

DROUGHT CONTINGENCY PLAN

For

**GALVESTON COUNTY
WATER CONTROL & IMPROVEMENT DISTRICT No. 1
DICKINSON, TEXAS**



**Approved by the
Galveston County WCID #1 Board of Directors
On
July, 2021**

DROUGHT CONTINGENCY PLAN

Section 1 - Declaration of Policy, Purpose, and Intent

In cases of extreme drought, periods of abnormally high usage, system contamination, or extended reduction in ability to supply water due to equipment failure, temporary restrictions will be instituted to limit non-essential water usage. The purpose of the Drought Contingency Plan is to encourage, and under emergency conditions require, customer conservation in order to maintain supply, storage, or pressure.

Section 2 - Public Involvement

Opportunity for the public to provide input into the preparation of the Plan was provided by posting of Notice of Board Meeting to approve ordinance adopting Drought Contingency Plan.

The meeting took place at:

Date: August 17, 2015

Time: 4:00 PM

Place: Joint City Hall/Water District Facility at 4403 Hwy 3, Dickinson, TX.

Section 3 - Public Education

The District will periodically provide the public with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage.

Drought plan information will be provided by press release and utility bill notice advising of availability of plan on internet web site or from Utility Billing Office. Additional information will be provided at various sponsored events throughout The District.

Section 4 - Coordination with Regional Water Planning Groups

The service area of The District is located within Regional Water Planning Group H and a copy of this plan has been mailed to this planning group.

Section 5 - Notice Requirements

Notice will be provided to each customer **prior to implementation or termination of each stage of the water restriction program**. Notice will be provided through posting on District web site, news release to radio, television and newspaper. The notice will include:

- The date restrictions will begin
- The circumstances that triggered the restrictions

- The stages of response and explanation of the restrictions to be implemented
- An explanation of the consequences for violations.

The utility will notify the TCEQ by telephone at (512) 239- 6020, or electronic mail at watermon@TCEQ.state.tx.us upon implementation the program and will notify in writing the Public Drinking Water Section at MC - 155, P.O. Box 13087, Austin, Texas 78711-3087 within five (5) working days of implementation including a copy of the utility's restriction notice. The utility must file a status report of its restriction program with the TCEQ every 30 days that restriction continues.

Section 6 - Violations

First violation - The customer will be notified by written notice of their specific violation.

Subsequent violations:

- A court citation will be issued for violation of this Ordinance and the amount fined shall not exceed the jurisdiction of the Justice Court.
- Continued violations may result in termination of water service.

Section 7 - Exemptions or Variances

The District Board of Directors may grant variance from requirements of this Plan in accordance with District Policy. An applicant who is refused a variance may appeal such action to the District. Any person seeking an exemption from this Plan may apply in writing to the District Board of Directors and must demonstrate good cause for the exemption. The District Board of Directors will treat all customers equally concerning exemptions and variances, and shall not discriminate in granting exemptions and variances. No exemption or variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the exemption or variance.

Section 8 - System Supply Strategy

The District water system is supplied with a combination of well water and surface water. The well water is supplied by water wells owned and operated by the system and can safely supply our annual daily average. The Surface water supply is through a purchase agreement with the GCWA, Texas and this supply can safely supply our daily annual average. With limitations on either of these supplies during peak pumping seasons it may be necessary to implement water usage restrictions. The District has five pump stations that can pump well water, surface water or a combination of both. The Pump Stations can safely supply the daily average flow but may require usage restrictions in the event of equipment outages during peak water pumping seasons.

Section 9 - Response Stages

The District will communicate Stage I concepts each year. If, supply or demand triggers are met The District will initiate the appropriate elevated Stage of restrictions.

The District in coordination with the Gulf Coast Water Authority and other entities in the area have adopted the regional Drought Contingency Plan which has the intent to standardize requirements in the region.

