



Water Shortage Plan Policy

The intent of the plan is to manage system demand so customers do not experience pressure, quality or availability issues during periods of extreme water demand. It will also be used if we experience water production/supply issues or when distribution system failures occur.

The Water Shortage Plan is divided into four (4) stages. The stages are written to be used in a consecutive fashion but each situation may require a more aggressive restriction and can be initiated at any time. The stages are as follows:

Stage I:	Voluntary 25% reduction in turf irrigation
Stage II:	Voluntary 50% reduction in outdoor water usage
Stage III:	Mandatory prohibition on turf irrigation
Stage IV:	Mandatory water rationing

Stage I: Voluntary 25% Reduction in Turf Irrigation

Action:

1. Request a city wide 25% reduction in lawn irrigation.
2. Encourage customers to optimize their irrigation systems so water is not directed onto impervious surfaces (concrete) and turf is not overwatered.
3. Recommend customers irrigate on alternate days. We would ask that even numbered addresses water only on Sundays, Wednesdays and Fridays; and odd numbered addresses water only on Tuesdays, Thursdays and Saturdays. No irrigation should occur on Mondays.

Reasons for Implementation:

1. This stage will be implemented whenever Des Moines Water Works implements Stage I within their system; or,
2. Whenever the City of Norwalk has a daily consumption for four consecutive weeks that exceed twice the average daily usage for the last consecutive 12 months.
3. There are other indications or circumstances that without further reductions in demand, a shortage could occur.

Reason for reversal:

1. Once the water tower recovers to maximum height (38ft) on several consecutive days and our two supply pumps alternate cycles. We will also want to consider current and future precipitation and temperatures. This decision will be made by the Director of Public Works or those delegated this responsibility.

Stage II: Voluntary 50% reduction in outdoor water use**Action:**

1. Request a city wide 50% reduction in outdoor water use.
2. Remind customers to optimize their irrigation systems so water is not directed onto impervious surfaces and turf is not overwatered.
3. Reinforce the recommendation for customers to irrigate on alternate days as specified in Stage 1 Action.
4. Encourage wise use of water during outdoor activities including: washing cars, playing in the sprinkler, playing with water toys, and filling swimming pools.
5. Encourage wise use of water indoors including: identifying and repairing leaking fixtures, washing only full loads in dish washers and washing machines and taking shorter showers.
6. Suspend high water use, non-essential municipal operations.

Reasons for Implementation:

1. Stage II will be implemented whenever Des Moines Water Works implements Stage II within their system; or,
2. Whenever the City of Norwalk has a daily consumption for four consecutive weeks that exceed two and a half (2.5) the average daily usage for the last consecutive 12 months and/or high service pumps run continuously for 96 hours and the water level of the tower does not increase more than 2-feet; Or,
3. There are other indications or circumstances that without further reductions in demand, a shortage could occur.

Reason for reversal:

1. Once the consumption has fallen below seasonal averages and our water tower begins to recover (34FT to 38FT) for several consecutive days. We will also want to consider current and future precipitation and temperatures. This decision will be made at the Director of Public Works discretion and/or delegate.

Stage III: Turf irrigation prohibited and no use of automatic irrigation systems

Action:

1. Require customer to further reduce water consumption by suspending all turf irrigation and the use of all automatic irrigation systems.

Enforcement:

Customers observed by City personnel irrigating in violation of this policy will be notified by a tag left on the property. If irrigation is not suspended within 48 hours, water service will be terminated and the published termination fee will apply. Water service will be restored after fees have been paid and also that the customer will comply with the mandatory conservation measures. Any subsequent violations will result in further termination of service and may be deemed an unauthorized user of water.

Reasons for implementation:

1. Stage III will be implemented as ordered by the Mayor, or Mayor Pro-Tem
2. Stage III will be implemented whenever Des Moines Water Works implements Stage III within their system; or,
3. Whenever the City of Norwalk has a daily consumption for eight consecutive weeks that exceed two and a half (2.5) the average daily usage for the last rolling 12 month period and/or high service pumps run continuously for four (4) consecutive weeks; or,
4. Whenever the storage level of the water reservoir is below 23 feet and is not recovering; or,
5. There are other indications or circumstances that without further reductions in demand, a shortage could occur.

Reasons for reversal:

1. Once the consumption has decreased and our storage tower and pumps begin to recover (above 32FT) for several consecutive days. Other factors may include but are not limited to precipitation, demand, system function, supply, droughts, etc. This decision will be made by the Public Works Department.

Stage IV: Mandatory water rationing

Action:

1. Water rationing measures will be implemented and enforced by the application of an Emergency Water Shortage Rate. In order to implement such a rate the Des Moines Water Works shall set a target level for demand consistent with its current capacity and shall use such target to establish a Rationing Factor. All customers will be asked to reduce their consumption to a level at or below Stage IV Monthly Water Ration, and consumption above such level will be charged at the Emergency Water Shortage Rate intended to strongly discourage consumption above such level.

Enforcement:

1. Stage IV Monthly Water Ration means for each customer the typical off-peak consumption of such customer multiplied by an announced Rationing Factor. Typical off-peak consumption shall be computed as of the date that the Stage IV is invoked as the mean monthly consumption of the customer for the immediately preceding months of March, April, and May. The Rationing Factor shall be a percentage as announced by Des Moines Water Works and designed to effectively reduce consumption the level as required by the prevailing circumstances.
2. While Stage IV is in effect, all water used beyond the Stage IV Monthly Water Ration for each customer will be billed at the Emergency Water Shortage Rate. Emergency Water Shortage Rate shall be four times the rate otherwise applicable to each customer.

Reasons for Implementation:

1. Stage IV will be implemented as ordered by the Mayor , or Mayor Pro-Tem
2. Stage IV will be implemented whenever Des Moines Water Works implements Stage IV within their system; or,
3. Whenever the City of Norwalk has a daily consumption for eight consecutive weeks that exceed two and a half (2.5) the average daily usage for the last rolling 12 month period and/or high service pumps run continuously for four (4) consecutive weeks; or,
4. Whenever the storage level of the water reservoir can't be maintained at 2/3 its capacity for a period longer than four consecutive weeks; or,
6. There are other indications or circumstances that without further reductions in demand, a shortage could occur.

Reasons for reversal:

1. Once the consumption has decreased and our storage tower and pumps begin to recover for several consecutive weeks. Other factors may include but are not limited to precipitation, demand, system function, supply ability, droughts etc. This decision will be made by the Mayor or Mayor Pro-Team, Director of Public Works, City of Norwalk staff and Water Department employees.

***Action for Release can move to any of the stages deemed necessary as determined by the Public Works Department.**