| Subject | Comment | EPD Response |
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| **Conservation Zones** | While the commenter encourages the permitting of new wells for frost protection across the Flint River Basin, they understand the initial caution and approach to provide these permits for Floridan aquifer water withdrawal mainly in the green zones as defined by the 2006 FRB Plan. The commenter indicates that his approach ensures responsible and sustainable water management, considering the availability and capacity of the aquifer while addressing the specific needs of farmers for frost protection. | EPD believes that starting in the green zone makes the most sense for the protection of our water resource and commits to study the data that EPD receives on frost protection. As a result, there is no change to the permitting framework. However, EPD commits to exploring the potential impact of frost protection permitting within the yellow and red zones. To gather the information necessary for a thorough assessment, EPD has developed a Letter of Interest form to collect specific information about the potential level of interest in frost protection permitting in the yellow and red zones specifically. |
| | The commenter says that it will be cost prohibitive for farmers in some areas, so they support EPD considering yellow and red zones as defined in the 2006 Flint River Basin Plan. | |
| | The commenter states that frost protection should occur only in Green Zones, and goes on to note that in Mitchell County, many of the permitted wells in the red zones are being used for sweet corn and are heavily used in dry years beginning on Feb. 15 and peaks around March. 10. This ends on July 4. The commenter says that red zones in Mitchell County are probably maxed out. | |
| | The commenter supports EPD's proposed Frost Protection Permitting framework because the framework appears to propose a "reasonable use of basin water to help conserve that increasingly scarce resource" in the Flint River Basin while also recognizing the climate challenges producers and the ecosystem face. | |
| | The commenter states that for Floridan aquifer water withdrawals, frost protection permitting should occur in the green zones, as defined by the 2006 FRB Plan. They also noted the potential overlap of sweet corn water needs with frost protection (Feb/March), and the impact of this overlapping use might be high in red areas. However, they said that in some places, frost protection in red areas might work without adverse impacts. It was acknowledged that starting in green areas probably makes sense. | |
| | The commenter indicated that the economic driver in this area is water and appreciated EPD's looking into wider issues. The commenter noted that water use is low in comparison to past, that EPD should look to expand water use in this area and continue to expand the agricultural economy. | |

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| **Eligibility** | The commenter strongly believes that all farmers, whether they currently hold another existing water withdrawal permit, should be eligible for frost protection permits. The commenter believes that this ensures equitable access to water resources for frost protection, regardless of the farmer's existing water usage capabilities. It acknowledges the importance of protecting crops from frost events, which can have devastating consequences for agricultural commodities. | EPD agrees anyone within the eligible area can apply for a permit or a permit modification. Any potential agricultural water user within the eligible area can apply for a frost protection permit or a permit modification to reflect frost protection use under an existing agricultural water use permit. No change to the permitting framework. |
| | The commenter stated that applicants who hold existing permits should be allowed to be eligible for frost protection permits. | |
| **Dedicated Frost Protection Wells and Variable Rate Motors** | The commenter supports the use of variable rate motors and believe that they play a vital role in frost protection for Georgia farmers. Variable rate motors allow farmers to precisely control the flow rate and distribution of water during frost protection irrigation. By adjusting the motor's speed and output, farmers can apply water directly to the plants or specific areas that are most susceptible to frost damage. This targeted approach ensures that the water is delivered where it is needed the most, maximizing its effectiveness in protecting crops. Their ability to provide targeted water application, promote water conservation, enhance energy efficiency, offer customization and adaptability, and enhance crop protection make them essential tools for farmers in mitigating the risks associated with frost events. By utilizing variable rate motors, farmers can optimize their irrigation strategies, minimize crop damage, and ensure the sustainability and productivity of their agricultural operations. | The EPD has had the incredible opportunity to receive demonstrations of variable rate motors (VRM) on both citrus and berry operations. These demonstrations have provided insights into the benefits that VRM can offer to growers when used for both frost protection and irrigation purposes. EPD understands that potential benefits include enhanced energy efficiency, precise control of flow rates and pressure, and optimized resource usage, while improving water conservation. Based on the knowledge and operational information garnered from these demonstrations, EPD has modified the frost protection permitting framework to account for the potential benefits that VRM technology can bring to both irrigation and frost protection practices. Moving forward, EPD will evaluate applications proposing the use of VRM on a case-by-case basis to ensure the permitting process aligns with sustainable water management and existing permitted user protections. |
| | Variable rates motors can be utilized to be more efficient in energy use and water application. The motor speeds can be turned up and down depending on irrigation and frost protection application needs. The commenter indicates that they could use the same infrastructure for both FP and irrigation without putting another IV into the ground. | |
| | The commenter provided specific crop and application rate information. The commenter supports the utilization of same infrastructure for both irrigation and frost protection needs. | |

