

**Southwest Florida Water Management District
Dover/Plant City Freeze Protection Rule Revisions
Frequently Asked Questions
June 2011**

1. Why did the District revise its rules in the Dover/Plant City area?

Answer: Over the past 40 years or more, farmers in the Dover/Plant City area have pumped groundwater to protect their crops by irrigating when temperatures drop below freezing. This is a best management practice for many agricultural commodities such as strawberries, blueberries, citrus, nurseries and aquaculture. Because most farmers in the area turn on their irrigation systems to their full capacity all at the same time, a tremendous strain is placed on the Floridan aquifer resulting in lowered groundwater levels. These reduced groundwater levels in turn have resulted in impacts to residential wells and have caused sinkholes to form. During the 11-day January 2010 freeze event, approximately 750 residential wells were impacted and more than 140 sinkholes were reported. Moreover, significant freeze events resulting in well failures and sinkholes have occurred three times over the past 10 years. The rule revisions are one component of a multifaceted, comprehensive management plan to significantly reduce the impacts from pumping during future freeze events.

2. To whom do the rule revisions apply?

Answer: The rule revisions apply to all existing permittees and permit applicants in the Dover/Plant City area with crops that require frost/freeze protection.

3. What do the rule revisions do?

Answer: The rule revisions declare a 256-square-mile water use caution area in the Dover/Plant City area, establish a minimum aquifer level and Minimum Aquifer Level Protection Zone in the Dover/Plant City area, impose special water use permitting criteria, and develop a recovery strategy to help meet the minimum aquifer level. The overall purpose of the rules is to prevent impacts during future freeze events from worsening. The recovery strategy described below is designed to reduce impacts during future freezes.

4. What is a water use caution area?

Answer: A water use caution area (WUCA) is designated where water resources are or will become critical in the next 20 years. A WUCA may be declared when the District's Governing Board determines that regional action is necessary to address cumulative water withdrawals, which are causing or may cause adverse impacts to the water and related land resources or the public interest. The purpose of a WUCA is to identify the area where the District intends to impose special requirements for existing permittees and permit applicants to prevent or remedy regional problems.

5. What is the Minimum Aquifer Level and Minimum Aquifer Level Protection Zone?

Answer: A minimum aquifer level is the level at which further withdrawals will cause significant harm. The Minimum Aquifer Level Protection Zone is the most impacted area where the greatest concentration of withdrawal impacts, such as well complaints and sinkholes have occurred. In the Dover/Plant City area, the proposed minimum aquifer level has been set at 10 feet above sea level at the District's DV-1 well because the District determined that the majority of the well failures and sinkholes happened after water levels fell below this level. The Minimum Aquifer Level Protection Zone has been established in the surrounding area where groundwater withdrawals have lowered the aquifer by more than 30 feet.

6. Why did the District develop a recovery strategy for the minimum aquifer level?

Answer: The District is required by Florida statute to develop a recovery strategy whenever a water body is not meeting its established minimum flow or level. The aquifer levels in the Dover/Plant City area fell well below the minimum aquifer level in January 2010 as well as several times in previous years. Since aquifer levels in the Dover/Plant City area fall below the minimum aquifer level during significant freeze events, a recovery strategy is required.

7. What is the goal of the recovery strategy?

Answer: The recovery strategy has a goal of reducing groundwater pumping for freeze protection by 20 percent within 10 years. It's expected that such reductions would keep groundwater levels above the minimum aquifer level and avoid or minimize significant impacts. Achievements toward this goal will be reviewed after the first five years.

8. Will my frost/freeze quantities automatically be reduced by 20 percent?

Answer: No. Florida statutes allow for recovery strategies to gradually restore the aquifer levels so that permittees have time to adapt to new practices or use alternative water sources. The District hopes to achieve the 20 percent goal by offering financial incentives for alternative freeze protection methods, such as tailwater recovery ponds and crop covers. These incentives will be available through the District's Facilitating Agricultural Resource Management Systems, or FARMS, Program.

9. When did the rule revisions take effect?

Answer: The District's Governing Board approved the rules in December 2010. The rules went into effect on June 16, 2011.

10. Where do the rule revisions apply?

Answer: The rule revisions apply to the 256-square-mile WUCA in the Dover/Plant City area. In addition, freeze protection quantities located outside of the WUCA that cause a drawdown in the Minimum Aquifer Level Protection Zone within the WUCA will also be affected by the proposed rules.

11. If I have an existing permit with frost/freeze quantities, can I move my withdrawals to a different location?

Answer: Yes, existing permittees can move their withdrawals to a different location as long as their freeze protection withdrawals do not exacerbate impacts and they otherwise meet rule criteria.

12. If I have an existing permit with frost/freeze quantities, can I transfer the quantities to a new owner?

Answer: Yes, existing permittees can transfer permitted quantities to a new owner.

13. What happens when my permit is up for renewal?

Answer: All permit applicants with frost/freeze protection quantities, including renewals and modifications, will be asked to evaluate alternative methods of freeze protection such as tailwater recovery ponds and crop covers. The District's FARMS program is offering funding and assistance in this area.

14. Will permit applicants be able to get new or additional frost/freeze protection quantities?

Answer: New groundwater withdrawals for frost/freeze protection will be authorized if they do not impact the Minimum Aquifer Level Protection Zone. If they do impact the zone, the applicant will either have to use an alternative method for frost/freeze protection or must use one of several "net benefit" mechanisms. The most common mechanism will likely be retiring an existing permitted groundwater quantity that has had an impact on or within the minimum aquifer level protection zone. The rules allow 80 percent of that existing freeze protection impact to be re-permitted, with 20 percent being retired to assist in the recovery of the aquifer level in the area.

15. What are some other ways the revisions will affect permittees?

Answer: Other ways permittees will be affected include:

- Flow meters and automatic meter reading devices are now required on all withdrawal points, such as wells and reservoirs, for all permits with crops that utilize frost/freeze protection quantities. The District will provide funding for flow meters and installation for existing permit holders not previously required to have flow meters. Permit holders will be responsible for any maintenance or replacement of these meters. The District will also fund automatic meter reading equipment and installation. The District will be responsible for all ongoing costs associated with the automatic meter reading equipment.
- The District implemented a new more efficient and equitable system for investigating and assigning well complaints for mitigation.

16. What else is the District doing to manage the issue?

Answer: The District has expanded the Dover Special Well Construction Area to reduce the likelihood that homeowners will experience well failures during prolonged freeze events. The District is also enhancing its communications before, during and after freeze events to the media, residents and permit holders. In addition, the District is expanding its data collection network for freeze events by drilling additional monitoring wells.

17. Where can I get more information?

Answer: For more information, visit www.WaterMatters.org/frost-freeze/.