

GEORGETOWN DIVIDE PUBLIC UTILITY DISTRICT DROUGHT PLAN

DROUGHT ACTION PLAN

Georgetown Divide Public Utility District (GDPUD) drought stage water supply conditions, objectives, and response actions including water use reduction targets, are summarized in Table 1. The Drought Plan involves an introductory Stage 1 drought response during which all customers are informed of drought. In Stage 1 total potable water customer demand reduction is targeted for 15 percent; raw water deliveries are managed at 50 percent. At Stage 2 water use decisions continue to be entrusted to the customer as long as the overall rationing goal for potable water customers of 30 percent is met; this is a voluntary/honor system approach. In Stage 2 raw water customers are curtailed up to 50 percent. If Stage 2 fails, then a strict allotment approach is implemented with a stiff penalty rate in Stage 3 with a total demand reduction goal of up to 50 percent for potable water customers and up to 100% for raw water customers.

Table 1. Drought Plan Summary			
Water supply conditions	Drought stage	Objective	Response actions
Normal 0% Total Supply Reduction	None - Ongoing conservation measures; water waste ordinance in effect.	Public awareness	Normal actions
Slightly Restricted Water Supplies (below normal) Up to 15% Total Supply Reduction	Drought Stage 1 - Voluntary reductions in use. Managed raw water supplies.	Initiate public awareness of predicted water shortage and encourage conservation. Reduce raw water deliveries	Encourage voluntary measures to decrease "normal" demand up to 15%. Raw water deliveries curtailed up to 50%
Moderately Restricted Water Supplies Up to 30% Total Supply Reduction	Drought Stage 2 – Voluntary reductions on use. Managed raw water supplies.	Increase public understanding of worsening water supply conditions, encourage voluntary conservation measures. Reduce raw water deliveries	Encourage some voluntary measures to decrease "normal" treated water demand up to 30%. Raw water deliveries curtailed up to 50% Surcharge enacted
Severely Restricted Water Supplies Up to 50% Total Supply Reduction	Drought Stage 3 – Mandatory restrictions (severe prohibitions) on use	Ensure that water use is limited to health and safety purposes	Enforce extensive restrictions on water use and implement water rationing to decrease potable water demand up to 50% and raw water deliveries up to 100%

Ongoing Drought Plan Implementation Actions

Ongoing Drought Plan implementation actions will be completed both during periods of non-drought and drought periods. These activities can be characterized as proactive actions that prepare for drought through monitoring, public outreach, and resource management practices.

Policy and regulation

1. Review and update Drought Plan every 5 years or as needed based on new supply, operational changes, or change in expected water demand.
2. Enforce water waste ordinance.
3. Continue conservation policies and promote water-efficient plumbing codes.
4. Continue and advance Irrigation Management System (IMS) program.
5. Continue to evaluate new requests for agricultural service annually based on available supply. Permits not granted unless sufficient capacity to meet the service requested.
6. Review and refine rate stabilization policy relating to drought impacts every 5 years.
7. Understand and comply with legal and regulatory requirements for drought management.

Monitoring

1. Assess drought indicators and triggers quarterly.

Table 2. GDPUD Trigger Plan			
Drought Stage	Stumpy Meadows Reservoir Level on 2 nd Wed. in April	Response actions	
		Potable water customer cutbacks	Raw water managed supply cutbacks
1	17,000 ac-ft	Up to 15%	Up to 50%
2	15,000 ac-ft	Up to 30%	Up to 50%
3	13,000 ac-ft	Up to 50%	Up to 100%

2. Monitor system demands.

Public outreach

1. Develop and maintain drought awareness and public education materials, tools, and protocol.
2. Continue water efficiency programs including limiting sidewalk washing, car washing without a shutoff nozzle, and fixing leaks within 72 hours.
3. Develop website link for “Drought Stage” information.

Resource management

1. Maintain interagency coordination annually as shown in Figure 1. Figure 1 depicts the type and frequency of interagency coordination activities that will be pursued by the Drought Interagency Coordination Committee (DICC).
2. Confirm and maintain commitment of Drought Advisory Committee (DAC) members as shown in Figure 2. Figure 2 depicts the suggested interagency organizational structure.
3. Pursue development of potential drought impact avoidance projects.
 - Rubicon Supply Alternative 1A
 - Rubicon Supply Alternative 1B & PL101-514 supply
 - Additional water conservation
 - Canyon Creek Reservoir
 - Ditch lining
4. Consider establishing trucking contracts for water hauling.

