Water Shortage Response Plan Town of Mars Hill, North Carolina February 23, 2010, Reviewed December 26, 2018

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 Mars Hill Town Mayor shall enact the following water shortage response provisions whenever the trigger conditions outlined in Section IV are met. In his or her absence, the Public Works Director will assume this role.

Mr. John Chandler Town of Mars Hill Mayor Phone: (828) 689-2301

E-mail: jlcmayor@yahoo.com

Mr. Nicholas Honeycutt Town of Mars Hill Vice Mayor Phone: (828) 689-2301

E-mail: nhoneycutt@madison.k12.nc.us

II. 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, notices in water bills and on the Town of Mars Hill's website homepage. Required water shortage response measures will be communicated through *The Town of Mars Hill's Quarterly news letter*, PSA announcements on local radio and cable stations, and on the Town of Mars Hill's website. Declaration of emergency water restrictions or water rationing will be communicated to all customers by telephone through use of reverse 911.

III. 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.

Stage	Response	Description
1	Voluntary Reductions	Water users are encouraged to reduce their water use and improve water use efficiency; however, no penalties apply for noncompliance. Water supply conditions indicate a potential for shortage.
2	Mandatory Reductions I	Water users must abide required water use reduction and efficiency measures; penalties apply for noncompliance. Water supply conditions are significantly lower than the seasonal norm and water shortage conditions are expected to persist.
3	Mandatory Reductions II	Same as in Stage 2
4	Emergency Reductions	Water supply conditions are substantially diminished and pose an imminent threat to human health or environmental integrity.
5	Water Rationing	Water supply conditions are substantially diminished and remaining supplies must be allocated to preserve human health and environmental integrity.

In Stage 1, Voluntary Reductions, all water users will be asked to reduce their normal water use by 5%. Customer education and outreach programs will encourage water conservation and efficiency measures including: irrigating landscapes a maximum of one inch per week; preventing water waste, runoff and watering impervious surfaces; watering plants deeply to encourage root growth; washing only full loads in clothes and dishwashers; using spring-loaded nozzles on garden hoses; and identifying and repairing all water leaks.

In Stage 2, Mandatory Reductions I, all customers are expected to reduce their water use by 10% in comparison to their previous month's water bill. In addition to continuing to encourage all voluntary reduction actions, the following restrictions apply: irrigation is limited to a half inch per week between 8PM and 8AM; outdoor use of drinking water for washing impervious surfaces is prohibited; and all testing and training purposes requiring drinking water (e.g. fire protection) will be limited.

In Stage 3, Mandatory Reductions II, customers must continue actions from all previous stages and further reduce water use by 20% compared to their previous month's water bill. All non-essential uses of drinking water are banned and garden and landscape irrigation must be reduced to the minimum amount necessary for survival. Additionally, in Stage 3, a drought surcharge of 1.5 times the normal water rate applies.

In Stage 4, Emergency Reductions, customers must continue all actions from previous stages and further reduce their water use by 25% compared to their previous month's water bill. A ban on all use of drinking water except to protect public health and safety is implemented and drought surcharges increase to 2 times the normal water rate.

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 Mars Hill's Emergency Response Plan. Drought surcharges increase to 5 times the normal water rate.

IV. Triggers

The Town of Mars Hill's water source is the Poplar Cove Reservoir. The following measurements of usable storage and intake levels trigger entry into corresponding water restriction stages.

Stage	Usable Storage	Water Level	
1	<90%	2ft below full	
2	<85%	3ft below full	
3	<70%	5ft below full	
4	<60%	6ft below full	
5 <40%		10ft below full	

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.

V. Enforcement

The provisions of the water shortage response plan will be enforced by Town of Mars Hill Public Works Department and police personnel. Violators may be reported to the Town's dedicated water conservation hotline. Citations are assessed according to the following schedule depending on the number of prior violations and current level of water shortage.

