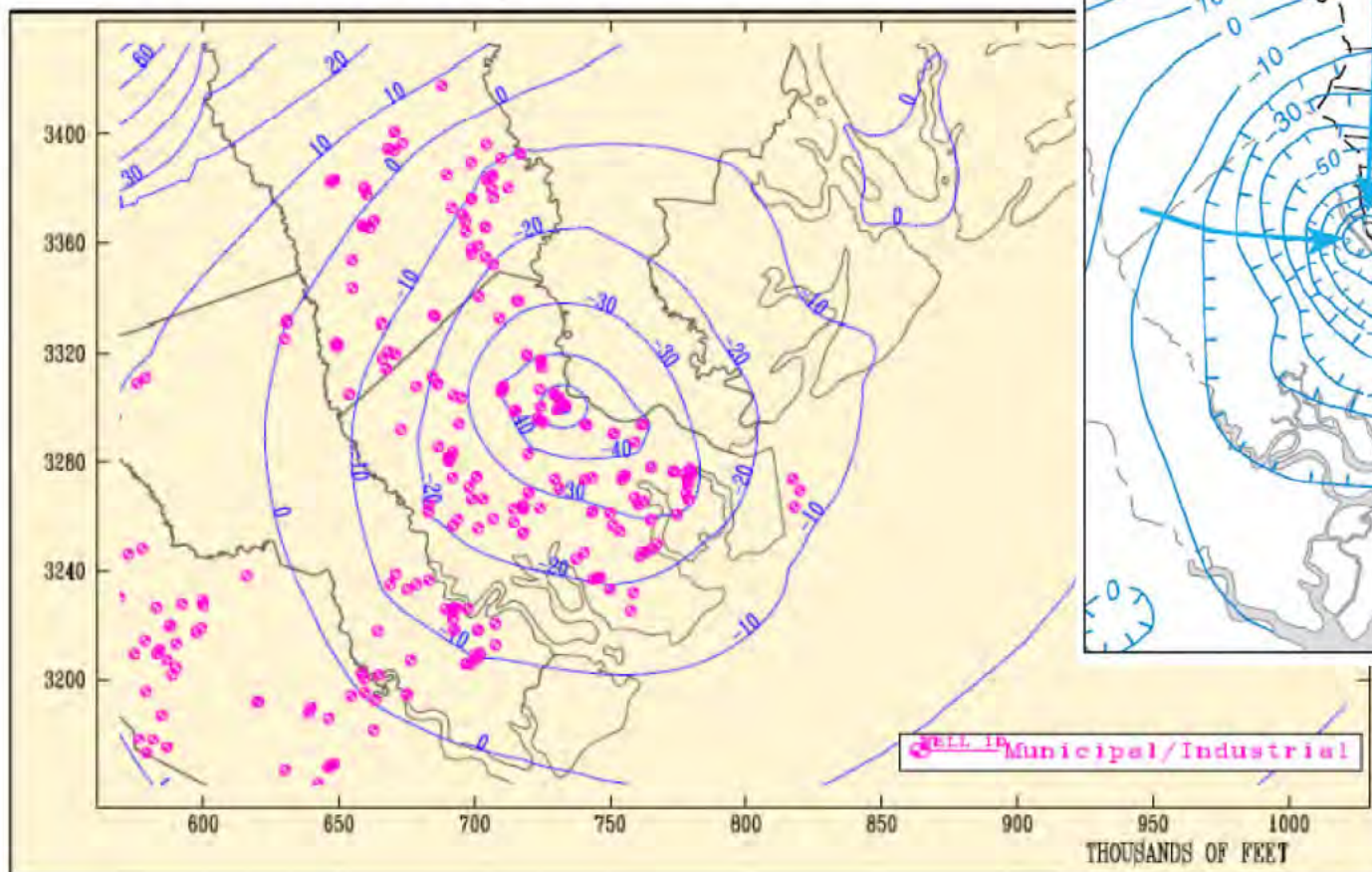
- Finer grid spacing around Hilton Head
- Model was calibrated for steady state and transient conditions.
  - GA EPD and SCDHEC approved the model for use in the CSSI.
- Baseline withdrawals (includes Ag, Drinking water systems, and Non-Farm Permitted Withdrawals):
  - Savannah Area – 69 mgd
  - Hilton Head Island – 9 mgd



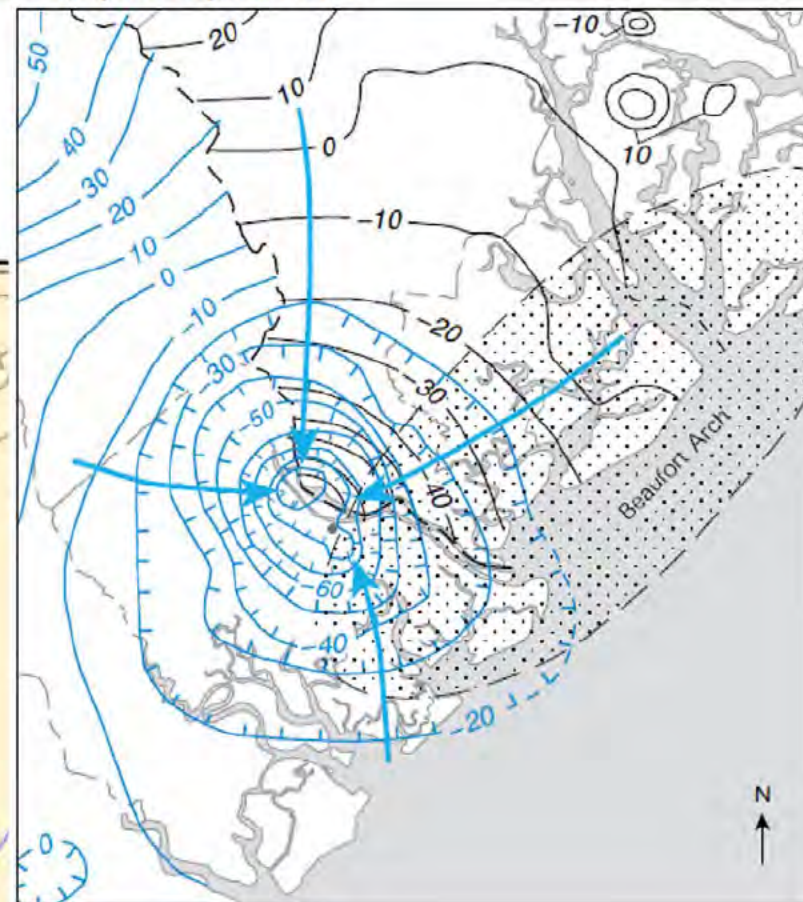


# CSSI Model Updates (2017-2018)

- Reduced cone of depression by 40 ft in Savannah area
- Red Zone (Chatham & S. Effingham) – 45.6 mgd
- Yellow Zone (Bryan & Liberty) - 19.6 mgd
- Chlorides are moving toward cone of depression



B. May and September 1998





# Pause – Questions?

- Bottom line - There is not an issue of saltwater encroachment in the Bryan/Bulloch area

# Proposed Withdrawals for Hyundai Site

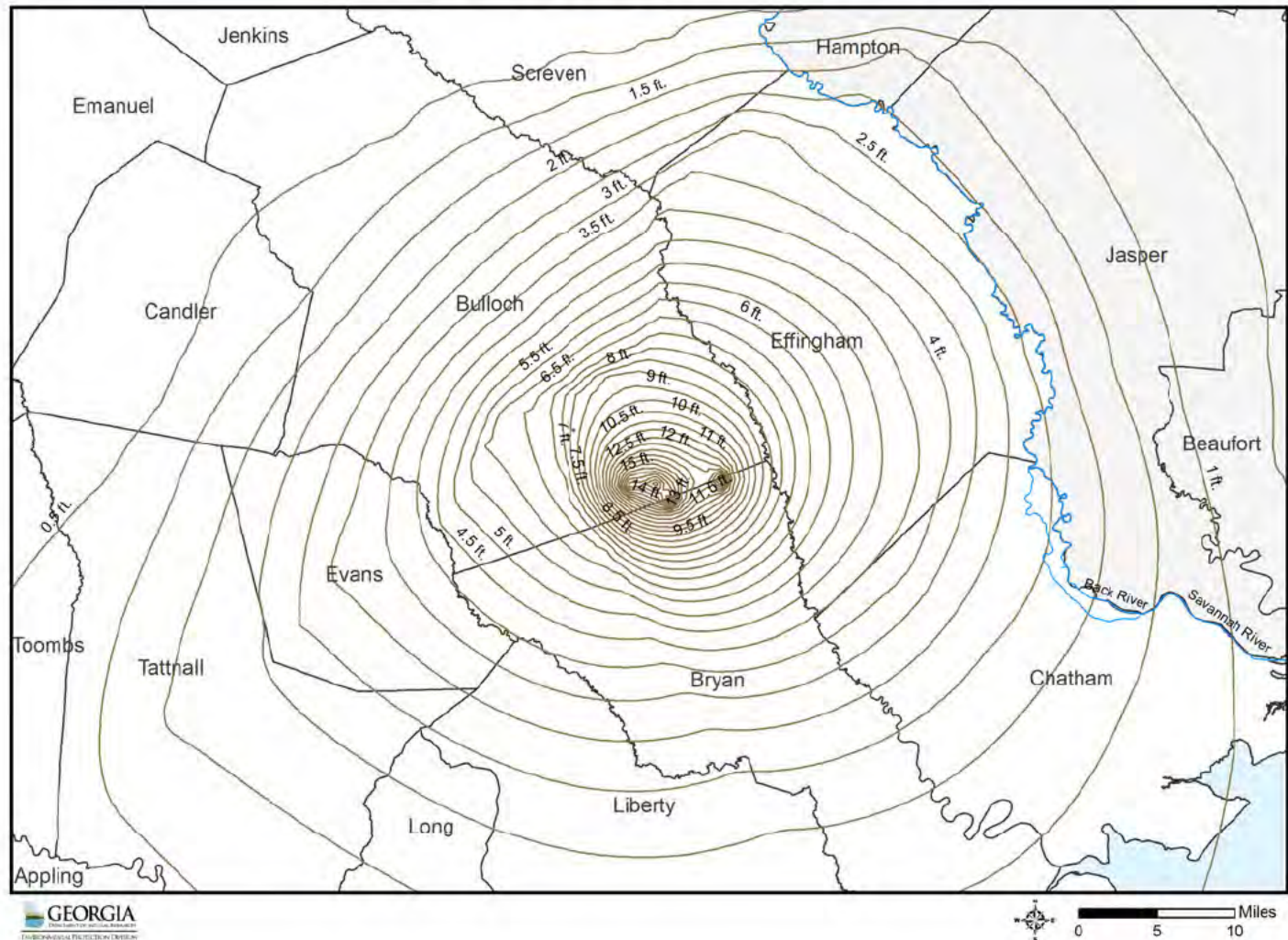
- Two independent simulations were conducted of this proposed withdrawal within EPD. The simulation was as follows:
  - 4 wells pumping a total of 6.625 mgd from the Floridan Aquifer.
  - Simulation assumes pumping at permitted limits.
  - **Reality is pumping will not be at max permitted limits.**



# Proposed Drawdown impacts from Hyundai Site

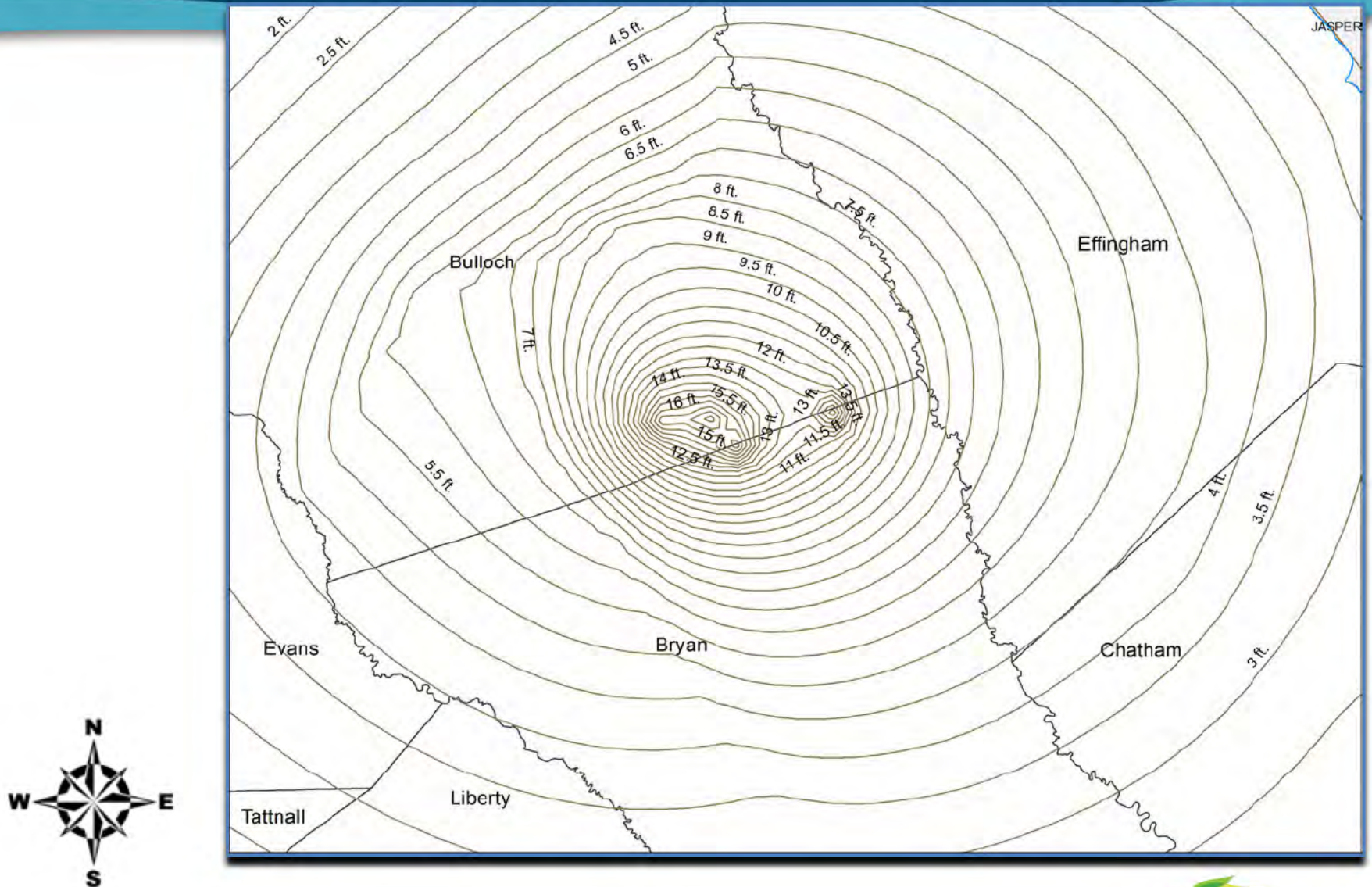
- Maximum Drawdown is 19 feet in Floridan Aquifer
- There will be no impact to the surficial aquifer.
  - Significant confining layer between aquifers