5. Consider constructing tap manifolds for emergency water distribution through hydrants.
6. Establish procedure by which residents on wells within GDPUD service area apply for emergency relief.

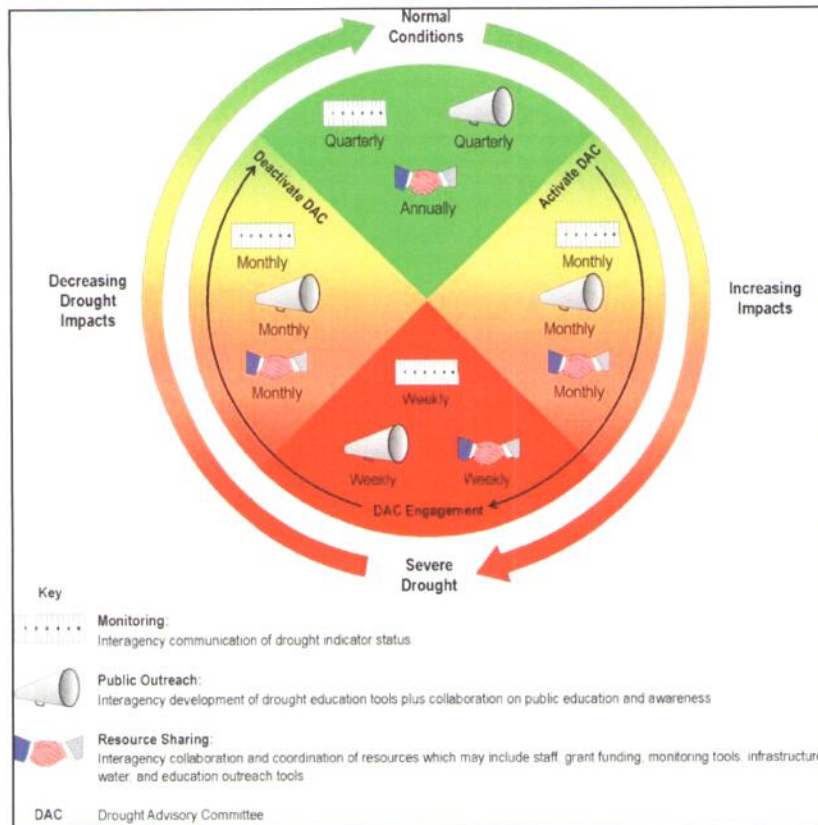


Figure 1. Drought Interagency Coordination Committee Activities

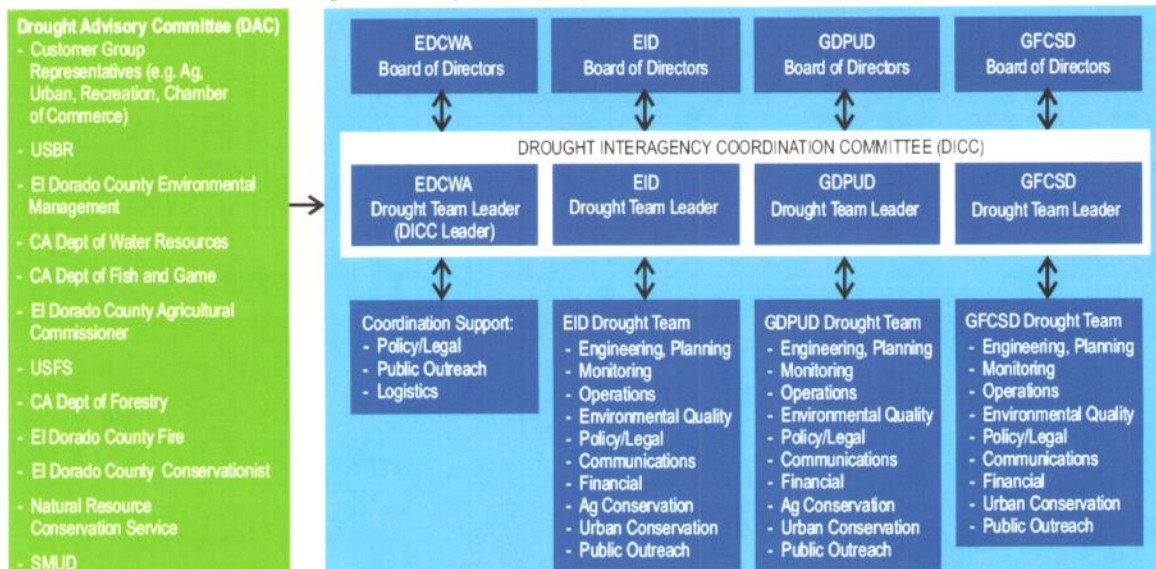


Figure 2. Drought Interagency Organization Structure

Drought Stage 1 Actions

Drought Stage 1 actions are intended to initiate public awareness of water shortages and encourage conservation. Stage 1 actions target a 15 percent demand reduction in potable water use through implementation of voluntary measures. Raw water deliveries are curtailed by up to 50 percent.

Policy and regulation

1. Implement Stage 1 water shortage response measures. Potable water customers are suggested to:
 - Apply irrigation water only during the evening and early morning hours (8 PM to 6 AM) to reduce evaporation losses.
 - Inspect all irrigation systems, repair leaks, and adjust spray heads to provide optimum coverage and eliminate avoidable over-spray.
 - Change the minutes of run-time for irrigation valves consistent with fluctuations in weather as determined by evapotranspiration data obtained from GDPUD or El Dorado County Water Agency (EDCWA).
 - Reduce minutes of run-time for each irrigation valve if water run-off (gutter flooding) is occurring.
 - Utilize water conservation incentive, rebate, and giveaway programs to replace high water-using plumbing fixtures and appliances with water efficient models.
 - Take advantage of the free information available from GDPUD on how to use water efficiently, read a water meter, repair leaks, and irrigate efficiently.
 - Do not refill a swimming pool that had been drained.
 - Fix leaks.
 - Wash vehicles from a bucket. Use a hose equipped with a shutoff nozzle for a quick rinse (commercial car washes exempted).

Affects on raw water customers are as follows:

- GDPUD Board has the discretion to limit new agricultural customers at any time if necessary. New requests for agricultural service are evaluated annually based on available supply and will not be permitted unless there is sufficient capacity to meet the service requested.
 - Raw water deliveries curtailed up to 50 percent.
 - Alternating days of managed raw water supply deliveries.
 - The irrigation season, generally from May 1 to October 1, may be delayed.
2. Drought Team Leader provides monthly updates on drought status to GDPUD management.
