# Water Shortage Response Plan Town of Mayodan, North Carolina September 21, 2018 Updated April 10, 2023

The procedures herein are written to reduce potable water demand and supplement existing drinking water supplies whenever existing water supply sources are inadequate to meet current demands for potable water.

#### I. Authorization

The Mayodan Town Manager shall enact the following water shortage response provisions whenever the trigger conditions outlined in Section IV are met. In her absence, the WTP Supervisor will assume this role.

Kathleen Patterson Mayodan Town Manager Phone: (336) 427-0241

Cell: (336) 589-8311

E-mail: kpatterson@mayodannc.org

Mr. William Mike Sears Town of Mayodan WTP Supervisor

Phone: (336) 427-3339 Cell: (336)613-5366

E-mail: msears@mayodannc.org

#### I. Notification

The following notification methods will be used to inform water system employees and customers of a water shortage declaration: employee e-mail announcements, notices at municipal buildings, and notices on water bills. Required water shortage response measures will be communicated through *News and Record*, PSA announcements on local radio and cable stations, and on the Town's website, social media sites and Code Red Alert. Declaration of emergency water restrictions or water rationing will be communicated to all customers by telephone through the use of reverse 911.

### II. Levels of Response

Five levels of water shortage response are outlined in the table below. The five levels of water shortage response are: voluntary reductions, mandatory reductions I and II, emergency reductions, and water rationing. A detailed description of each response level and corresponding water reduction measures follow below.

The goal of Stage 5, Water Rationing, is to provide drinking water to protect public health (e.g. residences, residential health care facilities and correctional facilities). In Stage 5, all customers are only permitted to use water at the minimum required for public health protection. Firefighting is the only allowable outdoor water use and pickup locations for distributing potable water will be announced according to Mayodan's Emergency Response Plan. Drought surcharges increase to 5 times the normal water rate.

# III. Triggers

The Town of Mayodan's water source is the Mayo River. The following stream flow measurements, intake levels, and production capacities trigger entry into corresponding water restriction stages.

Stage	River Operating Conditions
1	Water Level at .7ft msl at Intake in River
	Discharge at USGS Gage 02070500 is <60 cfs for >14 days >80% of Production Capacity for 3 consecutive days
2	Water Level at .6ft msl at Intake in River
	Discharge at USGS Gage 02070500 is <50 cfs for >10 days >90% of Production Capacity for 3 consecutive days
3	Water Level at .5ft msl at Intake in River
	Discharge at USGS Gage 02070500 is < 40 cfs for > 7 days
	100% of Production Capacity on any day
4	Water Level at .4ft msl at Intake in River
	Discharge at USGS Gage 02070500 is < 30 cfs for > 5 days
5	Water Level at .35ft msl at Intake in River
	Discharge at USGS Gage 02070500 is < 25 cfs

# Return to Normal

When water shortage conditions have abated and the situation is returning to normal, water conservation measures employed during each phase should be decreased in reverse order of implementation. Permanent measures directed toward long-term monitoring and conservation should be implemented or continued so that the community will be in a better position to prevent shortages and respond to recurring water shortage conditions.

## VII. Effectiveness

The effectiveness of the Mayodan water shortage response plan will be determined by comparing the stated water conservation goals with observed water use reduction data. Other factors to be considered include frequency of plan activation, any problem periods without activation, total number of violation citations, desired reductions attained and evaluation of demand reductions compared to the previous year's seasonal data.

### VIII. Revision

The water shortage response plan will be reviewed and revised as needed to adapt to new circumstances affecting water supply and demand, following implementation of emergency restrictions, and at a minimum of every five years in conjunction with the updating of our Local Water Supply Plan. Further, a water shortage response planning work group will review procedures following each emergency or rationing stage to recommend any necessary improvements to the plan to Mayodan's Town Council. The Town of Mayodan WTP Supervisor is responsible for initiating all subsequent revisions.