Modeled Drawdown for Proposed Hyundai Wells



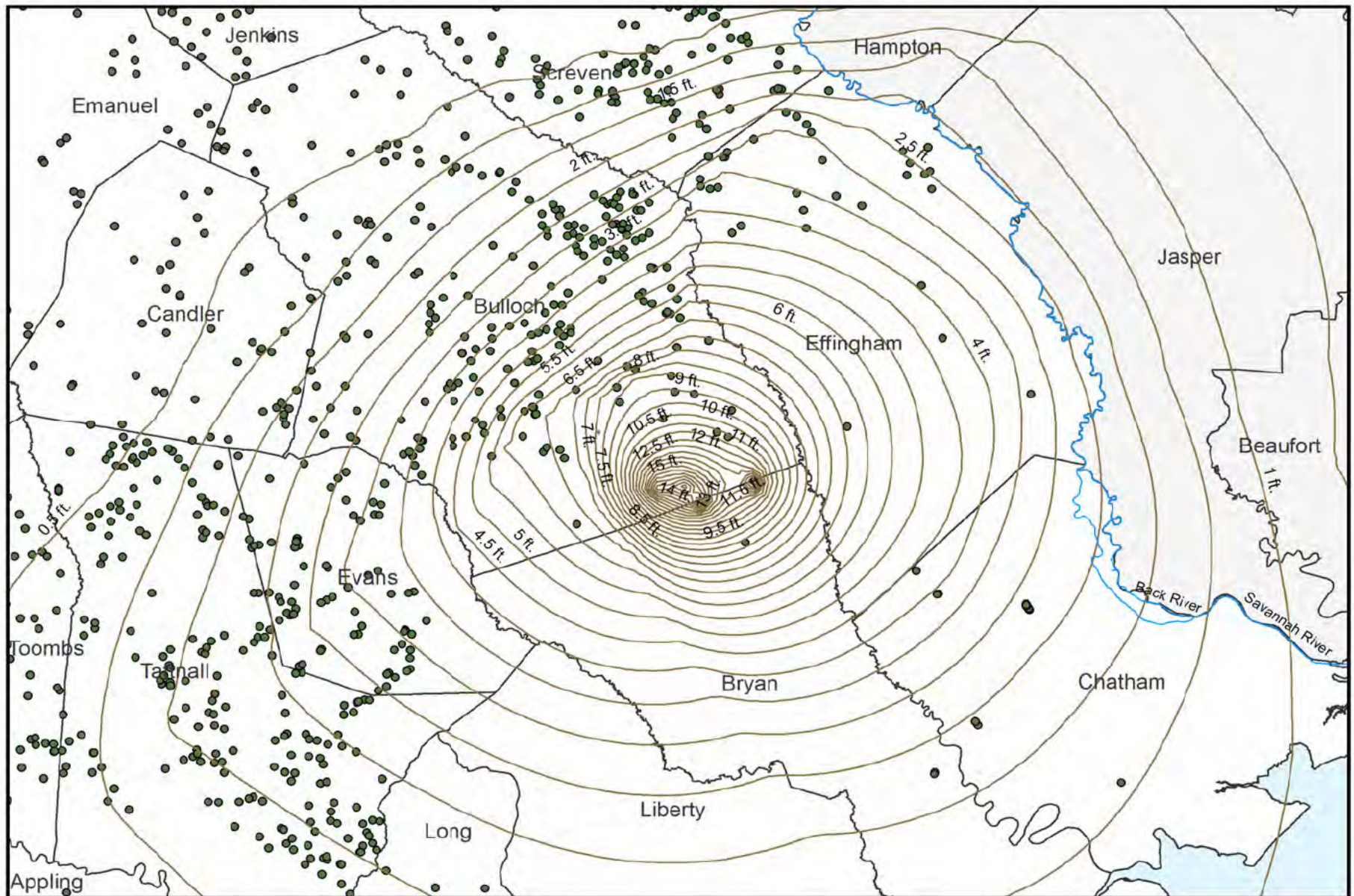


# Proposed Impact from Hyundai Site - Zoomed



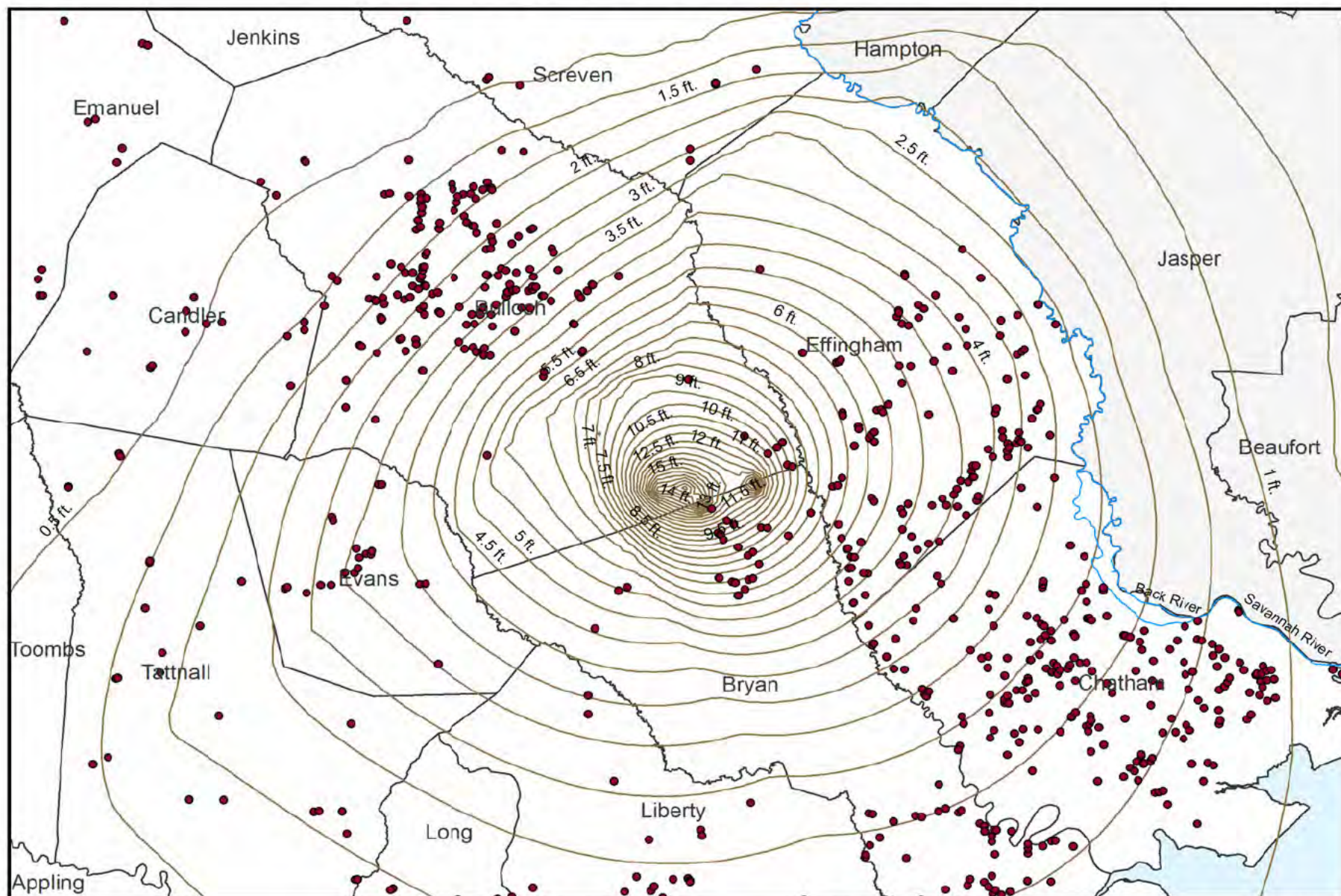


# Agricultural Wells Permitted by EPD



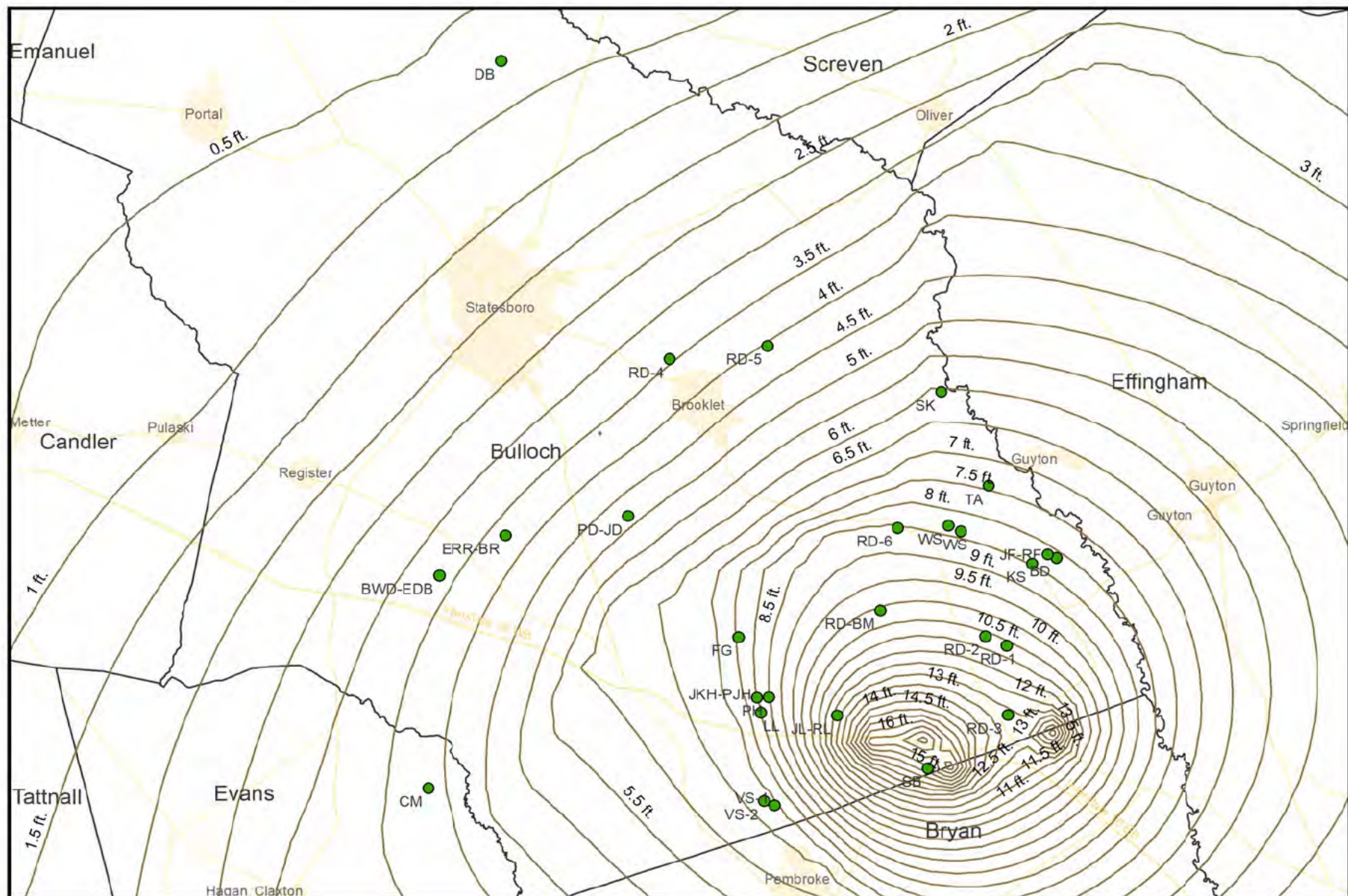


# Drinking Water Wells Permitted by EPD



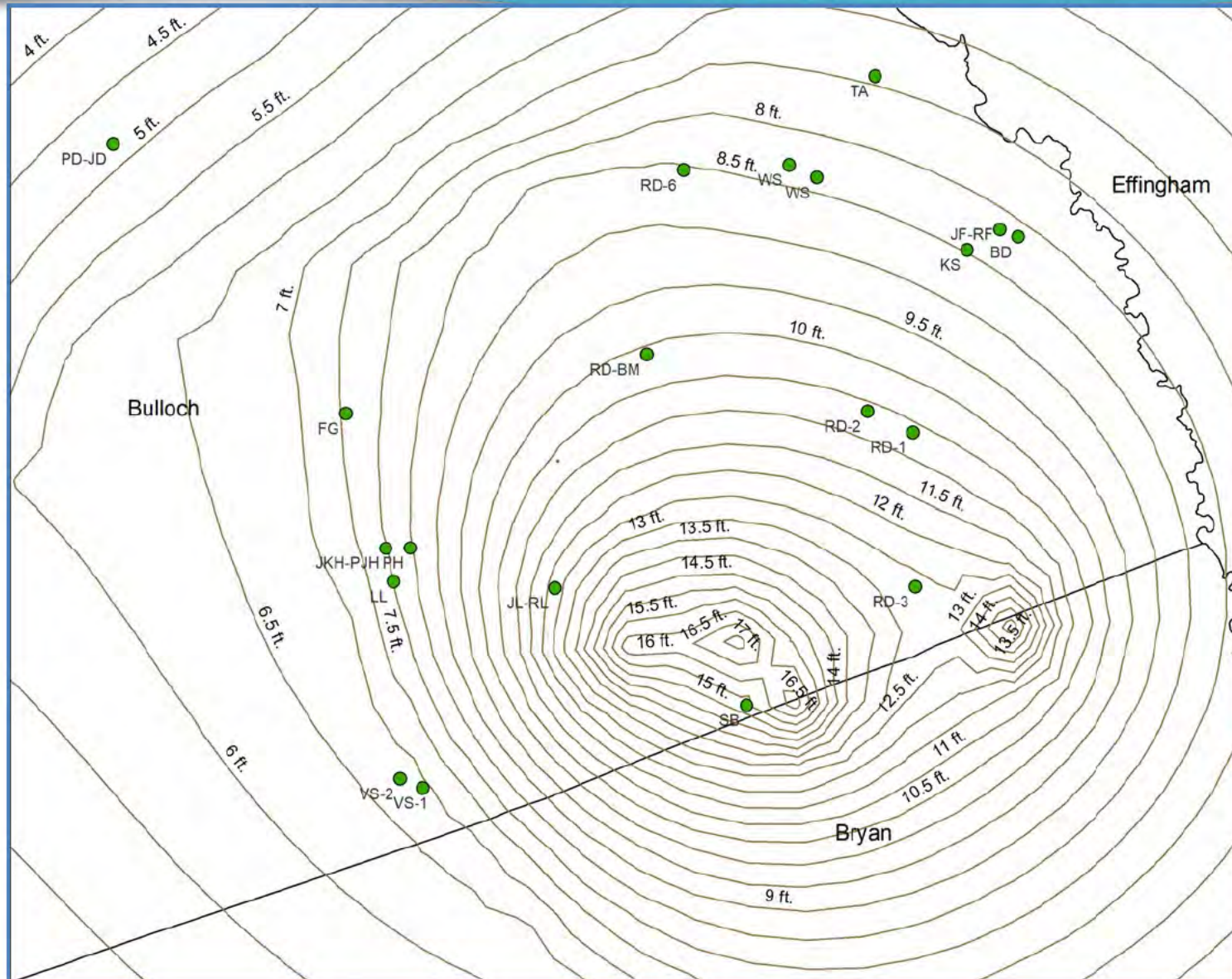


# Resident Locations Submitted to EPD





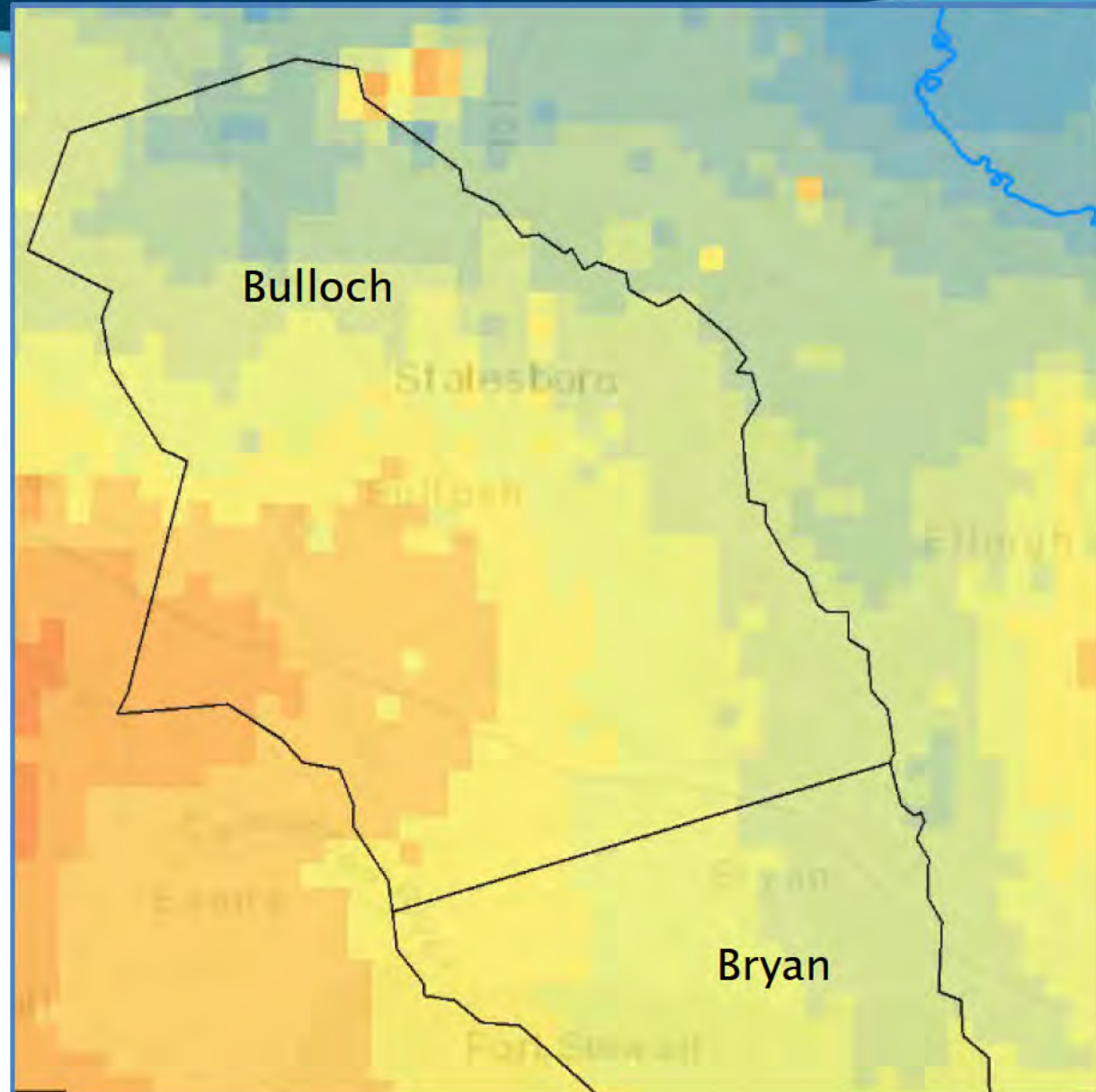
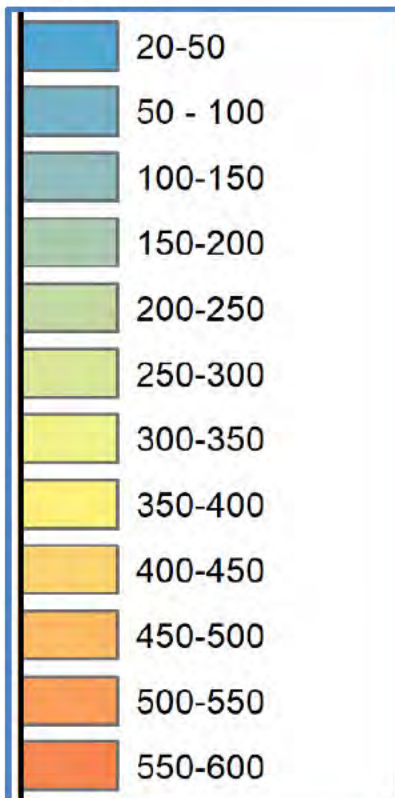
# Residential Wells in Vicinity of Hyundai Site





# Is Your Well Set in the Floridan Aquifer?

Feet Below Ground Surface



# Pause – Questions?

- Modeling captures the geographic area and the magnitude of impact
- Current farm water use permittees (utilizing the Floridan Aquifer) will experience an impact of less than 12 feet assuming max pumping capacity (6.625 mgd)
- Private residential wells have also been assessed; the one closest to the center of the cone of depression may have a 15 feet impact, if it is sourced in the Floridan Aquifer and the site is pumping at capacity



# Proposed Draft Permit Conditions

A&B) To address impacts to users in the vicinity:

- Funds set up by permittees to address impacts and issues from the use of the Bryan/Bulloch municipal wells.
- Users whose Floridan wells are within a 5-mile radius of the approximate center of the 4 proposed Bryan/Bulloch wells and whose wells experience significant water issues resulting from the operation of Bryan/Bulloch wells.



# Proposed Permit Special Conditions

- A. *A joint Bulloch County and Bryan County municipal managed fund will be created by the permitted counties, which may include industrial monetary contributions and assistance, to address any potential unreasonable impacts to existing permitted individual Floridan aquifer residential (permitted by local health departments) or agricultural wells (permitted by EPD) in the nearby area within a 5-mile radius of the I-16 and Highway 119 interchange. This mitigating mechanism will exist for the term (10 years) of this permit.*
- B. *If an EPD approved party conducts an independent investigation which indicates that an unreasonable impact to an existing water well meeting the above parameters is considered to have been caused by the Floridan Aquifer drawdown engendered by the use of the 4 municipal wells providing water to the industries at the Bryan county Mega-Site, money from the fund may be used to indemnify the affected party to solve such delineated water problems. These options may include methods proposed using best management practices of a Georgia licensed well driller, such as resetting the water pump deeper or by other proposed solutions.*

# Proposed Draft Permit Conditions

C-G) This set of conditions are contemplated to address long term concerns from resource managers, Coastal Water Planning Region, and utilities in the coastal region

- Permittees will work with other parties and EPD to bring surface water or other water alternatives to the area
- Permittees will work with EPD and maintain consistency with the EPD coastal permitting strategy and other policies



# Proposed Permit Special Conditions

- C. The Georgia Environmental Protection Division (EPD) strongly encourages Bryan County and Bulloch County to work together to expeditiously plan for the timely provision of treated surface water (or other alternatives) and the construction of all infrastructure necessary to deliver sufficient quantities of treated water to northern Bryan County and southern Bulloch County. This provision of treated surface water (or other alternatives) and the construction of all infrastructure necessary should not exceed 25 years. Such planning should be premised on making sufficient surface water (or other alternatives) available to provide for offsetting permitted Floridan aquifer groundwater withdrawals tied to the Bryan County Mega-Site and the future water needs of any additional industrial, commercial, and residential growth which may occur in this area because of Bryan County Mega-Site development.*
- D. Groundwater withdrawals from the proposed four (4) municipal Floridan Aquifer wells in the Green Zone of Bulloch County must be reduced upon completion and operation of infrastructure to deliver surface water in the area, in coordination and compliance with any contract restrictions placed on the use of the wells by the initial funding source requirements.*
- E. Any future suggestion to drill new Floridan aquifer wells away from the Savannah Cone of Depression (such as farther west or north) and then transfer or move any already issued permitted groundwater limits must comply with all EPD policy and permitting requirements in place at the time of such a proposal.*



# Proposed Permit Special Conditions

- F. Bryan County and Bulloch County must submit an initial joint annual report to EPD within 12 months of the withdrawal permits being issued, informing EPD of the pending status regarding:*
- 1. The investigation of, and discovery or development of, sufficient funding sources to pay for any effort to expand surface water availability in a timely manner.*
  - 2. All negotiations between the above parties and any others working towards the construction of necessary surface water and pipeline infrastructure.*
  - 3. Contractual documents between the parties proposed or approved.*
  - 4. A solid, firm and feasible front-loaded timetable for such developments,*
  - 5. Any other information pertaining to this effort.*
- G. Bryan County and Bulloch County must also submit annual updates to the initial report, which must at a minimum address each of the five items above, summarizing progress and providing any new information available. As significant progress, changes in conditions, or changes in timelines may occur, the level of detail provided in the annual reporting should be sufficient to appropriately inform EPD of the project status.*

# Pause – Questions?

- Link to Meeting Notice and Special Conditions:
  - <https://epd.georgia.gov/water-withdrawal-permitting>



# Summary

- Saltwater will not reach wells in Bryan or Bulloch County
- Maximum drawdown (if pumping at permitted limits) in Floridan Aquifer from proposed withdrawals in the vicinity of the Bryan/Bulloch wells is expected to be approximately 19 feet
- Wells set in Surficial aquifer will see no impact from proposed withdrawal at Hyundai site
- Wells in the vicinity of the Bryan/Bulloch proposed wells and set in the Floridan Aquifer may see an impact
- Permit Special condition(s) to address impacts in the vicinity
- Permit Special condition(s) to encourage utilization of surface water and to address any long-term impact on the coastal region's water resources



# Ongoing Information of Coastal Resources

- Georgia EPD – Coastal Water Study
  - <https://epd.Georgia.gov/coastal-water-study>
  - Background information and Coastal Permitting Plan Guidance documents
  - Information on the Technical Advisory Committee work
  - Information on the Sound Science Initiative
