

10.0 MANDATORY WATER CONSERVATION MEASURES

The Strategic Water Supply Plan anticipates reductions of water use per capita by our community as we map out our water needs through the year 2060. Outdoor irrigation is a component of water use that looks promising when looking at ways to reduce water usage. Summer peak days are approximately double the daily average of our community. Our community used an average of 12.4 million gallons per day for FYE13 and experienced a peak day usage of 24.8 million gallons per day July 23, 2012.

Customers are encouraged to irrigate sprinklers between 4AM and 9AM. On a hot and windy day, the amount of water that never reaches your grass can be substantial. Citizens are asked to maintain and review irrigation sprinkler operation to repair broken sprinkler heads and prevent watering of sidewalks and streets.

Hand watering landscape and gardens with a hand held hose with a positive shut off nozzle is allowed any time. Also, soaker hoses are allowed any time throughout all stages listed below.

During periods of water conservation, the Water Conservation Plan enables the City Manager to implement conservation stages when certain criteria are met. The City is in Stage 1, Everyday Conservation at all times unless a subsequent conservation stage is implemented. With the implementation of each subsequent conservation stage, the City Manager will sign a proclamation and publish notice of the implementation of such conservation stage in the local newspaper. City ordinances allow for the police enforcement of the limits set by each conservation stage (City of Norman Code of Ordinances; Section 21-501) should efforts to educate the public be ineffective to ensure the City maintains necessary water supplies to its citizens.

10.1 Drought Contingency Plan

Stage 1, Everyday Conservation. The City of Norman will be in Stage 1 water conservation year round. This means the citizens of Norman will practice Odd/Even watering all year round. This strategy reduces the peak water usage and will delay the need for larger infrastructure required to deliver everyone's total water need on a per-day basis.

Odd/Even is better explained:

- **Last number of the building address – 1, 3, 5, 7, 9 – water odd number calendar days**
- **Last number of the building address – 0, 2, 4, 6, 8 – water even number calendar days**

Additional water conservation measures are utilized when drought patterns begin. The City Manager begins with Stage 2 Conservation and elevates the restrictions up to Stage 5 Conservation if drought conditions persist, and or extreme conditions dictate such.

Triggers for Stage 2, Moderate Conservation. The City Manager may implement Stage 2 when one or more of the following criteria are met:

1. The City water demand exceeds the NUA's supply capacity by greater than 3 mgd for two consecutive days and there is no weather related relief in the immediate forecast. The following link is used for forecasting extensiveness of drought:

<http://droughtmonitor.unl.edu/>

2. There is a reduction in the long term source of water supply (i.e. supply shortage, pumps down, break or extensive damage to raw water line, contamination to water supply), or Central Oklahoma Master Conservancy District requests a 10% reduction in allocation from Lake Thunderbird.
3. Lake Thunderbird water level drops to a water level of 1033.0 or 69% full. The following link is used for instantaneous lake level readings:

<http://waterdata.usgs.gov/ok/nwis/uv?07229900>

4. A large portion of NUA's water distribution system is out of service due to failure or damage of major water distribution components.

Goals for Use Reduction and Actions Available Under Stage 2. The goal for water use reduction in Stage 2 is a significant reduction in the water demand to more closely match the supply capability of NUA. Water use restrictions shall apply to all customers connected to the NUA water system.

1. **Continue with water conservation actions and programs provided under Stage 1, unless they are amended or replaced by the restrictions provided in Stage 2.**
2. **All Outdoor irrigation will reduced to 2 days per week.**
 - **Single-family resident address ends in odd number – Saturdays & Wednesdays**
 - **Single-family resident address ends in even number – Sundays & Thursdays**
 - **All others – Tuesdays & Fridays (Duplexes, Triplexes, home owner association properties, commercial, industrial, government)**
3. **All outdoor watering or irrigation is prohibited between the hours of 9AM and 6PM.**
4. Washing of cars, trucks, trailers or other vehicles is allowed on your designated landscape watering day as described above.
5. Recommend the public, developers and commercial enterprises to wait until the current drought or water emergency has passed before establishing new landscaping. New landscaping installed during any drought stage will be subject to all water use restrictions implemented. Financial loss will not constitute justification for a variance.
6. Eliminate non-essential City water use (e.g. street cleaning, vehicle washing, flushing of water lines, fire hydrant testing, etc.).
7. City to reduce splash pad operation hours by 2 hours per day.
8. Washing or hosing down of buildings, sidewalks, driveways, patios, porches, parking areas or any other paved surfaces is prohibited.
9. Excessive water run-off from any landscaped area onto streets, alleys or parking lots or other paved surfaces is prohibited. Water run-off is excessive when it extends for a distance greater than ten feet from the property's boundary lines or ten feet past the targeted irrigation area.