 3. GDPUD management provides monthly updates to Board.

Monitoring

1. Assess current drought stage monthly with current demand and supply information.
2. Consider potential future hydrologic conditions.
3. Monitor water demand monthly to assess water savings accomplished.

Public outreach

1. Initiate community-oriented drought awareness with focus on community water use reduction goals and range of voluntary steps to accomplish savings.
2. Reacquaint customers with GDPUD's Water Waste Prohibitions and introduce Stage 1 recommended water shortage response measures.
3. Inform agricultural customers of managed supply curtailment
4. Provide monthly updates to public on current drought stage.
5. Provide monthly updates to public on community demand response status.
6. Implement procedure for customer reporting of water waste.

Resource management

1. Monthly Drought Interagency Coordination Committee (DICC) meetings.
2. Confirm commitment by Drought Advisory Committee (DAC) members.

Drought Stage 2 Actions

Drought Stage 2 action items are intended to increase public understanding of worsening water supply conditions and encourage voluntary conservation measures by potable water customers to decrease “normal” demand up to 30 percent. In Stage 2, raw water deliveries continue to be curtailed by up to 50 percent. Stage 2 activities include a continuation of activities described previously under the Stage 1 actions and ongoing actions.

Policy and regulation

1. Implement Stage 2 water shortage response measures, including a continuation of Stage 1 activities. The following are recommendations to potable water customers:
 - Limit water use up to 30 percent of “normal” amount used.
 - No watering of any existing turf grass, ornamental plant, garden, landscaped area, tree, shrub or other plant except from a hand held hose or container or drip irrigation system.
 - No watering of new turf grass or replacement turf grass.
 - No initial filling of any swimming pool.
 - No automatic serving of drinking water at dining establishments except with patron request.
 - No new domestic accounts accepted unless the parcel has been assessed for improvements through a legal process.
 - Curtailment of any use of water from a fire hydrant, except for fighting fires, human consumption (hauling allowed to persons whose wells have gone dry), stock water, essential water quality flushing, and toxic clean-up purposes.