- US Army Corps of Engineers SHEP Monitoring Reports
  - <http://shep.uga.edu/reports.html>
  - Information on the Sentinel monitoring wells
  - Other monitoring data associated with the SHEP
- USGS South Atlantic Water Science Center – Coastal Sound Science Initiative:
  - <https://www2.usgs.gov/water/southatlantic/ga/projects/coastal/index.html>
  - Real Time monitoring of wells in Coastal Georgia
  - Background information on Coastal history
  - Coastal Sound Science Initiative Publications

Contact EPD at:

Bill Frechette - 470-524-0567 or [bill.frechette@dnr.ga.gov](mailto:bill.frechette@dnr.ga.gov)

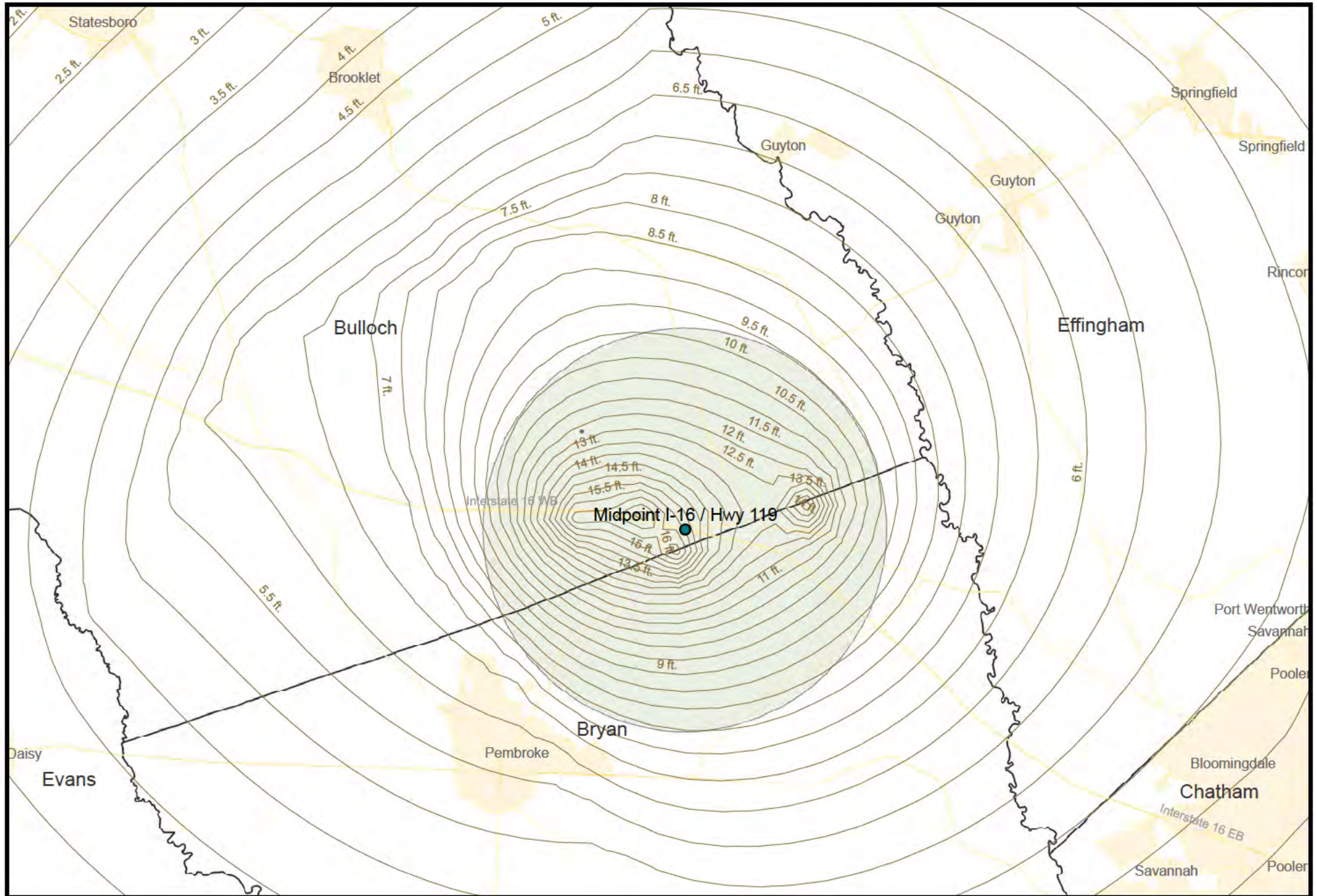
John Ariail – 470-524-0533 or [john.ariail@dnr.ga.gov](mailto:john.ariail@dnr.ga.gov)

Christine Voudy – 470-607-2621 or  
[Christine.voudy@dnr.ga.gov](mailto:Christine.voudy@dnr.ga.gov)

Wei Zeng – 470-251-4897 or [wei.zeng@dnr.ga.gov](mailto:wei.zeng@dnr.ga.gov)



# Simulated Drawdown from Proposed Withdrawal - 5 Mile Radius from Midpoint of I-16 / Hwy 119





**Proposed DRAFT Special Conditions (01/30/2024):**

**Addressing Short-Term Impacts:**

- A) *A joint Bulloch County and Bryan County municipal managed fund will be created by the permitted counties, which may include industrial monetary contributions and assistance, to address any potential unreasonable impacts to existing permitted individual Floridan aquifer residential (permitted by local health departments) or agricultural wells (permitted by EPD) in the nearby area within a 5-mile radius of the I-16 and Highway 119 interchange. This mitigating mechanism will exist for the term (10 years) of this permit.*
- B) *If an EPD approved party conducts an independent investigation which indicates that an unreasonable impact to an existing water well meeting the above parameters is considered to have been caused by the Floridan Aquifer drawdown engendered by the use of the 4 municipal wells providing water to the industries at the Bryan county Mega-Site, money from the fund may be used to indemnify the affected party to solve such delineated water problems. These options may include methods proposed using best management practices of a Georgia licensed well driller, such as resetting the water pump deeper or by other proposed solutions.*

+++++

**Addressing Potential Long-Term Impact:**

- C) *The Georgia Environmental Protection Division (EPD) strongly encourages Bryan County and Bulloch County to work together to expeditiously plan for the timely provision of treated surface water (or other alternatives) and the construction of all infrastructure necessary to deliver sufficient quantities of treated water to northern Bryan County and southern Bulloch County. This provision of treated surface water (or other alternatives) and the construction of all infrastructure necessary should not exceed 25 years. Such planning should be premised on making sufficient surface water (or other alternatives) available to provide for offsetting permitted Floridan aquifer groundwater withdrawals tied to the Bryan County Mega-Site and the future water needs of any additional industrial, commercial, and residential growth which may occur in this area because of Bryan County Mega-Site development.*
- D) *Groundwater withdrawals from the proposed four (4) municipal Floridan Aquifer wells in the Green Zone of Bulloch County must be reduced upon completion and operation of infrastructure to deliver surface water in the area, in coordination and compliance with any contract restrictions placed on the use of the wells by the initial funding source requirements.*
- E) *Any future suggestion to drill new Floridan aquifer wells away from the Savannah Cone of Depression (such as farther west or north) and then transfer or move any already issued permitted groundwater limits must comply with all EPD policy and permitting requirements in place at the time of such a proposal.*
- F) *Bryan County and Bulloch County must submit an initial joint annual report to EPD within 12 months of the withdrawal permits being issued, informing EPD of the pending status regarding:*

1. *The investigation of, and discovery or development of, sufficient funding sources to pay for any effort to expand surface water availability in a timely manner.*
  2. *All negotiations between the above parties and any others working towards the construction of necessary surface water and pipeline infrastructure.*
  3. *Contractual documents between the parties proposed or approved.*
  4. *A solid, firm and feasible front-loaded timetable for such developments,*
  5. *Any other information pertaining to this effort.*
- G) *Bryan County and Bulloch County must also submit annual updates to the initial report, which must at a minimum address each of the five items above, summarizing progress and providing any new information available. As significant progress, changes in conditions, or changes in timelines may occur, the level of detail provided in the annual reporting should be sufficient to appropriately inform EPD of the project status. Three years after the initial report and every three years thereafter, Bryan County and Bulloch County must submit an updated report summarizing all progress taking place and setting goals and milestones to be achieved in the next three-year period.*

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## 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>



	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>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>



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.	The applications that EPD received are for consumptive use of water and EPD has been reviewing the applications accordingly.
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.”	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.
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?”	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.
One commenter requested that EPD “include references to the ‘EPD policy and permitting requirements’ that exist at the time of issuing the withdrawal permit.”	This is EPD’s standard practice. The permit expressly states that the permit is issued in accordance with Georgia laws.
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.  A commenter asked that all “EPD policy and permitting requirements” be identified and made public before moving forward.  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	Information on Savannah Cone of Depression can be found at EPD website <a href="https://epd.georgia.gov/water-withdrawal-permitting">https://epd.georgia.gov/water-withdrawal-permitting</a> 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.  Coastal permitting strategy and studies leading to it can be found at <a href="https://epd.georgia.gov/coastal-water-study">https://epd.georgia.gov/coastal-water-study</a> . State regulations on permitting of groundwater withdrawal can be found at <a href="https://rules.sos.ga.gov/gac/391-3-2">https://rules.sos.ga.gov/gac/391-3-2</a> and the Groundwater Use Act is codified in OCGA 12-5-90 et seq.