Water Shortage Conditions assumes 4 drought stages:

- Stage 1 Mild
- Stage 2 Moderate
- Stage 3 Severe
- Stage 4 Emergency

Stage 1 Drought – MILD Water Shortage Conditions

Triggers and Termination

Initiate:

When WATER DEMAND for 4 Consecutive Days:

- Equals or exceeds 80% (3.728 MGD) of available contracted surface water supply

OR when WATER SYSTEM for 3 consecutive days experiences:

- System wells are operating at 80% of maximum pumping capacity to augment an inadequate supply of contracted surface water

OR when WATER SUPPLY is:

- Insufficient to meet Demand

Terminate:

When all conditions listed as triggering events have ceased to exist for 7 consecutive days. Authorizing authority shall have discretion to terminate or continue voluntarily.

Stage 1 Drought – MILD Water Shortage Conditions

Responses and Termination

Community Outreach

- Advise public of condition and publicize availability of information from established information center and person of contact
- Notify public by means of:

- Public service announcement
- Announcement in newspaper or other local publication
- Direct mail
- Signs posted in public places
- Explain necessity for initiation of strict conservation methods

System Measures

- Visually inspect lines and repair leaks on a daily basis
- Flushing hydrants or valves shall be limited to maintaining public health, safety, and welfare
- Notify the TCEQ and GCWA of implementation of this drought stage.

Supply Management Measures

- Implement system oversight to be able to make adjustments as required to meet changing conditions
- Reduce or discontinue flushing of water mains
- Reduce all operations of the city/district to adhere to water use restrictions prescribed for Stage 2
- Where feasible, substitute reclaimed, non-potable water for city/district irrigation

Demand Management Measures (VOLUNTARY)

- Contact high-use customers and request voluntary water conservation measures to reduce usage by at least 10%
- Encourage more efficient water usage through conservation measures such as those in Appendix A
- Discourage waste of water, which is defined as excessive pooling and/or runoff from a property that forms a stream of water in a street for a distance of 50 feet or greater, or pools in a street or parking lot to a depth greater than ¼ inch.
- Publicize a voluntary lawn watering schedule that:
 - Limits the irrigation of landscaped areas with automatic sprinkler systems or hose-end sprinklers to designated watering days:
 - Monday and Thursday (OR Tuesday and Friday) between the hours of 12:01 am and 5:00 am and 10:00 pm and 11:59 pm for customers with even numbered addresses

- Tuesday and Friday (OR Monday and Thursday) between the hours of 12:01 am and 5:00 am and 10:00 pm and 11:59 pm for customers with odd numbered addresses
 - Allows irrigation of landscaped areas by the following means at any time:
 - Faucet-filled bucket or watering can of five (5) gallons or less.
 - Soaker hose that does not produce a spray of water above the ground
 - Drip irrigation system that does not produce a spray of water above the ground
 - Hand-held hose equipped with a positive shutoff nozzle
- Publicize the need to minimize or discontinue water use for non-essential purposes, which are defined as the use of water for:
 - Washing the following:
 - Motor or recreational vehicles
 - Washing is allowed during designated times and days for applicable residential addresses
 - Such washing, when allowed, shall be done with a hand-held bucket and/or hand-held hose equipped with a positive shutoff nozzle
 - Sidewalks, walkways, driveways, parking lots, tennis courts or other hard-surfaced areas
 - Buildings or structures for purposes other than immediate fire protection
 - Filling, refilling, or replenishing any recreational pool, pond for aesthetic or scenic purposes, or ornamental water fountains, fixtures, etc., except on designated watering days and where such pool, ponds or fountains are equipped with a recirculation system and are necessary to protect aquatic life
 - Irrigating the following:
 - Parks or greenbelts
 - Golf course greens, tees, and fairways except on designated watering days.
 - If a golf course uses a water source other than potable water provided by the water system, then the facility shall not be subject to these regulations.
 - Stabilizing foundations through the use of water, except on designated watering days between the hours of 10am and 2pm.
 - Watering is permitted by means of:
 - Handheld hose equipped with a positive shutoff nozzle
 - Soaker hose or drip irrigation system placed within 24 inches of foundation that does not produce a spray of water above the ground

- When daily surface water demand exceeds 85% of supply for 3 consecutive days, foundation watering shall cease
- Controlling dust
- Flushing gutters or permitting water to run or accumulate in any gutter or street
- Failing to repair a leak(s) within a reasonable time after having been given notice directing the repair of such leak(s)
- During winter months, request water users to insulate pipes rather than running water to prevent freezing