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| | The commenter notes that one concern raised about permitting framework was about not accepting variable rate motors. The commenter indicated that there may be a benefit to allowing these as part of the permits, particularly if the proper reporting can go back to EPD. | |
| | The commenter indicated that specific wells should be used for frost protection only, and variable rate motors should not be accepted. | |
| | The commenter supports the proposal that specific wells could be used exclusively for frost protection purposes, however, the commenter feels that in emergency situations farmers should be allowed to use existing wells to protect their crops in a frost event, regardless of their primary purpose. This approach allows for efficient water allocation and usage during critical frost protection periods, ensuring that farmers can effectively protect their crops without compromising the availability of other water resources. | |
| | The commenter believes that if an existing permitted well is used for regular irrigation and frost protection, that it be allowed. | |
| | For new wells, the commenter believes that specific wells should be used for frost protection only, and variable rate motors should not be accepted. | |
| **Telemetry Utilization with Water Use Meters** | The commenter disagrees that EPD-prescribed telemetry equipment should be required for all frost protection permits to monitor air temperature, as well as the timing and volume of water withdrawn. This decision-making process could be left to individual farmers, within reason, to ensure their crops are protected. Farmers have long been the greatest stewards of their natural resources and we believe that this capability is essential for ensuring proper protection of crops, while promoting accountability among farmers. If farmers are prepared to make the large investments necessary for frost protection wells and the other infrastructure required, they should not be at risk of then losing a crop because they are awaiting further governmental approval in a weather event that may be individualized to their farm, or specific part of their county. | Telemetry units and their associated meters installed on the permitted farms are only intended to provide information to EPD on water use amounts and patterns. EPD and the State benefited substantially from agricultural water meters installed across Georgia in the past decades. Water use information provided by meter readings played a critical role in the Special Master's accepting Georgia's estimated basin-wide water use and its impact in the US Supreme Court case of Florida vs. Georgia. Georgia's ultimate victory in the case stemmed from that acceptance. Telemetry data collected on frost protection operations will be invaluable in similar fashions. Telemetry units are only informational in nature. They will in no way interfere with independent operation decisions made by permitted growers. The data will in no way replace the growers' discretion when it comes to the timing of frost protection applications or other |
| | The commenter indicates that the use of telemetry systems is straightforward with the information it will provide to the farmer and EPD and says telemetry ensures compliance with the farmer's permit. | |

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| | EPD prescribed telemetry equipment to monitor air temperature and the timing and volume of water withdrawn should be required for all frost protection permits. | operational decisions. EPD respects the autonomy of growers in managing their operations, and the EPD will not intervene in controlling on/off or any other operational decision points. Collaboration with stakeholders, including growers, remains a vital aspect of our approach to water management, fostering a shared responsibility in protecting and preserving the precious water resources for future generations. EPD will require telemetry units for withdrawals associated with frost protection permits. |
| | The commenter supports EPD's requirement for telemetry equipment to monitor air temperature and the timing and volume of water withdrawn for all frost protection permits. Georgia must continue to collect all necessary quantifiable data to demonstrate reasonable use of all water resources. Data collected by the state formulates an insurance policy—and evidence—for water users in the event of a future state or transboundary legal disputes. Because "water wars" are never over Georgia must collect municipal, industrial, and agricultural water use data to prove Georgians use water wisely and that the use is reasonable. | |
| | The commenter agrees that EPD prescribed telemetry equipment to monitor air temperature and the timing and volume of water withdrawn should be required for all frost protection permits. | |
| **Surface Water Use (Well to Pond Systems)** | The commenter supports allowing the use of surface water for frost protection permits. Surface water can serve as an alternative source for frost protection in areas where access to groundwater is limited. By incorporating surface water options, the commenter says we can provide flexibility to farmers and ensure that they have viable water sources for frost protection. The commenter notes that surface water plays an important role in their frost protection plans as they can "pre-load" irrigation ponds to be prepared for the sheer volume of water that is needed in a short amount of time to protect their crops during a freeze event. | EPD understands that some landowners in the Flint River Basin are hydrogeologically challenged with respect to groundwater availability. In those areas of those known challenges, EPD will consider proposed surface water frost protection systems that include groundwater well discharges into farm ponds on a case-by-case application basis. |
| | The commenter states that, in some areas, surface water may be all a farmer has, and they support the use of surface water ponds from frost protection. | |
| | The commenter says that no new surface water permits should be issued for frost protection except out of private reservoirs. | |

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| **Recommendations** | The commenter says that EPD should ask farmers to provide details on how farming operations in citrus and berry are carried out. EPD should consider a consultant who can advise EPD on these systems used on the farms, specifically the various setups that can be used to keep water used just enough for what the crops need. | EPD agrees that farmers are the experts, and EPD spoke directly with farmers in these areas to gain additional information. The insights gained from these experts' experiences and knowledge have proven instrumental in enhancing our understanding of the region's unique water needs. Moreover, the operational infrastructure demonstrations shared by the regional growers have been enlightening and informative. The hands-on approach to showcasing their methods and technologies has allowed us to witness firsthand the practical applications and challenges faced in water resource management. |
| **General Comments** | The commenter is working with all parties to help lift elements of the suspension, because the suspension represents a form of mismanagement. The commenter is proud of all the work going into the effort to lift the suspension and is looking to the farmer and hydrologic managers to make it happen. | Thank you for your comments. |
| | The commenter noted that people call the Georgia Department of Agriculture wanting to know who is making these decisions around water withdrawal permitting and the permitting suspension. | Thank you for your comments. EPD is committed to open and full communication with the Department of Agriculture. EPD will continue the work closely with the Department of Agriculture to answer questions and provide information. |
| | The commenter asked if there was a thorough look into temperature history. | Yes. EPD pulled climate data for locations within the basin, spoke with farmers within the basin about their water use, and looked at other areas of the state to understand how often frost protection may be necessary. |
| | A commenter asked why a Habitat Conservation Plan was being developed. The commenter indicated that it is unclear exactly what a Habitat Conservation Plan is and that they can't get details on what it is and what it costs. | Thank you for your comments. EPD and the Georgia Water Planning and Policy Center have both updated their websites in response to this comment. Both websites now include additional discussion of the Habitat Conservation Plan. |