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 <a href="https://epd.georgia.gov/coastal-water-study">https://epd.georgia.gov/coastal-water-study</a> (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>



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.”	Comment noted.
Several commenters raised concerns about the possibility of sinkholes as a result of the water withdrawals.	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.
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.	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).
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.”	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.
One commenter asked what the “green zone” was.	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>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.
<p>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.”</p> <p>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.</p>	<p>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.</p> <p>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.</p>
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.	<p>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.</p> <p>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 <a href="mailto:epd.comments@dnr.ga.gov">epd.comments@dnr.ga.gov</a>.</p>
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.



Several commenters expressed general concern about impacts to the Floridan aquifer.	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.
One commenter expressed that Bulloch County should have a referendum on this issue.	Comment noted.
One commenter asked how EPD could be sure that there were no lasting effects of the wells after the permit term.	EPD's assessment is based on best available information (i.e. models and data).
One commenter asked whether any excess water from the permitted amount could be used in other locations.	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.
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.	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.
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.	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.
One commenter asked for clarification on "any contract restrictions placed on the use of the wells by the initial funding source requirements."	EPD does not review the initial funding source requirements for the wells. EPD has removed this language from the draft permits.
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 &	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>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>	
A commenter wanted to know what the impact of HB1146 would be on the need for new wells.	HB1146 does not have an impact on the need for the new wells in these draft permits.
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.	Yes, existing permitted water uses have been included in EPD’s modeling assessment.
A commenter wanted to know EPD’s level of review of the joint report.	EPD will review all reports for compliance with the permit terms.
A commenter wanted to know what level of detail would be considered “sufficient to appropriately inform EPD of the project status.”	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.
A commenter asked why there have not been determinations of impacts per the Clean Water Act, NEPA and Endangered Species Act?	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.



PERMIT NO. 016-0013  
ISSUANCE DATE:



# GEORGIA

DEPARTMENT OF NATURAL RESOURCES

## ENVIRONMENTAL PROTECTION DIVISION

### PERMIT TO USE GROUNDWATER

PERMIT HOLDER'S NAME: **Bryan County Board of Commissioners –  
Bulloch County Operations**  
PERMIT HOLDER'S ADDRESS: 66 Captain Matthew Freeman Drive, Suite 201,  
Richmond Hill, GA 31324  
COUNTY: **Bulloch County**

In accordance with the Provisions of the Groundwater Use Act, (O.C.G.A § 12-5-90 et seq.) as amended, and the Rules and Regulations for Groundwater Use, Chapter 391-3-2, promulgated pursuant thereto, this Permit is issued to withdraw, obtain, or utilize a maximum system wide total of groundwater in the amount of:

**3.500** million gallons per day monthly average and **3.500** million gallons per day annual average;

from **two** well(s) located near **where I-16 crosses the county line in southeastern Bulloch County, Georgia** for the purpose of a consumptive use to **provide water to the various entities at the Bryan County Industrial Mega-Site and other associated development.**

This Permit is conditioned upon the permit holder complying with all of the terms, conditions, and schedules of compliance specified on the attached pages, which are hereby made a part of this Permit.

In accordance with the application dated **August 16, 2023** and in conformity with the statements and supporting data entered therein or attached thereto, all of which are filed with the Environmental Protection Division (EPD) and are hereby made part of this Permit.

This permit is effective from the date first above written and is subject to revocation on evidence of noncompliance with any of the provisions of the Groundwater Use Act, as amended, or any of the Rules and Regulations promulgated pursuant thereto; or with any representation made in the above mentioned application or the statements and supporting data entered therein or attached thereto; or with any condition of this permit.

Absent prior revocation in accordance with the above language, this Permit will expire **ten (10) years from the issuance date on this permit.**



Jeffrey W. Cown, Director  
Environmental Protection Division

This Permit is conditioned upon the permit holder complying with the provisions of the Groundwater Use Act, as amended, or any of the Rules and Regulations promulgated pursuant thereto;

1) **GENERAL REQUIREMENTS**

- a) This Permit is valid for ground water withdrawal from the **Floridan** Aquifer(s). No other aquifer(s) can be used without the approval of the EPD.
- b) The withdrawal of groundwater is limited to the quantities and purpose of the water herein specified.
- c) Water associated with this Permit must not be withdrawn by, released for, or otherwise utilized by any other entity or for any other purpose, without first modifying this Permit.
- d) This Permit must not be transferred except with the approval of the EPD.
- e) The replacement of any permitted well must receive prior approval from the EPD.
- f) This permit supersedes any and all previous permits of the same permit number.

2) **PERMIT RENEWAL**

All permit holders desiring to renew a permit shall submit an application for renewal to the EPD Director within six (6) months of the permit's expiration.

3) **PERMIT MODIFICATION**

- a) The permit holder may seek modification of any of the terms of an unexpired permit upon written request to the EPD Director.
- b) The Georgia EPD has the authority to modify any groundwater withdrawal permit at any time.

4) **MONITORING AND REPORTING**

- a) If multiple aquifers are designated in Condition (1a) above, groundwater withdrawal from each aquifer must be reported separately, in addition to the total amount withdrawn from all wells. Each aquifer must be identified on the Groundwater Withdrawal Report, in addition to listing the well or wells that are producing from each aquifer. If a well is producing in more than one aquifer, it is to be noted.
- b) The Groundwater Withdrawal Report must be submitted MONTHLY in accordance with the following schedule:
  - Production between the first day of the month and the last day of the month will be submitted to EPD by the 10<sup>th</sup> day of the following month (ex. January 1<sup>st</sup> through January 31<sup>st</sup> groundwater withdrawal data will be reported to the EPD by February 10<sup>th</sup>).



4) **MONITORING AND REPORTING (Continued)**

- c) In accordance with the Groundwater Use Rules, 391-3-2-.08(1), a permit holder will measure and record the static and pumping levels of each aquifer utilized and the date the water levels were measured on a semi-annual basis, submitting the results to EPD. Semi-Annual Water Level measurements must be collected from the highest yielding wells, using the same wells for each reporting period and preferably taking the measurements during the same two months of the year (six months apart). One well should be measured for every five permitted wells (i.e., if you have between one and five permitted wells, conduct measurements for one well; if you have between six and ten permitted wells, conduct measurements from two of the permitted wells, etc.).
- d) In accordance with the Groundwater Use Rules, 391-3-2-.08(2), a permit holder will analyze a raw groundwater sample for specific conductance on an annual basis. Analysis for specific conductance must be conducted in accordance with 40 Code of Federal Regulations, Part 141.89. A raw groundwater sample must be collected for every five permitted wells (i.e., if you have between one and five permitted wells, collect one raw groundwater sample for analysis; if you have between six and ten permitted wells, collect a raw groundwater sample from two of the permitted wells, etc.). The groundwater samples will be collected from the highest yielding wells. The results must be submitted to EPD and include the date sampled, well number, temperature of water sample at time of testing, the specific conductance result, and the units of measurement.

5) **WATER PLANNING REQUIREMENTS**

- a) This groundwater withdrawal permit and any future modifications or re-issuances of such, is conditioned upon implementation of the permit holder's Water Conservation Plan developed in accordance with the Rules and Regulations for Groundwater Use, Chapter 391-3-2, and the Georgia Water Stewardship Act. It should be regularly updated to be consistent with current EPD guidelines.
- b) The permit holder must submit a Water Conservation Progress Report to the Division five years after permit issuance, and every five years thereafter.
- c) In accordance with the Rules for Public Water Systems to Improve Water Supply Efficiency (391-3-33), Public Water Systems that regularly serve 3,300 or more individuals must submit an annual Water Audit to EPD by March 1 of each year. Any future permit action is conditional upon the demonstration of progress toward increased water efficiency. The permit holder must maintain ongoing compliance with the following:
  - 1. Establishment of a Water Loss Control Program and associated goals to set measures of water supply efficiency.
  - 2. Demonstration of progress toward increased water efficiency using the measures established.

5) **WATER PLANNING REQUIREMENTS (Continued)**

- d) The permit holder must abide by all applicable drought response requirements, which include but are not limited to the Georgia Drought Management Rule (391-3-30), the Georgia Water Stewardship Act, and the permit holder's Drought Contingency Plan.
- e) The permit holder must maintain ongoing compliance with applicable **Coastal Georgia** Regional Water Plan requirements.

6) **SPECIAL CONDITIONS**

- a) The EPD has produced the **'Coastal Georgia Water & Wastewater Permitting Plan for Managing Salt Water Intrusion'** (the Plan). The Plan has identified an array of water conservation, efficiency, and reuse requirements for public and private water providers. The permit holder is required to fully implement and otherwise comply with ALL appropriate requirements identified in the Plan.
- b) The permit holder will cooperate with the Georgia EPD in the coordination of its water withdrawal requirements associated with this Groundwater Withdrawal Permit and the following additional Water Withdrawal Permit(s):
  - **015-0007**

**ADDRESSING SHORT TERM IMPACTS:**

- c) The permittee must create a joint Bulloch County and Bryan County municipal managed fund, which may include contributions from other entities, to address any potential significant impacts to existing Floridan aquifer wells in an area defined by a circle with a 5-mile radius from the center point at the I-16 and Highway 119 interchange.
  - 1. The permittee must develop mitigation fund mechanisms with defined forms, mitigation practices, processes and protocols prior to withdrawals from the permitted groundwater wells.
  - 2. No groundwater withdrawals may be made until the materials approved under item c(1) above are made readily available on the permittee's website to the public.
  - 3. This mitigation fund must be implemented for the duration of authorized groundwater usage from the permitted wells.
- d) A water well driller or pump installer licensed in the State of Georgia may investigate alleged significant impacts to existing wells. A list of those licensed professionals must be published on the permittee's website. If an investigator finds that a significant impact to an existing water well was caused by the Floridan Aquifer drawdown from the permitted withdrawals, the fund referenced in Special Condition 6(c) shall be used to mitigate, in a timely manner, the specific issues of the affected party.



**6) SPECIAL CONDITIONS (Continued)**

- e) The permittee must submit to EPD an annual report regarding the fund referenced in Special Condition 6(c), describing the fund amounts available, the amount of funds distributed to each user, the total amount of funds distributed, and all fund actions taken over the course of the preceding year, including the total number of wells rehabilitated and how each well was rehabilitated (for example, whether the well was deepened or the pump was lowered). The annual report must be submitted by January 31 following each year that the fund is in place.

**ADDRESSING POTENTIAL LONG-TERM IMPACT:**

- f) The permittee must work to expeditiously and thoroughly plan for the timely provision of surface water or other water alternatives, such as reuse water, as a replacement for the Floridan aquifer groundwater withdrawals authorized by this permit, the construction of all infrastructure necessary to deliver quantities of such alternative sourced water to the Bryan County Mega-Site and associated developments sufficient to replace the groundwater withdrawals authorized under this permit, and the funding sources necessary to deliver and utilize the alternative sourced water. This provision of surface water or other water alternatives, or a combination thereof, and the construction and operation of all infrastructure necessary to use the alternative water supply source(s) must be accomplished within 25 years of the date of this permit. Such planning will require ensuring surface water (or other alternative sourced water) sufficient to provide for the water needs of the Bryan County Mega-Site and the existing and future water needs of any additional industrial, commercial, and residential growth which may occur in the Bryan County Mega-Site area.
- g) The Floridan aquifer groundwater withdrawals authorized by this permit must be reduced in equal quantity to the amount of alternate water capacity available upon completion and operation of the necessary infrastructure to deliver surface water or other non-Floridan aquifer alternative water to the Bryan County Mega-Site and associated developments. This shall mean that at the end of the 25 years from this permit issuance, the permittee shall have fully replaced the groundwater withdrawal from these two permitted wells by surface water or an alternative water source. Prior to the end of the 25 year period, the permittee shall have the right to submit an application to modify the permit and EPD will review and consider the request in compliance with Georgia law at the time of the application.
- h) Any future request to drill new Floridan aquifer wells away from the Savannah Cone of Depression (such as farther west or north) and then transfer or move any of the already issued permitted groundwater limits contained in this permit must comply with all EPD groundwater policy and permitting requirements and practices in place at the time of such an application or proposal and receive formal EPD approval.

**6) SPECIAL CONDITIONS (Continued)**

- i) The permittee must submit an initial written report to EPD within six months of the issuance of this permit, before the first use of the groundwater wells. This report may be a joint report from Bryan County and Bulloch County. This initial report must be made readily available on the permittee's website for the public.
  - 1. This initial report must include:
    - i. Candidate surface water alternatives;
    - ii. Candidate other alternative sources of water;
    - iii. An initial prioritization and delineation of these alternate resources in terms of ready deliverability;
    - iv. An initial prioritization of what specific areas will be served by these non-Floridan aquifer groundwater alternative water sources;
    - v. Provide an itemization of the potential goals and milestones for this source water transition;
    - vi. The potential funding mechanisms for planning and implementation efforts for the development and delivery of alternate sources, as listed below.
- j) Following the initial report, the permittee must submit an annual written report to EPD. The annual report must be submitted by January 31 of the following year for each year that the permitted wells are operational. The annual report must be made available on the permittee's website to the public and must include:
  - 1. A demonstration of progress to develop sufficient funding sources to pay for the transition to surface water or other alternative water sources.
  - 2. A list of meetings or discussions addressing the construction of infrastructure necessary for the delivery and use of alternative water sources.
  - 3. A copy of any fully executed contractual document necessary for the delivery and use of an alternative water source.
  - 4. A demonstration of the extent of completion of construction and operation of the delivery of an alternative water source and the commensurate reduction in Floridan aquifer groundwater withdrawals to date.
  - 5. An updated timetable for the construction and operation of the delivery and use of alternate water sources, and the commensurate reduction of Floridan aquifer groundwater withdrawals to be accomplished within 25 years of the date of this permit.