Terminate:

- Upon termination of Stage 1

Stage 2 Drought – MODERATE Water Shortage Conditions Triggers and Termination

Initiate:

When WATER DEMAND for 4 Consecutive Days:

- Equals or exceeds 85% (3.961) of available contracted surface water supply

OR when WATER SYSTEM for 3 consecutive days experiences:

- System wells are operating at 85% of maximum pumping capacity to augment an inadequate supply of contracted surface water

OR when WATER SUPPLY is:

- Insufficient to meet Demand

AND when GCWA requires municipal customers to reduce GCWA water by 10% or more of current usage

Terminate:

When all conditions listed as triggering events have ceased to exist for 7 consecutive days. Authorizing authority shall have discretion to terminate or continue voluntarily.

Stage 2 Drought – MODERATE Water Shortage Conditions Responses and Termination

Goal: Achieve a 20% reduction in daily water consumption, based on previous 14 days

Community Outreach

- Continue implementation of all relevant actions in preceding phase

System Measures

- Continue implementation of all relevant actions in preceding phase

Supply Management Measures

- Continue implementation of all relevant actions in preceding phase

Demand Management Measures (MANDATORY, under threat of penalty)

- Continue implementation of all relevant actions in preceding phase
- Contact commercial and industrial users and advise of mandatory water use restrictions to reduce usage by at least 20%
- Contact high-use customers and advise of mandatory water use restrictions to reduce usage by at least 20%
- Prohibit waste of water, which is defined as excessive pooling and/or runoff from a property that forms a stream of water in a street for a distance of 50 feet or greater, or pools in a street or parking lot to a depth greater than ¼ inch
- Publicize a mandatory lawn watering schedule that:
 - Limits the irrigation of landscaped areas with automatic sprinkler systems or hose-end sprinklers to designated watering days:
 - Monday and Thursday (OR Tuesday and Friday) between the hours of 12:01 am and 5:00 am and 10:00 pm and 11:59 pm for customers with even numbered addresses
 - Tuesday and Friday (OR Monday and Thursday) between the hours of 12:01 am and 5:00 am and 10:00 pm and 11:59 pm for customers with odd numbered addresses
 - Allows irrigation of landscaped areas by the following means at any time:
 - Faucet-filled bucket or watering can of five (5) gallons or less
 - Soaker hose that does not produce a spray of water above the ground
 - Drip irrigation system that does not produce a spray of water above the ground
 - Hand-held hose equipped with a positive shutoff nozzle
 - When daily surface water demand exceeds 80% of supply for 3 consecutive days, hand-held hose usage shall cease
- Prohibit the use of water for non-essential purposes, except as specified, with non-essential purposes defined as the use of water for:
 - Washing the following:
 - Motor or recreational vehicles
 - Washing is allowed during designated times and days for applicable residential addresses
 - Such washing may be exempted from these regulations if the health, safety or welfare or the public is contingent, i.e. garbage trucks and other vehicles used to transport food and perishables
 - Such washing, when allowed, shall be done with a hand-held bucket and hand-held hose equipped with a positive shutoff nozzle

- Sidewalks, walkways, driveways, parking lots, tennis courts or other hard-surfaced areas
 - Buildings or structures for purposes other than immediate fire protection
 - Filling, refilling, or replenishing any recreational pool, pond for aesthetic or scenic purposes, or ornamental water fountains, fixtures, etc., except on designated watering days and where such pool, ponds or fountains are equipped with a recirculation system and where necessary to protect aquatic life
 - Irrigating the following:
 - Parks or greenbelts
 - Golf course greens, tees, and fairways except on designated watering days
 - If a golf course uses a water source other than potable water provided by the water system, then the facility shall not be subject to these regulations
 - Stabilizing foundations through the use of water, except on designated watering days between the hours of 10am and 2pm
 - Watering is permitted by means of:
 - Handheld hose equipped with a positive shutoff nozzle
 - Soaker hose or drip irrigation system placed within 24 inches of foundation that does not produce a spray of water above the ground
 - When daily surface water demand exceeds 85% for 3 consecutive days, foundation watering shall cease
 - Controlling dust
 - Flushing gutters or permitting water to run or accumulate in any gutter or street
 - Failing to repair a leak(s) within a reasonable time after having been given notice directing the repair of such leak(s)
- Use of water from hydrants shall be limited to fire fighting or related activities, except that use of water from designated fire hydrants for construction purposes may be allowed under special permit from the water system
- Use of treated effluent, recycled by water system's wastewater treatment plant, is permissible