Water Shortage Level	First Violation	Second Violation	Third Violation
Voluntary Reductions	N/A	N/A	N/A
Mandatory Reductions (Stages 2 and 3)	Warning	\$250	Discontinuation of Service
Emergency Reductions	\$250	Discontinuation of Service	Discontinuation of Service
Water Rationing	\$500	Discontinuation of Service	Discontinuation of Service

Drought surcharge rates are effective in Stages 3, 4 and 5.

VI. Public Comment

Customers will have multiple opportunities to comment on the provisions of the water shortage response plan. First, a draft plan will be published in *The Town of Mars Hill's quarterly news letter* and on the Town of Mars Hill's website. A public hearing will be scheduled with notice printed in all customer water bills to collect comments on the draft. All subsequent revisions to the draft plan will be published at least 30 days prior to an adoption vote by Mars Hill's Town Council.

VII. Variance Protocols

Applications for water use variance requests are available from the Town Public Works Office. All applications must be submitted to the Public Works Office for review by the Public Works Director or his or her designee. A decision to approve or deny individual variance requests will be determined within two weeks of submittal after careful consideration of the following criteria: impact on water demand, expected duration, alternative source options, social and economic importance, purpose (i.e. necessary use of drinking water) and the prevention of structural damage.

VIII. Effectiveness

The effectiveness of the Mars Hill 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.

IX. 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 Mars Hill's Town Council. The Town of Mars Hill Public Works Director is responsible for initiating all subsequent revisions.

Town of Mars Hill Mars Hill. North Carolina ORDNANCE# 166 (Updated August 2018)

AMENDED WATER SHORTAGE RESPONSE PLAN

The Town of Mars Hill constantly strives to protect the water supply from waste by maintaining water lines and water storage tanks as well as strictly supervising the water treatment plant operations. During times of drought or other unforeseen emergencies, additional measures become necessary to insure the availability of an adequate water supply. The following details these measures the level of the shortage when measures advance from voluntary to mandatory-

ARTICLE 1: Declaration of Water Shortage

A water shortage will be deemed to exist when water demand by customers connected to the water system, including commercial, industrial and institutional, reaches the point where continued or increased demand will equal or exceed the system supply and transmission capabilities.

In the event that the US Drought Monitor indicates abnormally dry or moderate drought in the Mars Hill area and it appears the water demand of the Town of Mars Hill may exceed supply and/or transmission capabilities and the reservoir Level drops one (l) foot below overflow at the spillway, the Town Manager may recommend to the Governing Board that voluntary water conservation measures be implemented. The Town Mayor, following this consultation, may declare a Stage I Water Shortage Condition advisory' requesting voluntary water conservation by consumers. In the absence of the Mayor, the Vice-Mayor may declare a water shortage condition,

After a time deemed adequate by the Board of Aldermen and Water Department Personnel, if voluntary water conservation measures required by a Stage I Water Shortage fail to relieve the demand on the system, the Town will advance to a Stage 11 or a Stage 111 Water Shortage Condition. If conditions improve, voluntary water conservation measures will be rescinded when the lake has reached full level and water is flowing over the spillway for fourteen (14) consecutive days-

ARTICLE 11: Stage I Water Shortage Condition — Voluntary Level

In the event a Stage 1 Water Shortage Condition is declared, the following guidelines shall apply:

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- A. Implementation of a public relations media campaign to advise the general public with specialized methods for informing industrial, commercial and institutional consumers of impending or existing water shortage. The public will be asked to voluntarily conserve water and individuals responsible for public facility buildings to implement water conservation measures.
- B. Conservation measures will be encouraged and recommended. Voluntary conservation methods by individuals are recommended but not limited to the following:

1. Limit all car washing to a minimum.

Limit lawn and garden water to that which is necessary for plants to survive. Delay new landscape work until water shortage is ended.

3. Do not wash down outside areas such as sidewalks, patios, porches, etc.

- 4. Do not leave faucets running while shaving, brushing teeth, rinsing dishes, etc.
- 5. Water shrubbery to the minimum required reusing household water when possible.
- 6. Limit use of clothes washers and dish washers and when used, operate fully loaded.
- Use showers rather than bathtub for bathing and limit showers to no more than four (4) minutes.