PERMIT NO. 016-0014  
ISSUANCE DATE:



# GEORGIA

DEPARTMENT OF NATURAL RESOURCES

## ENVIRONMENTAL PROTECTION DIVISION

### PERMIT TO USE GROUNDWATER

PERMIT HOLDER'S NAME: **Bulloch County Board of Commissioners**  
PERMIT HOLDER'S ADDRESS: **113 North Main Street, Statesboro, GA 30458**  
COUNTY: **Bulloch County**

In accordance with the Provisions of the Groundwater Use Act, (O.C.G.A § 12-5-90 et seq.) as amended, and the Rules and Regulations for Groundwater Use, Chapter 391-3-2, promulgated pursuant thereto, this Permit is issued to withdraw, obtain, or utilize a maximum system wide total of groundwater in the amount of:

**3.500** million gallons per day monthly average and **3.125** million gallons per day annual average;

from **two** well(s) located near **where I-16 crosses the county line in southeastern Bulloch County, Georgia** for the purpose of a consumptive use to **provide water to the various entities at the Bryan County Industrial Mega-Site and other associated development.**

This Permit is conditioned upon the permit holder complying with all of the terms, conditions, and schedules of compliance specified on the attached pages, which are hereby made a part of this Permit.

In accordance with the application dated **August 21, 2023** and in conformity with the statements and supporting data entered therein or attached thereto, all of which are filed with the Environmental Protection Division (EPD) and are hereby made part of this Permit.

This permit is effective from the date first above written and is subject to revocation on evidence of noncompliance with any of the provisions of the Groundwater Use Act, as amended, or any of the Rules and Regulations promulgated pursuant thereto; or with any representation made in the above mentioned application or the statements and supporting data entered therein or attached thereto; or with any condition of this permit.

Absent prior revocation in accordance with the above language, this Permit will expire **ten (10) years from the issuance date on this permit.**



Jeffrey W. Cown, Director  
Environmental Protection Division

This Permit is conditioned upon the permit holder complying with the provisions of the Groundwater Use Act, as amended, or any of the Rules and Regulations promulgated pursuant thereto;

1) **GENERAL REQUIREMENTS**

- a) This Permit is valid for ground water withdrawal from the **Floridan** Aquifer(s). No other aquifer(s) can be used without the approval of the EPD.
- b) The withdrawal of groundwater is limited to the quantities and purpose of the water herein specified.
- c) Water associated with this Permit must not be withdrawn by, released for, or otherwise utilized by any other entity or for any other purpose, without first modifying this Permit.
- d) This Permit must not be transferred except with the approval of the EPD.
- e) The replacement of any permitted well must receive prior approval from the EPD.
- f) This permit supersedes any and all previous permits of the same permit number.

2) **PERMIT RENEWAL**

All permit holders desiring to renew a permit shall submit an application for renewal to the EPD Director within six (6) months of the permit's expiration.

3) **PERMIT MODIFICATION**

- a) The permit holder may seek modification of any of the terms of an unexpired permit upon written request to the EPD Director.
- b) The Georgia EPD has the authority to modify any groundwater withdrawal permit at any time.

4) **MONITORING AND REPORTING**

- a) If multiple aquifers are designated in Condition (1a) above, groundwater withdrawal from each aquifer must be reported separately, in addition to the total amount withdrawn from all wells. Each aquifer must be identified on the Groundwater Withdrawal Report, in addition to listing the well or wells that are producing from each aquifer. If a well is producing in more than one aquifer, it is to be noted.
- b) The Groundwater Withdrawal Report must be submitted MONTHLY in accordance with the following schedule:
  - Production between the first day of the month and the last day of the month will be submitted to EPD by the 10<sup>th</sup> day of the following month (ex. January 1<sup>st</sup> through January 31<sup>st</sup> groundwater withdrawal data will be reported to the EPD by February 10<sup>th</sup>).



**4) MONITORING AND REPORTING (Continued)**

- c) In accordance with the Groundwater Use Rules, 391-3-2-.08(1), a permit holder will measure and record the static and pumping levels of each aquifer utilized and the date the water levels were measured on a semi-annual basis, submitting the results to EPD. Semi-Annual Water Level measurements must be collected from the highest yielding wells, using the same wells for each reporting period and preferably taking the measurements during the same two months of the year (six months apart). One well should be measured for every five permitted wells (i.e., if you have between one and five permitted wells, conduct measurements for one well; if you have between six and ten permitted wells, conduct measurements from two of the permitted wells, etc.).
- d) In accordance with the Groundwater Use Rules, 391-3-2-.08(2), a permit holder will analyze a raw groundwater sample for specific conductance on an annual basis. Analysis for specific conductance must be conducted in accordance with 40 Code of Federal Regulations, Part 141.89. A raw groundwater sample must be collected for every five permitted wells (i.e., if you have between one and five permitted wells, collect one raw groundwater sample for analysis; if you have between six and ten permitted wells, collect a raw groundwater sample from two of the permitted wells, etc.). The groundwater samples will be collected from the highest yielding wells. The results must be submitted to EPD and include the date sampled, well number, temperature of water sample at time of testing, the specific conductance result, and the units of measurement.

**5) WATER PLANNING REQUIREMENTS**

- a) This groundwater withdrawal permit and any future modifications or re-issuances of such, is conditioned upon implementation of the permit holder's Water Conservation Plan developed in accordance with the Rules and Regulations for Groundwater Use, Chapter 391-3-2, and the Georgia Water Stewardship Act. It should be regularly updated to be consistent with current EPD guidelines.
- b) The permit holder must submit a Water Conservation Progress Report to the Division five years after permit issuance, and every five years thereafter.
- c) The permit holder must demonstrate an effort to increase water use efficiency.
- d) When the service population of the Bulloch County Board of Commissioners' water system reaches 3,300, the Bulloch County Board of Commissioner's must submit an annual water audit to EPD as outlined below:

In accordance with the Rules for Public Water Systems to Improve Water Supply Efficiency (391-3-33), Public Water Systems that regularly serve 3,300 or more individuals must submit an annual Water Audit to EPD by March 1 of each year. Any future permit action is conditional upon the demonstration of progress toward increased water efficiency. The permit holder must maintain ongoing compliance with the following:

1. Establishment of a Water Loss Control Program and associated goals to set measures of water supply efficiency.
2. Demonstration of progress toward increased water efficiency using the measures established.

5) **WATER PLANNING REQUIREMENTS (Continued)**

- e) The permit holder must abide by all applicable drought response requirements, which include but are not limited to the Georgia Drought Management Rule (391-3-30), the Georgia Water Stewardship Act, and the permit holder's Drought Contingency Plan.
- f) The permit holder must maintain ongoing compliance with applicable **Coastal Georgia** Regional Water Plan requirements.

6) **SPECIAL CONDITIONS**

- a) The EPD has produced the '**Coastal Georgia Water & Wastewater Permitting Plan for Managing Salt Water Intrusion**' (the Plan). The Plan has identified an array of water conservation, efficiency, and reuse requirements for public and private water providers. The permit holder is required to fully implement and otherwise comply with ALL appropriate requirements identified in the Plan.

**ADDRESSING SHORT TERM IMPACTS:**

- b) The permittee must create a joint Bulloch County and Bryan County municipal managed fund, which may include contributions from other entities, to address any potential significant impacts to existing Floridan aquifer wells in an area defined by a circle with a 5-mile radius from the center point at the I-16 and Highway 119 interchange.
  - 1. The permittee must develop mitigation fund mechanisms with defined forms, mitigation practices, processes and protocols prior to withdrawals from the permitted groundwater wells.
  - 2. No groundwater withdrawals may be made until the materials approved under item b(1) above are made readily available on the permittee's website to the public.
  - 3. This mitigation fund must be implemented for the duration of authorized groundwater usage from the permitted wells.
- c) A water well driller or pump installer licensed in the State of Georgia may investigate alleged significant impacts to existing wells. A list of those licensed professionals must be published on the permittee's website. If an investigator finds that a significant impact to an existing water well was caused by the Floridan Aquifer drawdown from the permitted withdrawals, the fund referenced in Special Condition 6(b) shall be used to mitigate, in a timely manner, the specific issues of the affected party.



6) **SPECIAL CONDITIONS (Continued)**

- d) The permittee must submit to EPD an annual report regarding the fund referenced in Special Condition 6(b), describing the fund amounts available, the amount of funds distributed to each user, the total amount of funds distributed, and all fund actions taken over the course of the preceding year, including the total number of wells rehabilitated and how each well was rehabilitated (for example, whether the well was deepened or the pump was lowered). The annual report must be submitted by January 31 following each year that the fund is in place.

**ADDRESSING POTENTIAL LONG-TERM IMPACT:**

- e) The permittee must work to expeditiously and thoroughly plan for the timely provision of surface water or other water alternatives, such as reuse water, as a replacement for the Floridan aquifer groundwater withdrawals authorized by this permit, the construction of all infrastructure necessary to deliver quantities of such alternative sourced water to the Bryan County Mega-Site and associated developments sufficient to replace the groundwater withdrawals authorized under this permit, and the funding sources necessary to deliver and utilize the alternative sourced water. This provision of surface water or other water alternatives, or a combination thereof, and the construction and operation of all infrastructure necessary to use the alternative water supply source(s) must be accomplished within 25 years of the date of this permit. Such planning will require ensuring surface water (or other alternative sourced water) sufficient to provide for the water needs of the Bryan County Mega-Site and the existing and future water needs of any additional industrial, commercial, and residential growth which may occur in the Bryan County Mega-Site area.
- f) The Floridan aquifer groundwater withdrawals authorized by this permit must be reduced in equal quantity to the amount of alternate water capacity available upon completion and operation of the necessary infrastructure to deliver surface water or other non-Floridan aquifer alternative water to the Bryan County Mega-Site and associated developments. This shall mean that at the end of the 25 years from this permit issuance, the permittee shall have fully replaced the groundwater withdrawal from these two permitted wells by surface water or an alternative water source. Prior to the end of the 25 year period, the permittee shall have the right to submit an application to modify the permit and EPD will review and consider the request in compliance with Georgia law at the time of the application.
- g) Any future request to drill new Floridan aquifer wells away from the Savannah Cone of Depression (such as farther west or north) and then transfer or move any of the already issued permitted groundwater limits contained in this permit must comply with all EPD groundwater policy and permitting requirements and practices in place at the time of such an application or proposal and receive formal EPD approval.

6) **SPECIAL CONDITIONS (Continued)**

- h) The permittee must submit an initial written report to EPD within six months of the issuance of this permit, before the first use of the groundwater wells. This report may be a joint report from Bryan County and Bulloch County. This initial report must be made readily available on the permittee's website for the public.
1. This initial report must include:
    - i. Candidate surface water alternatives;
    - ii. Candidate other alternative sources of water;
    - iii. An initial prioritization and delineation of these alternate resources in terms of ready deliverability;
    - iv. An initial prioritization of what specific areas will be served by these non-Floridan Aquifer groundwater alternative water sources;
    - v. Provide an itemization of the potential goals and milestones for this source water transition;
    - vi. The potential funding mechanisms for planning and implementation efforts for the development and delivery of alternate sources, as listed below.
- i) Following the initial report, the permittee must submit an annual written report to EPD. The annual report must be submitted by January 31 of the following year for each year that the permitted wells are operational. The annual report must be made available on the permittee's website to the public and must include:
1. A demonstration of progress to develop sufficient funding sources to pay for the transition to surface water or other alternative water sources.
  2. A list of meetings or discussions addressing the construction of infrastructure necessary for the delivery and use of alternative water sources.
  3. A copy of any fully executed contractual document necessary for the delivery and use of an alternative water source.
  4. A demonstration of the extent of completion of construction and operation of the delivery of an alternative water source and the commensurate reduction in Floridan aquifer groundwater withdrawals to date.
  5. An updated timetable for the construction and operation of the delivery and use of alternate water sources, and the commensurate reduction of Floridan aquifer groundwater withdrawals to be accomplished within 25 years of the date of this permit.





Outlook

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**Re: State and JDA Response to Recent Ground Water Withdrawal Information Request**

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**From** Wise, Sarah E CIV USARMY CESAS (USA) <Sarah.E.Wise@usace.army.mil>**Date** Thu 10/10/2024 9:32 AM**To** Trip Tollison <ttollison@seda.org>

Good morning Trip! We have reviewed the information provided below and have some additional questions. Please provide an assessment of effects on whether the anticipated drawdown of the Floridan aquifer would result in any drainage of aquatic resources. In addition, we are in receipt of 2 comment letters from Ms. Sydney Bacchus. Please provide a response to these comment letters. Given the size of the letters, I cannot attach them to this email. Therefore, I am sending them through a DoD SAFE link. If you do not receive this link, let me know and I will send another one. If you have any questions, please let me know.

V/R,

Sarah E. Wise

Team Lead, Coastal Branch

Regulatory Division

U.S. Army Corps of Engineers, Savannah District

100 West Oglethorpe Avenue

Savannah, Georgia 31401 3640

912 652 5550 (desk)

912 652 5995 (fax)

Thank you in advance for completing our Customer Survey Form. This can be accomplished by visiting our web site at [https://regulatory.ops.usace.army.mil/customer\\_service\\_survey/](https://regulatory.ops.usace.army.mil/customer_service_survey/), and completing the survey on line. We value your comments and appreciate your taking the time to complete a survey each time you interact with our office.

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**From:** Trip Tollison <ttollison@seda.org>**Sent:** Friday, September 20, 2024 3:19 PM**To:** O'Kane, Jason D CIV USARMY CESAS (USA) <Jason.D.Okane@usace.army.mil>; Wise, Sarah E CIV USARMY CESAS (USA) <Sarah.E.Wise@usace.army.mil>

**Cc:** Pat Wilson <PWilson@georgia.org>; Sara Gershon <SGershon@georgia.org>; carterinfinger@bryan-county.org <carterinfinger@bryan-county.org>; jonpannell@gpwlawfirm.com <jonpannell@gpwlawfirm.com>; Alton Brown <abrown@rlandc.com>

**Subject:** [Non-DoD Source] State and JDA Response to Recent Ground Water Withdrawal Information Request

Jason and Sarah: Good afternoon. Attached is the response letter from the state and JDA regarding USACE Savannah District's recent information request concerning ground water withdrawals for the Bryan County Mega Site. Also attached is a file containing the requested information (there is also a link within the response letter to this information).

Please confirm receipt of these documents.

If you have any questions, or need additional information, please let us know.

Have a great weekend.

Trip





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**[Non-DoD Source] RE: State and JDA Response to Recent Ground Water Withdrawal Information Request**

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**From** Trip Tollison <ttollison@seda.org>

**Date** Thu 10/10/2024 10:08 AM

**To** Wise, Sarah E CIV USARMY CESAS (USA) <Sarah.E.Wise@usace.army.mil>

**Cc** Alton Brown <abrown@rlandc.com>

Good morning Sarah. Hope you are well. We are in receipt of your email along with the two, extensive comment letters from Ms. Bacchus.

We will continue to use Alton Brown of Resource Land Consultants as we move through this response and any other USACE Savannah related efforts. Alton is copied on this email.

Thank you.

Trip

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**From:** Wise, Sarah E CIV USARMY CESAS (USA) <Sarah.E.Wise@usace.army.mil>

**Sent:** Thursday, October 10, 2024 9:32 AM

**To:** Trip Tollison <ttollison@seda.org>

**Subject:** Re: State and JDA Response to Recent Ground Water Withdrawal Information Request

Good morning Trip! We have reviewed the information provided below and have some additional questions. Please provide an assessment of effects on whether the anticipated drawdown of the Floridan aquifer would result in any drainage of aquatic resources. In addition, we are in receipt of 2 comment letters from Ms. Sydney Bacchus. Please provide a response to these comment letters. Given the size of the letters, I cannot attach them to this email. Therefore, I am sending them through a DoD SAFE link. If you do not receive this link, let me know and I will send another one. If you have any questions, please let me know.

