Frequently Asked Questions About the Water Shortage Order for the Northeastern Portion of Cape Coral

Q: What are the water shortage restrictions implemented by the South Florida Water Management District?

A: To protect groundwater in the Mid-Hawthorn Aquifer, the South Florida Water Management District (District) declared a water shortage on November 28, 2023, and issued mandatory irrigation restrictions for portions of Cape Coral and unincorporated Lee County. Landscape irrigation is limited to one day a week in the designated area for irrigation water supplied by private wells. This water shortage is still in effect, and it is very serious.

Q: Why were water shortage restrictions only implemented for northeastern Cape Coral?

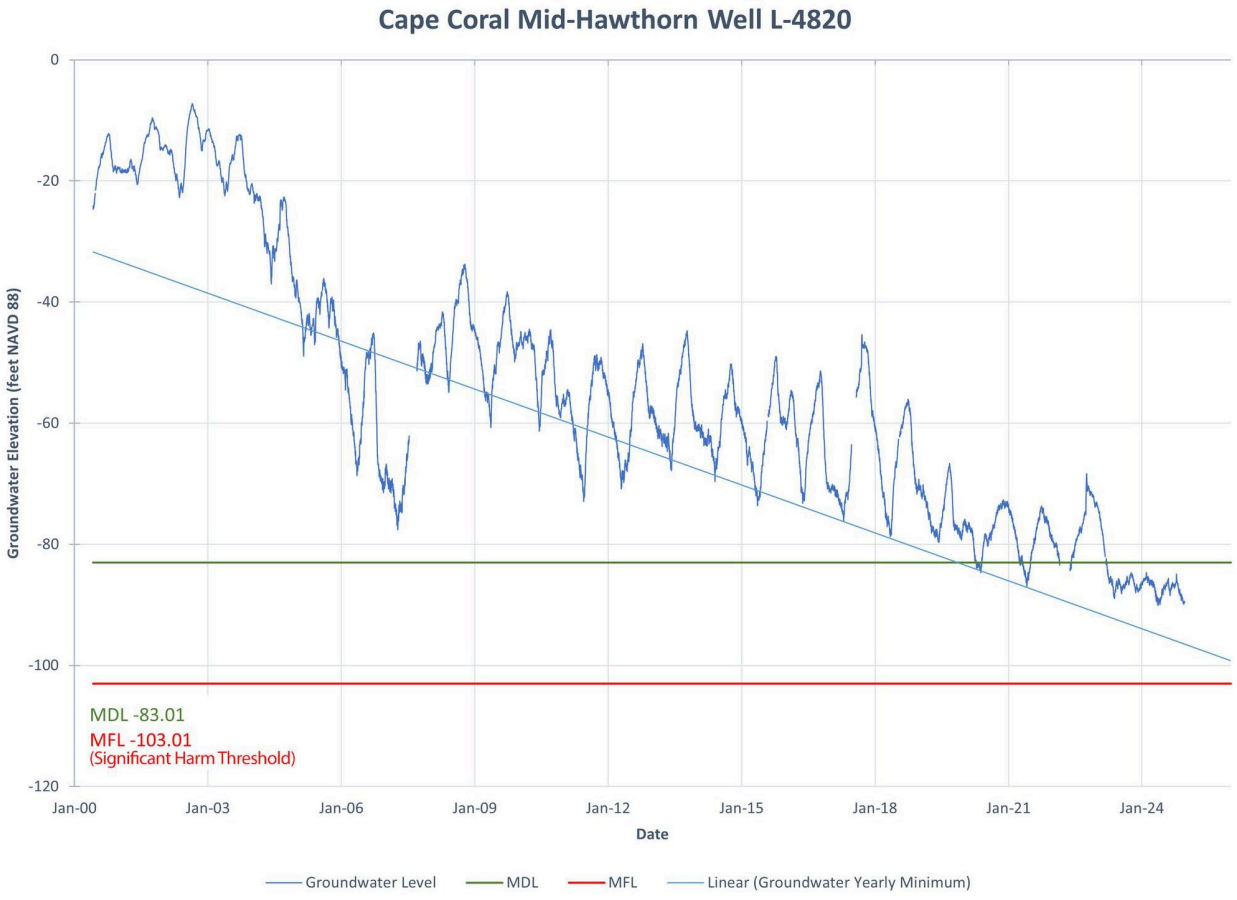
A: Water shortage orders are based on specific water resource concerns. In the case of northeastern Cape Coral, the water resource of concern is the Mid-Hawthorn Aquifer, located 125-150 feet below land surface. The Mid-Hawthorn Aquifer supplies water to many private wells in the area for drinking and irrigation. The aquifer is at its shallowest point in northeastern Cape Coral, making this area more susceptible to low water levels. The District uses specialized monitoring wells to measure water levels within the aquifer throughout Cape Coral, and analyzes this data to determine potential harm within the aquifer and protect it from permanent damage. The current water level in the Mid-Hawthorn Aquifer falls below District regulatory criteria intended to protect the aquifer and its water supply. The water level is approaching the lowest point ever recorded and it is projected to continue to decline. The current water elevation is approximately 15 feet lower compared to four of the last five years. By reducing irrigation withdrawals from the Mid-Hawthorn Aquifer through water shortage restrictions, the District is hopeful this will decrease the projected water level decline in the aquifer and protect the Mid-Hawthorn Aquifer from permanent damage.