Affects on raw water customers are as follows:

- GDPUD Board has the discretion to limit new agricultural customers at any time if necessary
 - Raw water deliveries curtailed up to 50 percent.
 - Managed supply of alternating days with preference given to IMS program members.
 - The irrigation season, generally from May 1 to October 1, may be delayed or shortened.
2. Drought Team Leader provides weekly updates on drought status to GDPUD management.
 3. GDPUD management provides at least monthly updates to Board.
 4. GDPUD management provides the Board of Directors with an assessment of the need to enact a drought surcharge.

Monitoring

1. Assess current drought stage every two weeks with current demand and supply information.
2. Consider potential future hydrologic conditions.
3. Monitor water demand weekly to assess water savings accomplished.

Public outreach

1. Accelerate community-oriented drought awareness with focus on community water use reduction goal and range of voluntary steps to accomplish savings.
2. Inform agricultural customers of managed supply of up to 50 percent curtailment.
3. Reinforce with customers the GDPUD Water Waste Prohibitions and Stage 2 voluntary recommended water shortage response measures.
4. Customers are informed that individual meter records will not be audited or fees levied if overall water use reduction goal is achieved.
5. Customers who can conserve more are strongly encouraged to help customers who would incur economic hardship if they met the reduction levels cited.
6. Provide weekly updates to public on current drought stage.
7. Provide weekly updates to public on community demand response status.

Resource management

1. Weekly DICC meetings to coordinate on monitoring, public outreach, current status, and opportunities for resource sharing.
2. Enact participation by DAC members.

Drought Stage 3 Actions

The objective of Drought Stage 3, actions are to reduce potable water demand up to 50 percent through effective and consistent public outreach, the enforcement of extensive restrictions on water use, and implementation of water rationing. In Stage 3 raw water deliveries are curtailed by up to 100 percent. Protection of water supply for public health and safety purposes is the primary objective during Stage 3 drought conditions.

Policy and regulation

1. Implement Stage 3 water shortage response measures which includes enforcing Stage 1 and Stage 2 water shortage response measures.
 - Residential meters serving single family detached homes are granted a 68 gallons per day per person allotment.
 - Residential meters serving multiple units are granted up to 50 percent of the amount used by the customer during the corresponding billing period in the base year.
 - Meters serving any non-residential use are granted 60 percent of the amount used by the customer during the corresponding billing period in the base year. (Note: Vital healthcare and public safety use is set at 65 percent).
 - No new domestic accounts are accepted.

Raw water customers are affected as follows:

- GDPUD Board has the discretion to limit new agricultural customers at any time if necessary
 - Raw water deliveries curtailed up to 100 percent.
 - Alternating managed water supplies with preference given to IMS customers.
 - The irrigation season, generally from May 1 to October 1, may be delayed and/or shortened.
2. Drought Team Leader provides weekly updates on drought status to GDPUD management.
 3. GDPUD management provides the Board of Directors with an assessment of the need to enact a drought surcharge.
 4. GDPUD management to provide recommendation to the Board of Directors on increasing the frequency on residential meter reading to monthly for accelerated assessment of demand reduction.

Monitoring

1. Assess current drought stage every two weeks with current demand and supply information.
2. Consider potential future hydrologic conditions.
3. Monitor water demand weekly to assess water savings accomplished.

Public outreach

1. Accelerate community-oriented drought awareness with focus on community water use reduction goals, range of voluntary steps, and mandatory requirements to accomplish savings.
2. Reinforce with customers the GDPUD Water Waste Prohibitions and Stage 3 mandatory water shortage response measures.
3. Provide weekly updates to public on current drought stage.
4. Provide weekly updates to public on community demand response status.
5. Continue with procedure for customer reporting of water waste.

Resource management

1. Weekly DICC meetings to coordinate on monitoring, public outreach, current status, and opportunities for resource sharing.
2. Continue participation by DAC members.
3. Coordinate and schedule water hauling as needed.
4. Implement and monitor tap manifolds for emergency water distribution through hydrants as needed.