V/R,

Sarah E. Wise

Team Lead, Coastal Branch

Regulatory Division

U.S. Army Corps of Engineers, Savannah District

100 West Oglethorpe Avenue  
Savannah, Georgia 31401-3640  
912-652-5550 (desk)  
912-652-5995 (fax)

Thank you in advance for completing our Customer Survey Form. This can be accomplished by visiting our web site at <https://regulatory.ops.usace.army.mil/customer-service-survey/>, and completing the survey on-line. We value your comments and appreciate your taking the time to complete a survey each time you interact with our office.

**From:** Trip Tollison <[ttollison@seda.org](mailto:ttollison@seda.org)>  
**Sent:** Friday, September 20, 2024 3:19 PM  
**To:** O'Kane, Jason D CIV USARMY CESAS (USA) <[Jason.D.Okane@usace.army.mil](mailto:Jason.D.Okane@usace.army.mil)>; Wise, Sarah E CIV USARMY CESAS (USA) <[Sarah.E.Wise@usace.army.mil](mailto:Sarah.E.Wise@usace.army.mil)>  
**Cc:** Pat Wilson <[PWilson@georgia.org](mailto:PWilson@georgia.org)>; Sara Gershon <[SGershon@georgia.org](mailto:SGershon@georgia.org)>; [carterinfinger@bryan-county.org](mailto:carterinfinger@bryan-county.org) <[carterinfinger@bryan-county.org](mailto:carterinfinger@bryan-county.org)>; [jonpannell@gpwlawfirm.com](mailto:jonpannell@gpwlawfirm.com) <[jonpannell@gpwlawfirm.com](mailto:jonpannell@gpwlawfirm.com)>; Alton Brown <[abrown@rlandc.com](mailto:abrown@rlandc.com)>  
**Subject:** [Non-DoD Source] State and JDA Response to Recent Ground Water Withdrawal Information Request

Jason and Sarah: Good afternoon. Attached is the response letter from the state and JDA regarding USACE Savannah District's recent information request concerning ground water withdrawals for the Bryan County Mega Site. Also attached is a file containing the requested information (there is also a link within the response letter to this information).

Please confirm receipt of these documents.

If you have any questions, or need additional information, please let us know.

Have a great weekend.

Trip





19 December 2023

US Army Corps of Engineers  
Savannah District / Regulatory Division  
Attention: Ms. Sarah Wise  
100 West Oglethorpe Ave  
Savannah, GA 31402-0889

**Subject: Additional Information  
Bryan County Mega Site  
Bryan County, Georgia  
SAS-2015-00235**

**RLC# 14-225.10**

Dear Ms. Wise:

As requested in an email dated 10 October 2024, the following provides additional information regarding potential impacts to wetlands and threatened & endangered species associated with the Georgia Department of Natural Resources Environmental Protection Division (EPD) ground water withdrawal permit issued to Bryan County and Bulloch County on 7 October 2024. The EPD permit includes installation of two wells in southeast Bulloch County and two wells in northwest Bryan County. As noted in the 20 September 2024 letter from the Georgia Department of Economic Development (GDECD), neither the Savannah Harbor Interstate 16 Corridor Joint Development Authority (JDA) nor Hyundai is the permittee for the ground water withdrawal permits. The wells are required to satisfy regional water needs and for that reason Bryan County and Bulloch County are the permittees. Development of the water and sewer infrastructure plan was initiated over 10 years ago and long before application of the USACE permit for the Hyundai project. This was noted prior to issuance of the 404 Permit in a response to a public notice comment where the applicant stated "Water and sewer [for the Bryan County Mega Site/Hyundai Meta Manufacturing Facility] will be provided by regional infrastructure plan developed in partnership by Bryan, Chatham, Bulloch and Effingham Counties".

While neither GDECD, JDA, nor Hyundai are the permittee for the EPD water withdrawal permits and while the regional water withdrawal plan is not associated with just the Hyundai project but all the development that has occurred within the last 5 years within the north Bryan, Effingham and southeast Bulloch region, the USACE has requested additional information in connection with the Bryan County Mega Site 404 Permit. Specifically, the USACE requested additional information focused on potential impacts to wetlands and threatened and endangered species.

**Wetlands:** The evaluation conducted as part of the EPD water withdrawal permit process considered potential impacts to surface water bodies (which includes wetlands). A copy of the EPD power point documenting this condition was provided in the 20 September 2024 response. The attached slides from that document depict a schematic of the Floridan Aquifer. The schematic depicts the condition in coastal Georgia where the Floridan aquifer is overlain by a thick confining unit, or aquitard, that acts as a hydraulic barrier between surface waters, such as wetlands, creeks, rivers, and ponds, and the Floridan Aquifer. While modeling completed by EPD indicated that entities with Floridan wells within 5 miles of the Interstate 16/Highway 280 interchange could potentially experience an impact of 10-19 feet or more of Floridan drawdown at their wells, the upper confining unit/hydraulic barrier is 285-320 feet thick in southern Bulloch County and unbreached (USGS Professional Paper 1807, Revised Hydrogeologic Framework of the Floridan Aquifer System in Florida and Parts of Georgia, Alabama, and South Carolina, published April 2015, revised March 2016). Due to the hydrogeologic conditions in the area of the proposed wells, and coastal Georgia in general, there is no hydraulic connection between nor is there any prospect that withdrawals from proposed Bryan and Bulloch wells will have any impact to the Savannah River, the Ogeechee River, the Okefenokee National Wildlife Refuge, creeks, wetlands or other surface water bodies. Additionally, the sites selected for the four wells consist of upland area only and no direct impacts to wetlands will occur during construction of the wells.

**Threatened & Endangered Species:** The potential impacts to threatened and endangered species associated with the withdrawal permits have also been evaluated. As documented above, the water withdrawal permit will have no impact on surface habitats beyond the footprint of the well sites. RLC reviewed the attached IPaC resource list which documents that the eastern indigo snake is the only federally protected species which has the potential to occur within the footprint of the four permitted well sites. The tricolored bat (proposed) and monarch butterfly (candidate) are also

identified. Review of the GNAHRGIS Ecology Review and Survey Module confirms that the eastern indigo snake is not known to occur within any of the well locations. The closest known occurrence is south of the well sites within Ft. Stewart. Because the proposed wells will have no impact on surface habitats beyond the small areas where the wells are constructed and no known occurrences of a federally listed species have been documented within any of the four well sites, the wells will have no effect on federally listed threatened or endangered species.

In addition, you provided comments received by the USACE from Ms. Sydney Bacchus dated 22 February 2024 and 3 September 2024.

The 22 February 2024 comment letter was addressed to the Georgia Department of Natural Resources Commissioner, Mr. Walter Raybun. All comments were associated with the proposed water withdrawal permit and have been addressed by EPD in the attached response to comments.

Regarding the 3 September 2024 comment letter, Ms. Bacchus generally stated that the draft EPD permits is not a reliable model based on *“reliable data and resources, because it: i) fails to include an analysis of the cumulative adverse impacts from all of the other groundwater withdrawals in the region; ii) predicts an “impact area” of only a 5-mile radius centered around the proposed 4 new wells; iii) fails to consider preferential flow through karst conduits that occur throughout the entire extent of the regional, karst, Floridan aquifer system; iv) assumes no cumulative vertical flow through the “thick, clayey” lower permeability layers above and below the Floridan aquifer, in response to pumping, when that vertical flow is known to occur throughout the entire extent of the regional, karst, Floridan aquifer system, resulting in the dewatering of “aquatic sites;” v) assumes no cumulative horizontal flow through the county-line boundaries of Bulloch County, in response to pumping, that will increase saltwater intrusion in Bulloch, Bryan, and Effingham Counties, and other coastal counties and barrier islands, and will increase the decline of Georgia’s coastal marshes; vi) assumes no cumulative dewatering of “aquatic sites,” including wetlands and streams; vii) assumes no cumulative “taking” of federally listed marine/aquatic species (e.g., shortnose sturgeon and South Atlantic Distinct Population Segment (DPS) of Atlantic sturgeon), or the irreversible destruction of designated habitat for those species; and viii) assumes no cumulative “taking” of federally listed upland species by the cumulative dewatering of the surficial aquifer, is known to occur in response to groundwater withdrawals throughout the entire extent of the regional, karst, Floridan aquifer system, resulting in the premature decline and death of longleaf pine trees and other native species of pine trees that are required for the survival and recovery of the federally endangered redcockaded woodpeckers”.*

These comments have been addressed by EPD as part of the attached Response to comments on the Draft Special Conditions (see highlighted response on pages 6, 7, 11, & 15). In addition, and as documented above, due to the hydrogeologic conditions in the area of the proposed wells, there is no hydraulic connection between nor is there any prospect that withdrawals from proposed Bryan and Bulloch wells will have any impact to the Savannah River, the Ogeechee River, the Okefenokee National Wildlife Refuge, creeks, wetlands or other surface water bodies. Additionally, because the proposed wells will have no impact on surface habitats and no known occurrences of a federally listed species have been documented within any of the four well sites, the wells will have no effect on federally listed threatened or endangered species.

We appreciate the opportunity to provide this additional information. If you have any questions or require any additional information, please feel free to contact us at (912) 443-5896.

Sincerely,



Alton Brown, Jr.  
Principal  
Resource & Land Consultants

Enclosures

cc: Mr. Pat Wilson – Georgia Department of Economic Development  
Ms. Sara Gershon – Georgia Department of Economic Development  
Mr. Trip Tollison - Savannah Harbor-Interstate 16 Corridor Joint Development Authority





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CONSULTANTS

## **APPENDIX A:** Well Location Exhibit

(b)(9)

WELL LOCATIONS

CLIENT:  
BRYAN COUNTY BOARD OF COMMISSIONERS

LOCATION: BRYAN COUNTY, GA  
DATE: 11/20/2024      DRAWN BY: CAS      SHEET: 1  
JOB NUMBER: J-27691.0081      REVIEWED BY: CAS      SCALE: 1" = 3000'



50 Park of Commerce Way  
Savannah, GA 31405 • 912.234.5300

[www.thomasandhutton.com](http://www.thomasandhutton.com)



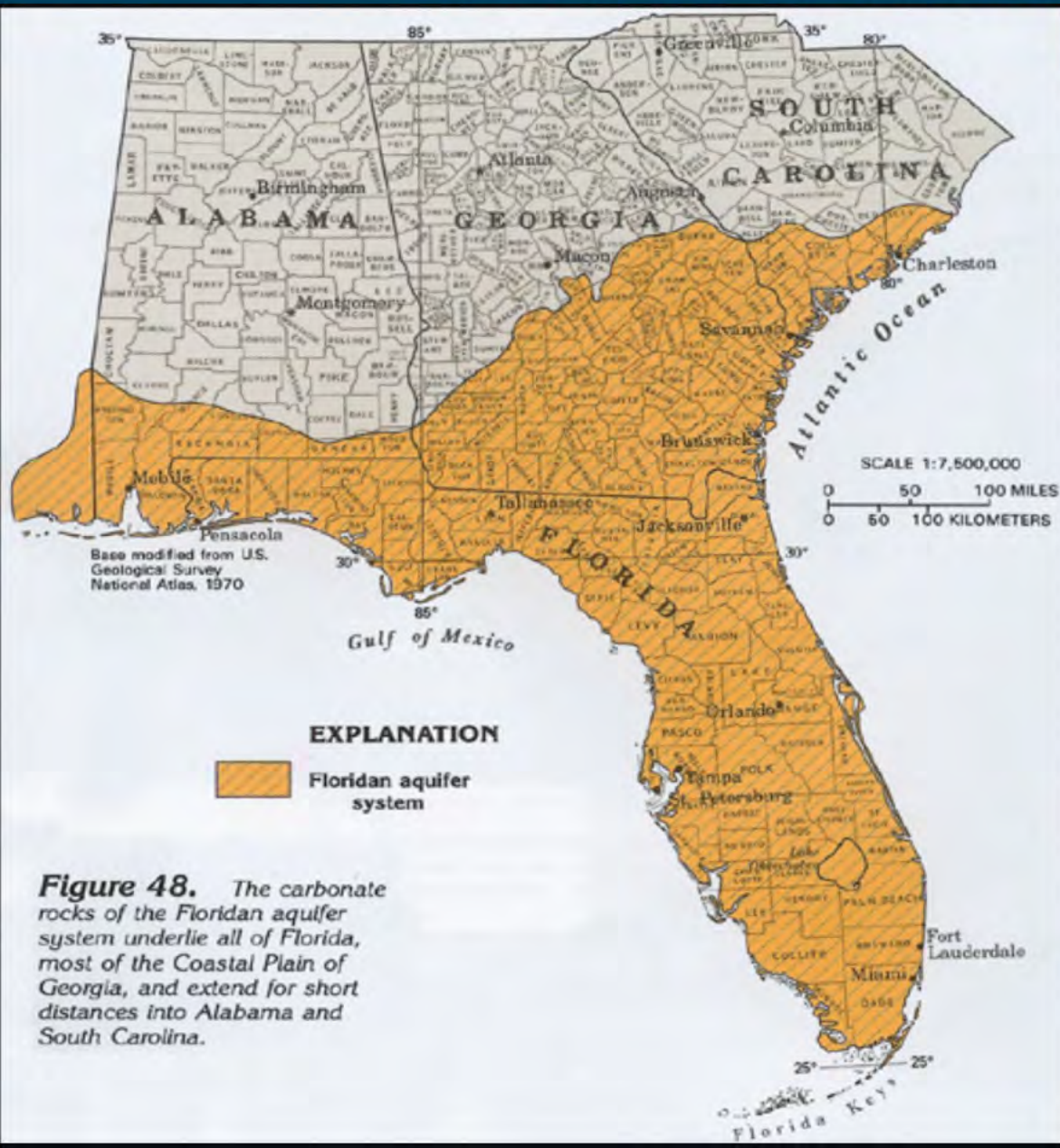




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## **APPENDIX B:** Floridan Aquifer Schematic

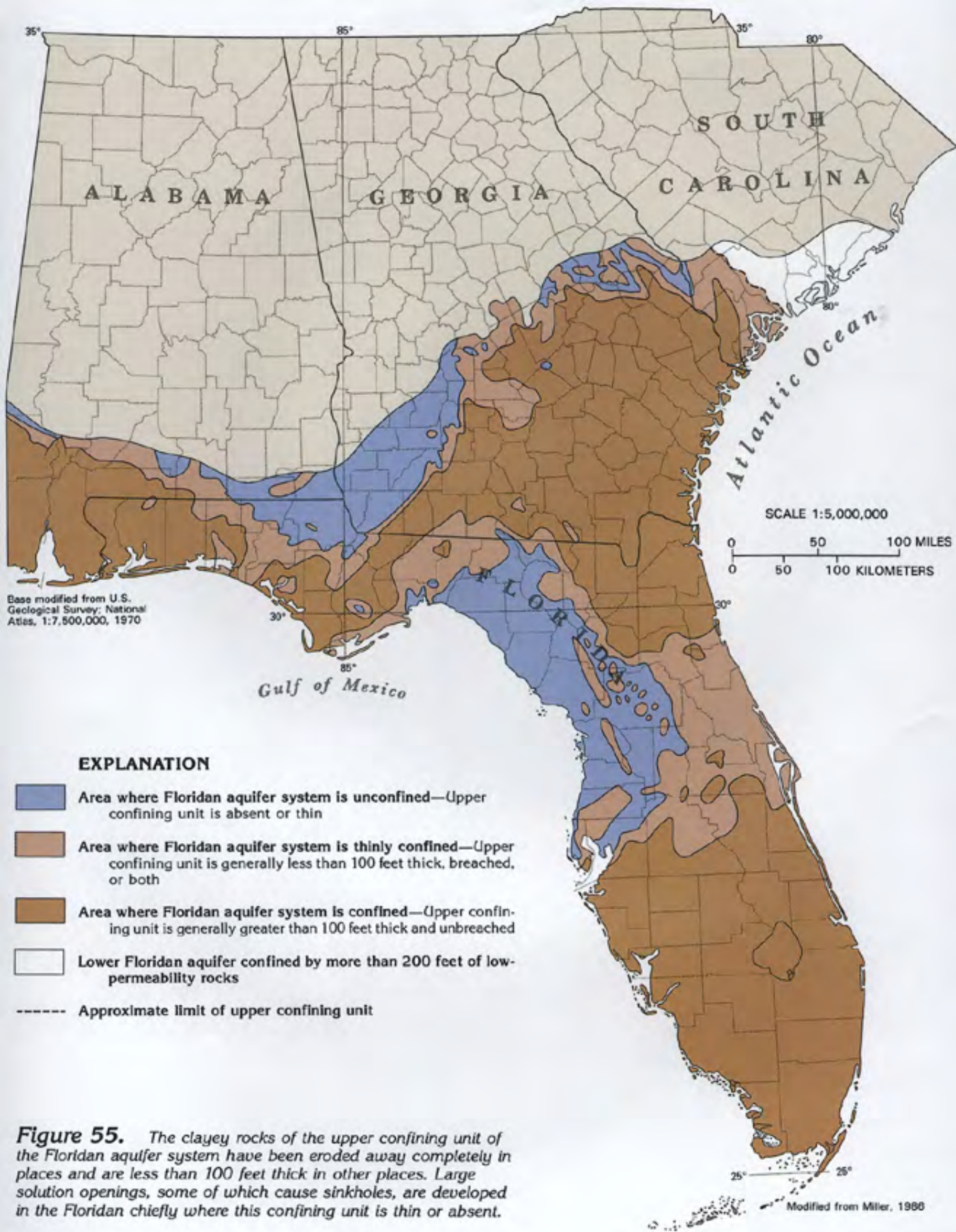
# Extent of Floridan Aquifer



**Figure 48.** The carbonate rocks of the Floridan aquifer system underlie all of Florida, most of the Coastal Plain of Georgia, and extend for short distances into Alabama and South Carolina.