Q: Why isn't the entire City of Cape Coral under water shortage restrictions?

A: The City of Cape Coral's drinking water originates from the deeper Floridan Aquifer, about 1,000 feet below land surface. This groundwater source is brackish and requires reverse osmosis to allow it to be used for drinking water. There is no connection between the Floridan Aquifer and the Mid-Hawthorn Aquifer. The City also provides irrigation water which is made up of reclaimed water (treated wastewater) and surface water from the local canal system. There is no connection between these sources and the Mid-Hawthorn Aquifer. As such, there is not a resource concern from these sources of water or the need to restrict their use.

Q: We’ve received above average rainfall in the summer of 2024. Why weren’t watering restrictions lifted?

A: Aquifer water levels did not recover sufficiently enough to minimize the potential for harm to the Mid-Hawthorn Aquifer. The Mid-Hawthorn Aquifer is a semi-confined aquifer, meaning it has rock layers above it that prevent rainfall over Cape Coral from directly recharging the aquifer. The Mid-Hawthorn Aquifer receives its recharge from areas north of Lee County where these confining rock layers are absent. The aquifer levels did not increase during the 2023 and 2024 summer months (rainy season) as has historically occurred. This is because water withdrawals from the Mid-Hawthorn Aquifer in Cape Coral exceeded the rate of water recharge from the north. Water shortage restrictions are expected to remain in effect until aquifer water levels recover sufficiently to minimize the potential for harm to the Mid-Hawthorn Aquifer.



Q: Why are declining water levels a problem?

A: Private water wells used by homeowners for drinking and irrigation may become inoperable if water levels within the aquifer continue to decline at the current rate. This is because the aquifer's water level could fall below the reach of the private well. If water levels get too low, it could cause irreversible damage to the aquifer, permanently reducing the available water from this source.

Q: What if water levels in the Mid-Hawthorn Aquifer continue to decline?

A: If the aquifer drops closer to the “significant harm threshold,” more restrictions will be put into place and residents may no longer be able to use their lawn irrigation systems. Restrictions are put in place to protect the aquifer and drinking water supply.

Q: Is my home at risk from collapse if water levels in the Mid-Hawthorn Aquifer fall below the top of the aquifer?

A: The potential for formation of sinkholes in Cape Coral is minimal. However, if water levels drop below the top of the Mid-Hawthorn Aquifer, it could result in compaction of the small water holding voids in the aquifer rock. Compaction of the aquifer will affect the amount of water that is stored in the aquifer and reduce the water that is available to be used. The aquifer is 125 feet below land surface.

Q: If my Mid-Hawthorn Aquifer well goes dry, what are my options?