Terminate:

- Upon termination of Stage 2

Stage 3 Drought – SEVERE Water Shortage Conditions Triggers and Termination

Initiate:

When WATER DEMAND for 3 consecutive days:

- Equals or exceeds 90% (4.194 MGD) of available contracted surface water supply

OR when WATER SYSTEM for 1 day experiences:

- Inability to process and supply water due to main breaks or systemic failure
- Failure of system from “acts of God” (tornados, hurricanes) or man
- System wells operating at 90% of capacity to augment an inadequate supply of contracted surface water- **Emergency water shortage**

OR when WATER SUPPLY is:

- Insufficient to meet Demand
- Storage levels cannot be maintained due to daily consumption

AND when GCWA requires municipal customers to reduce GCWA water by 20% or more of current usage

Terminate:

When all conditions listed as triggering events have ceased to exist for 7 consecutive days. Authorizing authority shall have discretion to terminate or move to a lower stage.

Stage 3 Drought – SEVERE Water Shortage Conditions Responses and Termination

Goal: Achieve a 20% reduction in daily water consumption, based on previous 14 days

Community Outreach

- Continue implementation of all relevant actions in preceding phase

System Measures

- Continue implementation of all relevant actions in preceding phase

Supply Management Measures

- Continue implementation of all relevant actions in preceding phase
- Conservation incentives
- Implement use of the District’s 4 Water Wells as alternative water supply strategy.

Demand Management Measures (MANDATORY, under threat of penalty)

- Continue implementation of all relevant actions in preceding phase
- Use of automatic sprinkler systems is prohibited
- Watering of golf courses with potable water is prohibited unless the golf course utilizes a water source other than that provided by city/provider

- Use of water for construction purposes from designated fire hydrants by special permit is allowed
- No application for new, additional, expanded or increased-in-size water service connections, meters, service lines, pipeline extensions, mains or water service facilities of any kind shall be approved, and time limits for approval of such applications are hereby suspended for such time as this drought response stage or a higher-numbered stage shall be in effect

Terminate:

- Upon termination of Stage 3

Stage 4 Drought – EMERGENCY Water Shortage Conditions

Triggers and Termination

Initiate:

When WATER DEMAND for 1 day:

- Equals or exceeds 95% (4.427 MGD) of available contracted surface water supply

OR when WATER SYSTEM for 1 day experiences:

- Inability to process and supply water due to main breaks or systemic failure
- Failure of system from “acts of God” (tornados, hurricanes) or man
- Failure due to terrorist activity.
- Inability to obtain water-treating chemicals due to unforeseen conditions.
- System wells operating at 90% of capacity to augment an inadequate supply of contracted surface water

OR when WATER SUPPLY is:

- Insufficient to meet Demand
- Storage levels cannot be maintained due to daily consumption

AND when GCWA requires municipal customers to reduce GCWA water by 50% or more of current usage

Terminate:

- When all conditions listed as triggering events have ceased to exist. Authorizing authority shall have discretion to terminate or move to a lower stage.

Stage 4 Drought – EMERGENCY Water Shortage Conditions

Responses and Termination

Goal: Achieve a 40% reduction in daily water consumption, based on previous 14 days

Community Outreach

- Continue implementation of all relevant actions in preceding phase

System Measures

- Continue implementation of all relevant actions in preceding phase

Supply Management Measures

- Continue implementation of all relevant actions in preceding phase

Demand Management Measures (MANDATORY, under threat of penalty)

- Continue implementation of all relevant actions in preceding phase.
- Publicize ways to limit indoor water usage – see Appendix B
- No external use of water except for protection of health, safety, welfare and fire protection

Terminate:

- Upon termination of Stage 4