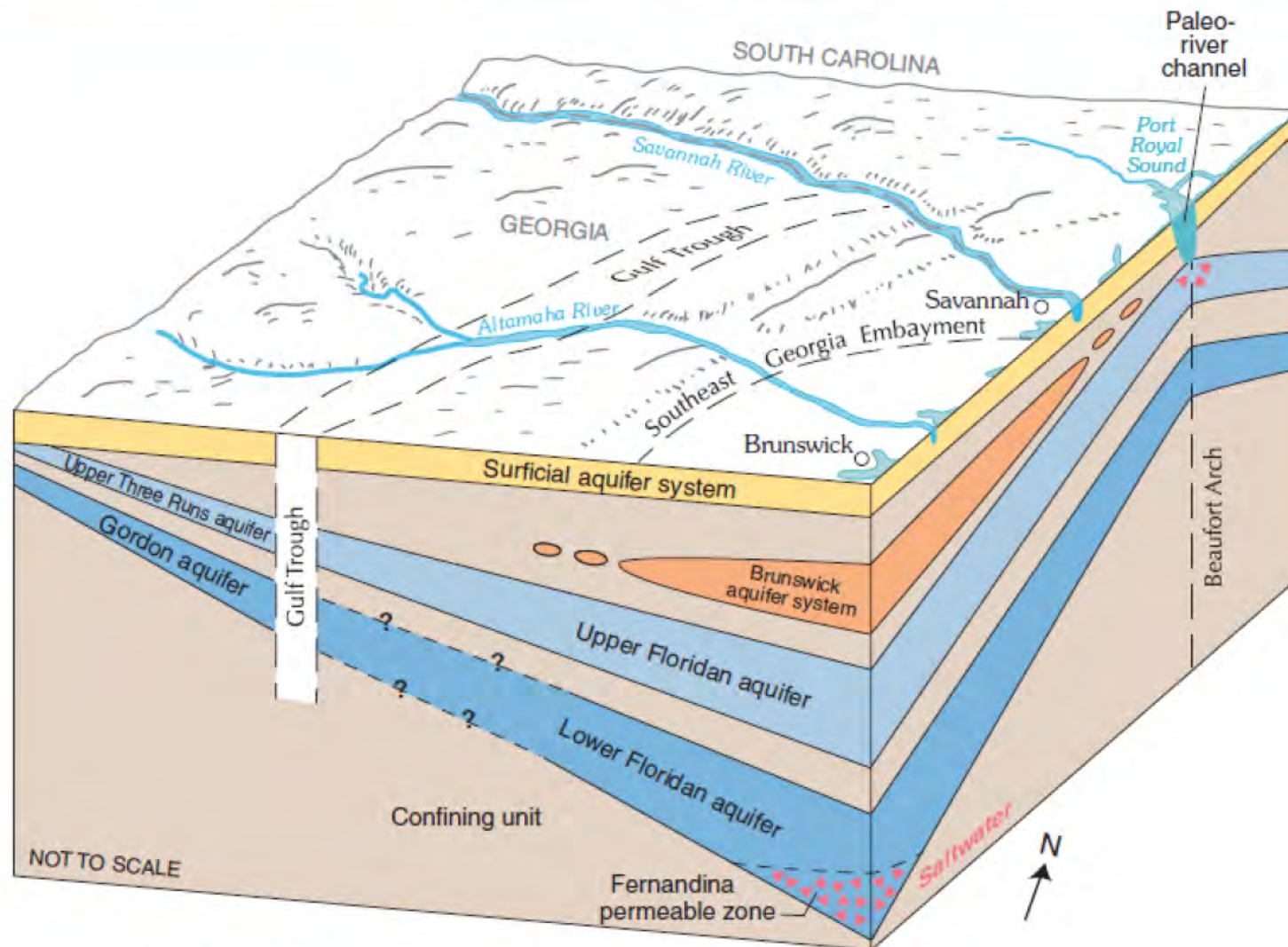
- USGS HA 730-G Groundwater Atlas of the United States – Floridan Aquifer System





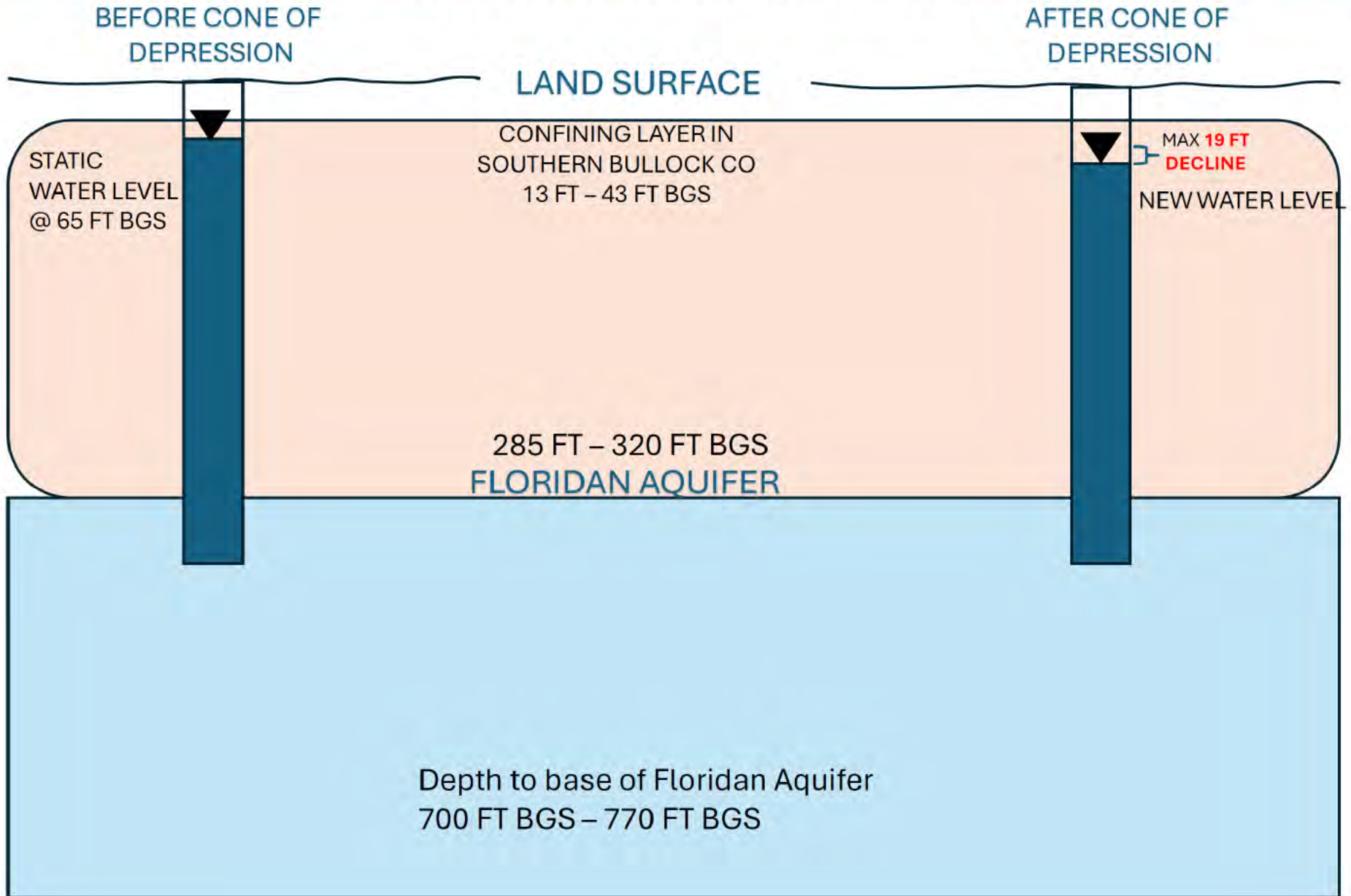
**Figure 55.** The clayey rocks of the upper confining unit of the Floridan aquifer system have been eroded away completely in places and are less than 100 feet thick in other places. Large solution openings, some of which cause sinkholes, are developed in the Floridan chiefly where this confining unit is thin or absent.

# Schematic of Floridan Aquifer

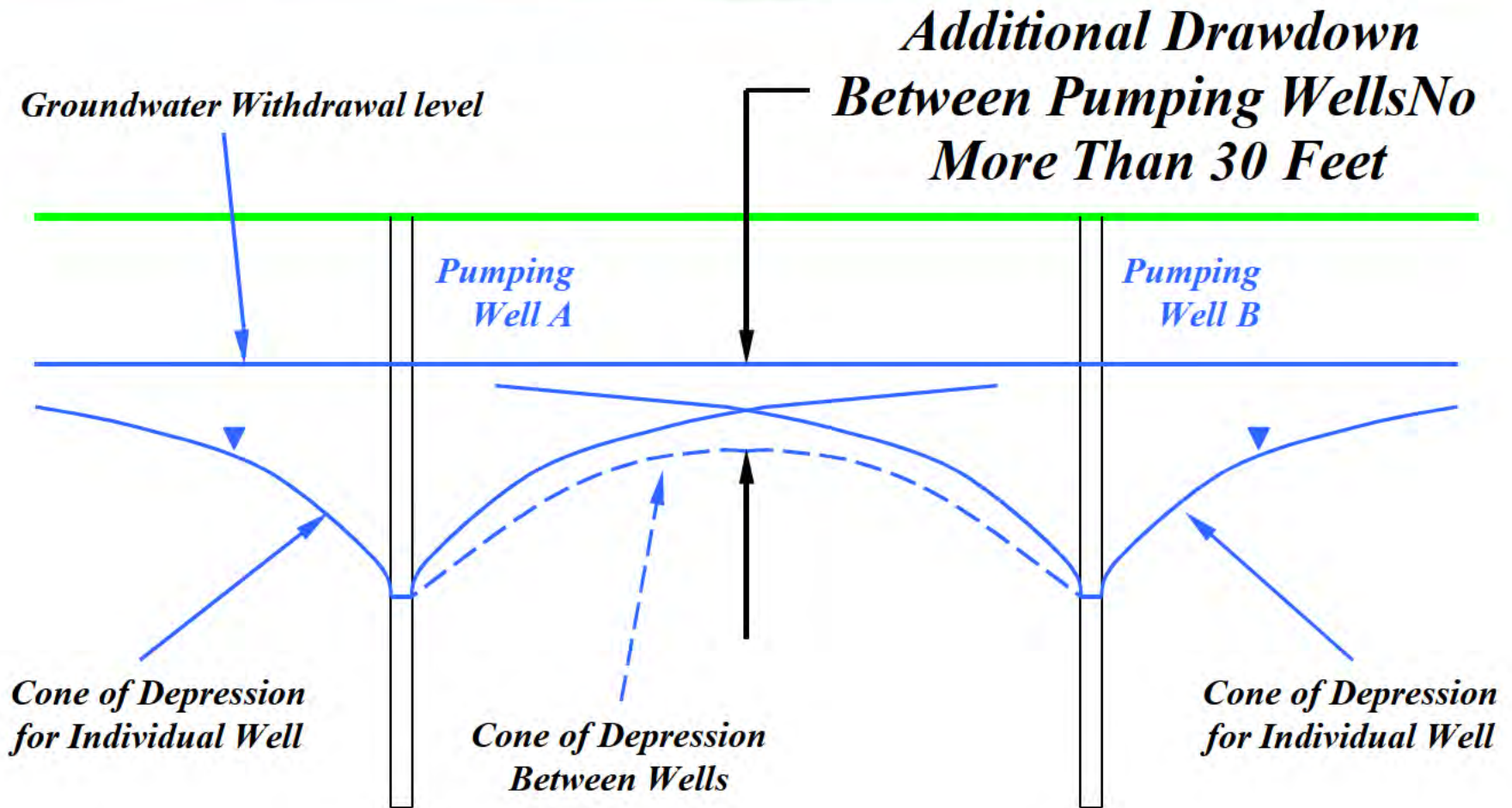




# Schematic on Drawdown



# Schematic on Drawdown Interference







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## **APPENDIX C:**

EPD Response to Comments on the  
Well Permit Draft Special Conditions

## 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>



	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>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>



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.	The applications that EPD received are for consumptive use of water and EPD has been reviewing the applications accordingly.
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.”	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.
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?”	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.
One commenter requested that EPD “include references to the ‘EPD policy and permitting requirements’ that exist at the time of issuing the withdrawal permit.”	This is EPD’s standard practice. The permit expressly states that the permit is issued in accordance with Georgia laws.
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.  A commenter asked that all “EPD policy and permitting requirements” be identified and made public before moving forward.  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	Information on Savannah Cone of Depression can be found at EPD website <a href="https://epd.georgia.gov/water-withdrawal-permitting">https://epd.georgia.gov/water-withdrawal-permitting</a> 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.  Coastal permitting strategy and studies leading to it can be found at <a href="https://epd.georgia.gov/coastal-water-study">https://epd.georgia.gov/coastal-water-study</a> . State regulations on permitting of groundwater withdrawal can be found at <a href="https://rules.sos.ga.gov/gac/391-3-2">https://rules.sos.ga.gov/gac/391-3-2</a> and the Groundwater Use Act is codified in OCGA 12-5-90 et seq.



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 <a href="https://epd.georgia.gov/coastal-water-study">https://epd.georgia.gov/coastal-water-study</a> (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>



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.”	Comment noted.
Several commenters raised concerns about the possibility of sinkholes as a result of the water withdrawals.	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.
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.	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).
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.”	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.
One commenter asked what the “green zone” was.	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>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.
<p>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.”</p> <p>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.</p>	<p>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.</p> <p>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.</p>
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.	<p>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.</p> <p>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 <a href="mailto:epd.comments@dnr.ga.gov">epd.comments@dnr.ga.gov</a>.</p>
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.