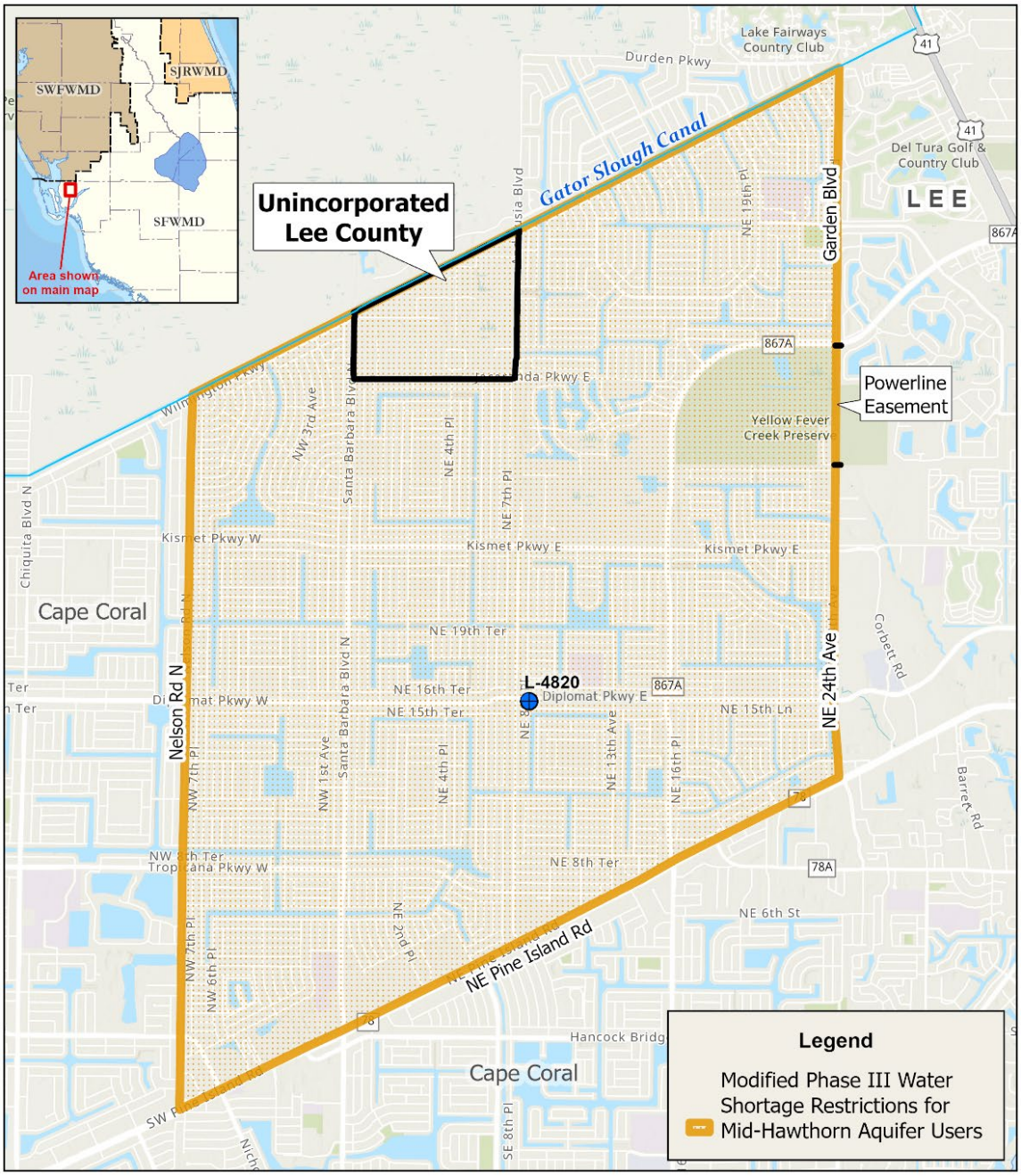
A: Currently, if your well goes dry, one of the primary mitigation measures is to drill a new deeper well into lower portions of the aquifer.

Q: What is the long-term solution for a sustainable water supply in northern Cape Coral?

A: The City is in the process of installing water, wastewater and irrigation water pipes throughout the City. The southern half of Cape Coral (south of Pine Island Road) has had regional services installed and Mid-Hawthorn Aquifer water levels have recovered in those areas. Regional services are currently being installed in the southeastern portion of the affected area (Utility Expansion Project (UEP) North 1 West) that is currently under water shortage restrictions. With completion in late 2025 and connection of homes and businesses, it is anticipated this will provide some relief to declining water levels. The City is planning to have regional services available to a majority of the affected area by 2030. Efforts should be made to conserve the limited water supply to only potable drinking and other indoor uses. With our efforts, we are trying to bridge the gap until those regional services are available and residents are connected. Homeowners and businesses are encouraged to reduce any wasteful or unnecessary water use practices and implement water conservation measures which reduce water demands.

Q: Where are the water shortage restrictions being enforced?

A: The map shows the area of Cape Coral and unincorporated Lee County where watering restrictions are being enforced.



Modified Phase III Water Shortage Restrictions for Mid-Hawthorn Aquifer Users

South Florida Water Management District
3301 Gun Club Rd., West Palm Beach, Florida 33406
(561) 686-8800, www.sfwmd.gov

0 0.5 1 1.5 2 Miles
0 0.5 1 1.5 2 2.5 3 Kilometers

BASE CREDITS:
State plane projection, Florida east zone, NAD 83 HARN, US feet

IMPORTANT DISCLAIMER:
This map is a conceptual or planning tool only. The South Florida Water Management District does not guarantee or make any representation regarding the information contained herein. It is not self-executing or binding, and does not affect the interests of any persons or properties, including any present or future right or use of real property.

January 2025

GEOSPATIAL SERVICES

User Name: ahoffart

Date Saved: 1/13/2025 10:10 AM

\\ad.sfwmd.gov\dfsroot\GS\GSPro\WS\WaterShortage\WaterShortage.aprx
Layout Name: 20250113_CapeCoral_WaterShortageArea