Triggers for Stage 3, Severe Conservation. The City Manager may implement Stage 3 when one or more of the following criteria are met:

1. The City water demand exceeds the NUA's supply capacity by greater than 6 mgd for two consecutive days and there is no weather related relief in the immediate forecast.
2. Areas of the water distribution system have reduced water pressures less than 25 psi for 24 hours or more.
3. There is a reduction in the long term source of water supply (i.e. supply shortage, pumps down, break or extensive damage to raw water line, contamination to water supply), or Central Oklahoma Master Conservancy District requests more than a 10% reduction in allocation from Lake Thunderbird.
4. Lake Thunderbird water level drops to a water level of 1031.0 or 60% full. The following link is used for instantaneous lake level readings:

<http://waterdata.usgs.gov/ok/nwis/uv?07229900>

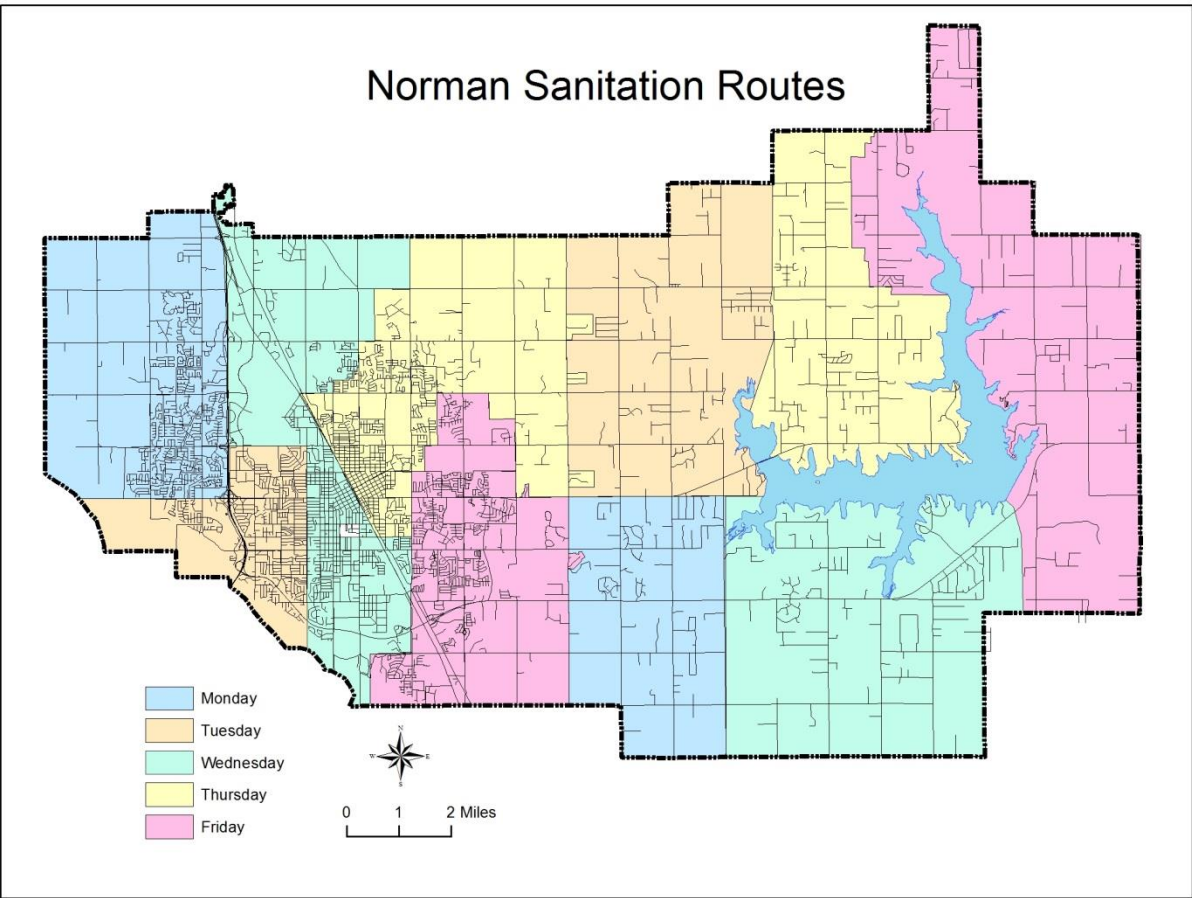
5. Stage 2 Moderate Conservation was implemented based on a reduction in allocation from Lake Thunderbird of 10% and demand for water in Norman has not decreased by 10% during Stage 2 and the drought is not forecast to end in the near future. The following link is used to forecast the extensiveness of the drought:

<http://droughtmonitor.unl.edu/>

6. A large portion of NUA's water distribution system is out of service due to failure or damage of major water distribution components.

Goals for Use Reduction and Actions Available Under Stage 3. The goal for water use reduction in Stage 3 is an immediate and drastic reduction in the water demand to more closely match the supply capability of NUA. Water use restrictions shall apply to all customers connected to the NUA water system.

1. **All of the water use restrictions implemented under Stage 1 and 2 shall continue in force except as amended or replaced by the restrictions set out in Stage 3.**
2. **Landscape watering is limited to one assigned day per week. Outdoor watering or irrigation is prohibited between the hours of 9AM and 6PM.**
 - a. **Customers with once a week garbage pickup (including all residential) may only water their landscaping on the same day as garbage is collected, as shown on the map below:**



b. Customers with more than one day per week garbage pick-up are limited to watering landscape according to the following schedule:

<u>Area</u>	<u>Allowed Landscape Water Day</u>
North Norman	Monday
South Norman	Tuesday
East Norman	Wednesday
West Norman	Thursday
Central Norman	Friday

- 3. Except as otherwise provided herein, landscape watering is prohibited on weekends.**
4. Landscape beds may be watered on any day by using a hand operated hose equipped with a positive shut off nozzle. Soaker hoses for foundation maintenance are authorized as necessary. In all instances, run-off is prohibited.
5. Watering of City property, medians, parks, and athletic complexes will be allowed one day per week, following the North, South, East, West, Central schedule, and only before 9 am or after 6 pm. Golf course watering and irrigation using potable water shall be limited to greens and tee boxes only.
6. City splash pads will be shut off.

7. Pools may use water to maintain operational levels. Use of potable water to refill ponds and lakes is prohibited.
8. Use of potable water at construction sites for dust control, compaction or wash-downs is prohibited.
9. Bulk water usage under a bulk water permit is prohibited unless an exception is granted by the City Manager on the basis of substantial and unnecessary hardship caused by the prohibition to the property owner. Any exception granted must be limited in time and only allow the minimum amount of water usage necessary to alleviate the substantial and unnecessary hardship caused to the property owner.
10. Washing of cars, trucks, trailers or other vehicles is prohibited, unless these items are taken to a commercial carwash.

Triggers for Stage 4, Emergency Conservation. The City Manager may implement Stage 4 when one or more of the following criteria are met:

1. Lake Thunderbird water level drops to a water level of 1028.56 or 50% full. The following link is used for instantaneous lake level readings:

<http://waterdata.usgs.gov/ok/nwis/uv?07229900>

Goals for Use Reduction and Actions Available Under Stage 4. The goal for water use reduction in Stage 4 is a further immediate and drastic reduction in the water demand to more closely match the supply capability of NUA. Water use restrictions shall apply to all customers connected to the NUA water system.

1. Hand watering gardens & flower beds only.
2. Commercial car wash with water recycling operations only.

All of the water use restrictions implemented under Stage 1, 2, and 3 shall continue in force except as amended or replaced by the restrictions set out in Stage 4.

Triggers for Stage 5, Emergency Conservation. The City Manager may implement Stage 5 when one or more of the following criteria are met:

1. Lake Thunderbird water level drops to a water level of 1025.0 or 37% full. The following link is used for instantaneous lake level readings:

<http://waterdata.usgs.gov/ok/nwis/uv?07229900>

Goals for Use Reduction and Actions Available Under Stage 5. The goal for water use reduction in Stage 5 is to **Ban all outdoor watering and washing of vehicles, including commercial car washing operations.** Implementation of Stage 5, will require public notification by the City Manager. Water use restrictions shall apply to all customers connected to the NUA water system.

All of the water use restrictions implemented under Stage 1, 2, 3, and 4 shall continue in force except as amended or replaced by the restrictions set out in Stage 5.