Several commenters expressed general concern about impacts to the Floridan aquifer.	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.
One commenter expressed that Bulloch County should have a referendum on this issue.	Comment noted.
One commenter asked how EPD could be sure that there were no lasting effects of the wells after the permit term.	EPD's assessment is based on best available information (i.e. models and data).
One commenter asked whether any excess water from the permitted amount could be used in other locations.	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.
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.	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.
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.	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.
One commenter asked for clarification on "any contract restrictions placed on the use of the wells by the initial funding source requirements."	EPD does not review the initial funding source requirements for the wells. EPD has removed this language from the draft permits.
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 &	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>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>	
A commenter wanted to know what the impact of HB1146 would be on the need for new wells.	HB1146 does not have an impact on the need for the new wells in these draft permits.
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.	Yes, existing permitted water uses have been included in EPD’s modeling assessment.
A commenter wanted to know EPD’s level of review of the joint report.	EPD will review all reports for compliance with the permit terms.
A commenter wanted to know what level of detail would be considered “sufficient to appropriately inform EPD of the project status.”	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.
A commenter asked why there have not been determinations of impacts per the Clean Water Act, NEPA and Endangered Species Act?	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.





**RESOURCE+LAND**  
CONSULTANTS

## **APPENDIX D:** IPaC Database Resource List

**IPaC** Information for Planning and Consultation **U.S. Fish & Wildlife Service**

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Bulloch County, Georgia





# Local office

Georgia Ecological Services Field Office

☎ (706) 460-7161

📠 (706) 613-6059

355 East Hancock Avenue

Room 320

Athens, GA 30601-2523

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).



1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME	STATUS
<b>Tricolored Bat</b> <i>Perimyotis subflavus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

## Reptiles

NAME	STATUS
<b>Eastern Indigo Snake</b> <i>Drymarchon couperi</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/646">https://ecos.fws.gov/ecp/species/646</a>	Threatened

## Insects

NAME	STATUS
<b>Monarch Butterfly</b> <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

## Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

**What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?**

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).



### What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats<sup>3</sup> should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>



- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<p>American Kestrel <i>Falco sparverius paulus</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p> <p><a href="https://ecos.fws.gov/ecp/species/9587">https://ecos.fws.gov/ecp/species/9587</a></p>	Breeds Apr 1 to Aug 31
<p>Brown-headed Nuthatch <i>Sitta pusilla</i></p> <p>This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds Mar 1 to Jul 15



**Chimney Swift** *Chaetura pelagica*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Mar 15 to Aug 25

**Painted Bunting** *Passerina ciris*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Apr 25 to Aug 15

**Prairie Warbler** *Setophaga discolor*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 1 to Jul 31

**Prothonotary Warbler** *Protonotaria citrea*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 1 to Jul 31

**Swallow-tailed Kite** *Elanoides forficatus*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8938>

Breeds Mar 10 to Jun 30

**Wood Thrush** *Hylocichla mustelina*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 10 to Aug 31

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

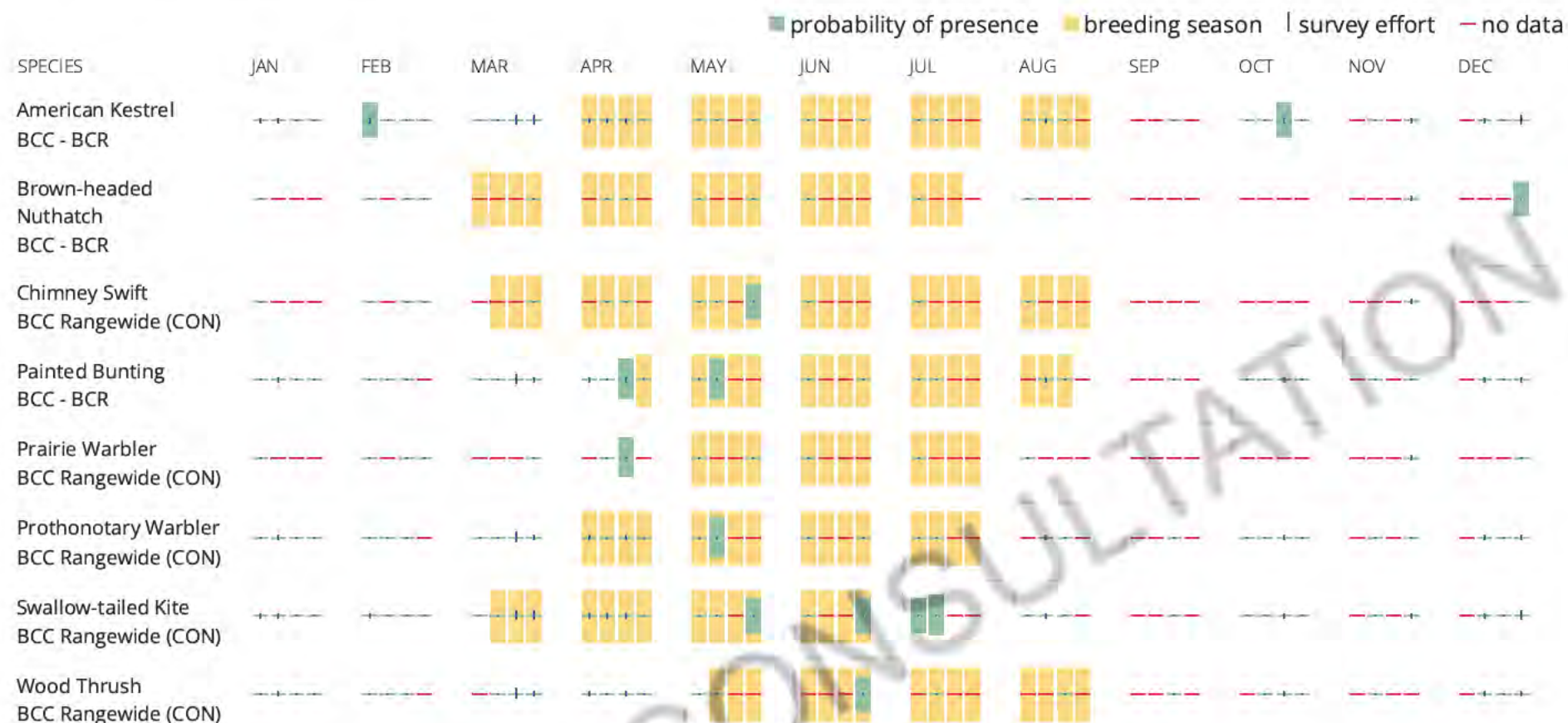
### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe



Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

### What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and



3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

# Facilities

## National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

## Fish hatcheries

There are no fish hatcheries at this location.

## Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

This location did not intersect any wetlands mapped by NWI.

**NOTE:** This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

### Data limitations



The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

**From:** [Alton Brown Jr.](#)  
**To:** [Wise, Sarah E CIV USARMY CESAS \(USA\)](#)  
**Cc:** [Trip Tollison](#); [Sara Gershon](#)  
**Subject:** [Non-DoD Source] RE: State and JDA Response to Recent Ground Water Withdrawal Information Request  
**Date:** Thursday, December 19, 2024 5:06:14 AM  
**Attachments:** [image001.png](#)  
[SAS-2015-00235 Bryan Mega Site USACE Additional Information Package.pdf](#)  
[016-0013 Bryan Cover Letter.pdf](#)  
[016-0013 Permit 2024-10.pdf](#)  
[016-0014 Bulloch Cover Letter.pdf](#)  
[016-0014 Permit 2024-10.pdf](#)

---

Sarah: See attached additional information for the Bryan Mega Site permit. I also have attached a copy of the water withdrawal permits issued by EPD to Bulloch County and Bryan County. Following review, let me know if you have any questions.

Alton

**Alton Brown, Jr. PRINCIPAL**

41 Park of Commerce Way, Suite 101

Savannah GA, 31405

📞 912 443 5896 📠 912 480 4402 📠 912 659 0084

<http://www.rlandc.com>

[Download vCard](#)



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**From:** Trip Tollison <[ttollison@seda.org](mailto:ttollison@seda.org)>  
**Sent:** Thursday, October 10, 2024 10:08 AM  
**To:** Wise, Sarah E CIV USARMY CESAS (USA) <[Sarah.E.Wise@usace.army.mil](mailto:Sarah.E.Wise@usace.army.mil)>  
**Cc:** Alton Brown Jr. <[abrown@rlandc.com](mailto:abrown@rlandc.com)>  
**Subject:** RE: State and JDA Response to Recent Ground Water Withdrawal Information Request

Good morning Sarah. Hope you are well. We are in receipt of your email along with the two, extensive comment letters from Ms. Bacchus.

We will continue to use Alton Brown of Resource Land Consultants as we move through this response and any other USACE Savannah related efforts. Alton is copied on this email.

Thank you.

Trip

---

**From:** Wise, Sarah E CIV USARMY CESAS (USA) <[Sarah.E.Wise@usace.army.mil](mailto:Sarah.E.Wise@usace.army.mil)>  
**Sent:** Thursday, October 10, 2024 9:32 AM  
**To:** Trip Tollison <[ttollison@seda.org](mailto:ttollison@seda.org)>  
**Subject:** Re: State and JDA Response to Recent Ground Water Withdrawal Information Request



Good morning Trip! We have reviewed the information provided below and have some additional questions. Please provide an assessment of effects on whether the anticipated drawdown of the Floridan aquifer would result in any drainage of aquatic resources. In addition, we are in receipt of 2 comment letters from Ms. Sydney Bacchus. Please provide a response to these comment letters. Given the size of the letters, I cannot attach them to this email. Therefore, I am sending them through a DoD SAFE link. If you do not receive this link, let me know and I will send another one. If you have any questions, please let me know.

V/R,

Sarah E. Wise  
Team Lead, Coastal Branch  
Regulatory Division  
U.S. Army Corps of Engineers, Savannah District

100 West Oglethorpe Avenue  
Savannah, Georgia 31401-3640  
912-652-5550 (desk)  
912-652-5995 (fax)

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**From:** Trip Tollison <[ttollison@seda.org](mailto:ttollison@seda.org)>  
**Sent:** Friday, September 20, 2024 3:19 PM  
**To:** O'Kane, Jason D CIV USARMY CESAS (USA) <[Jason.D.Okane@usace.army.mil](mailto:Jason.D.Okane@usace.army.mil)>; Wise, Sarah E CIV USARMY CESAS (USA) <[Sarah.E.Wise@usace.army.mil](mailto:Sarah.E.Wise@usace.army.mil)>  
**Cc:** Pat Wilson <[PWilson@georgia.org](mailto:PWilson@georgia.org)>; Sara Gershon <[SGershon@georgia.org](mailto:SGershon@georgia.org)>; [carterinfinger@bryan-county.org](mailto:carterinfinger@bryan-county.org) <[carterinfinger@bryan-county.org](mailto:carterinfinger@bryan-county.org)>; [jonpannell@gpwlawfirm.com](mailto:jonpannell@gpwlawfirm.com) <[jonpannell@gpwlawfirm.com](mailto:jonpannell@gpwlawfirm.com)>; Alton Brown <[abrown@rlandc.com](mailto:abrown@rlandc.com)>  
**Subject:** [Non-DoD Source] State and JDA Response to Recent Ground Water Withdrawal Information Request

Jason and Sarah: Good afternoon. Attached is the response letter from the state and JDA regarding USACE Savannah District's recent information request concerning ground water withdrawals for the Bryan County Mega Site. Also attached is a file containing the requested information (there is also a link within the response letter to this information).

Please confirm receipt of these documents.

If you have any questions, or need additional information, please let us know.

Have a great weekend.

Trip





**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, SAVANNAH DISTRICT**  
**100 W. OGLETHORPE AVENUE**  
**SAVANNAH, GEORGIA 31401-3604**

**MARCH 25, 2025**

Regulatory Division  
SAS-2006-00691

Mr. Hugh "Trip" Tollison  
Savannah Harbor-Interstate 16 Corridor Joint Development Authority  
131 Hutchinson Island Road, 4th Floor  
Savannah, Georgia 31421

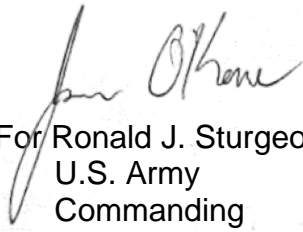
Mr. Pat Wilson, Commissioner  
Georgia Department of Economic Development  
Technology Square, 75 5th Street, N.W., Suite 1200  
Atlanta, Georgia 30308

Dear Mr. Tollison & Mr. Wilson:

I am writing in reference to Department of the Army (DA) permit SAS-2015-00235 proffered on October 4, 2022. The project site is located south of the intersection of Georgia Highway 280 and Interstate 16, in Ellabell, Bryan County, Georgia (Latitude 32.1584, Longitude -81.4533). The permit authorized permanent impacts to 221.36 acres of wetland, 763 linear feet of intermittent stream and 1.58 acres of ditch associated with the construction of an Electric Vehicle Original Equipment Manufacturing (EVOEM) facility, which would manufacture and distribute fully electric vehicles.

On August 23, 2024, we informed you that we re-evaluating the effects the project may have on municipal and private water supplies. Based on information supplied by you as well as the issuance of the groundwater withdrawal permits by the Georgia Department of Natural Resources, Environmental Protection Division, we have determined that the project would have a long-term minor effect on municipal and private water supplies.

If you have any further questions or concerns pertaining to this matter, please feel free to call Sarah Wise, Lead Biologist, Coastal Branch, at (912) 652-5550 or by email at [sarah.e.wise@usace.army.mil](mailto:sarah.e.wise@usace.army.mil).



For Ronald J. Sturgeon, PE  
U.S. Army  
Commanding



**From:** [Wise, Sarah E CIV USARMY CESAS \(USA\)](#)  
**To:** [Trip Tollison](#)  
**Cc:** [Alton Brown](#)  
**Subject:** RE: Reevaluation of the Corps' Kia Hyundai Permit Decision Regarding the Effects Determination on Municipal and Private Water Supplies  
**Date:** Friday, March 28, 2025 9:17:00 AM  
**Attachments:** [MFR Supplement to Hyundai Environmental Assessment 25.03.25.pdf](#)

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Good morning, Trip! Per our discussion yesterday, attached is the supplemental memorandum for record documenting our reevaluation decision. As stated in our call yesterday, this concludes our reevaluation process. If you have any questions, please let me know.

V/R,

Sarah E. Wise  
Lead Biologist, Coastal Branch  
Regulatory Division  
U.S. Army Corps of Engineers, Savannah District

100 West Oglethorpe Avenue  
Savannah, Georgia 31401-3640  
912-652-5550 (desk)  
912-652-5995 (fax)

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**From:** Trip Tollison <ttollison@seda.org>  
**Sent:** Thursday, March 27, 2025 2:16 PM  
**To:** Wise, Sarah E CIV USARMY CESAS (USA) <Sarah.E.Wise@usace.army.mil>  
**Cc:** Alton Brown <abrown@rlandc.com>  
**Subject:** [Non-DoD Source] RE: Reevaluation of the Corps' Kia Hyundai Permit Decision Regarding the Effects Determination on Municipal and Private Water Supplies

I tried to call you just now at the number below but it is constantly busy. I am happy to discuss more. My cell is 912-665-1079

Hugh "Trip" Tollison  
Savannah Economic Development Authority

(912) 447-8450

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**From:** Wise, Sarah E CIV USARMY CESAS (USA) <[Sarah.E.Wise@usace.army.mil](mailto:Sarah.E.Wise@usace.army.mil)>

**Sent:** Tuesday, March 25, 2025 5:14 PM

**To:** Trip Tollison <[ttollison@seda.org](mailto:ttollison@seda.org)>

**Cc:** Alton Brown <[abrown@rlandc.com](mailto:abrown@rlandc.com)>

**Subject:** Reevaluation of the Corps' Kia Hyundai Permit Decision Regarding the Effects Determination on Municipal and Private Water Supplies

Good afternoon, Trip. Attached is the Corps' reevaluation letter for the Kia Hyundai permit. If you have any questions, please let me know.

V/R,

Sarah E. Wise

Lead Biologist, Coastal Branch

Regulatory Division

U.S. Army Corps of Engineers, Savannah District

100 West Oglethorpe Avenue

Savannah, Georgia 31401-3640

912-652-5550 (desk)

912-652-5995 (fax)

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