8. The use of disposable and biodegradable dishes is encouraged.

- 9. The use of flow restrictive and water saving devices is encouraged (at all times).
- C. Conservation measures for commercial, industrial and institutional consumers are recommended but not limited to the following:
 - 1. Do not wash down outside areas such as parking lots, service bays, etc.
 - 2. Institute a high priority program for repair of any existing leaks in water system.
 - Public facilities housing overnight residents should make residents aware of water shortage and encourage conservation methods where practical.
 - Individuals responsible for public facility buildings should adhere to strict supervision
 of all conservation measures and potential for water waste.
 - 5. Delay new landscape work or outside project requiring additional water use.

ARTICLE III: Stage II Water Shortage Condition - Mandatory Level

In exercising the authority for declaring a water shortage condition, consideration shall be given to the water storage levels available, draw-down rates, the projected supply capabilities, outlook for precipitation, daily water use patterns and availability of water from other sources.

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In the event a Stage I Water Shortage Condition is in effect and the US Drought Monitor indicates moderate or severe drought in the Mars Hill area and voluntary conservation measures are deemed to be inadequate to deal with the shortage, and the reservoir level drops three (3) feet below the overflow at the spillway, a Stage II Water Shortage may be proclaimed. Under a Stage II Water Shortage Condition, the following restrictions on the usage of water shall apply.

- A. No person or persons shall use or permit the use of water from the water system for any of the following purposes until such time as the Board of Aldermen announces that the Stage II Water Shortage has ended. The restrictions are, but are not limited to, the following:
 - 1. Watering of lawns, grass, shrubbery, trees, flowers and/or vegetable gardens.
 - Filling newly constructed swimming/wading pools or refill swimming/wading pools which have been drained.
 - Washing automobiles, trucks, trailers, boats or any type of mobile equipment.
 Commercial car washes shall adhere to restrictions set by the Town Council.
 - Washing outside areas such as sidewalks, porches, patios or to use water for other similar purposes.
 - Use of water from public or private fire hydrant for any purpose other than fire suppression or a public emergency.
 - 6. Inducing water into any ornamental fountain, pool, pond or other structure making similar use of water.
 - Operation of water-cooled air conditioners or other equipment that does not recycle
 cooling water, except when health and safety are adversely affected.
 - 8. Use of water for any unnecessary purpose or intentionally wasting water.
- B. No firm, corporation or institution shall use or permit the use of water from the Town of Mars Hill water system for any of the following purposes:
 - 1. Watering landscape, recreation areas, etc.
 - 2. Filling/refilling swimming pools.
 - Operating any water-cooled equipment that does not recycle cooling water except when health and safety are adversely affected.
 - 4. Washing parking lots, service bays, or outside facilities.
 - 5. To reduce or eliminate dust or other airborne particles.
 - Washing commercial vehicles and equipment.
 - 7. Hotels or any establishment with overnight guests/residents shall provide notices for all guests of water restrictions and provide tips for conservation as well as enforcing strict water conservation methods.

A Stage II Water Shortage Condition may be reverted back to a Stage I once the reservoir level is full and spilling over the spillway.

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ARTICLE IV: Stage III Water Shortage Condition - Emergency Level

In exercising the authority for declaring a water shortage condition, consideration shall be given to water storage levels available, draw-down rates, the projected supply capability, outlook for precipitation, daily water use patterns and availability of water from other sources.

A. In the event the reservoir level drops five (5) feet below the overflow at the spillway and the US Drought Monitor indicates severe or extreme drought in the Mars Hill area, the Board of Aldermen must issue a Stage III Water Shortage Emergency Condition, it shall be unlawful for any person, firm or corporation to use or permit the use of water for any purpose set forth in Article III until such time as the declaration of water shortage has been rescinded. It shall be the intent of the Town to restrict or shutdown any water usage not considered vital to public health. Fire protection shall be maintained by drafting of ponds, rivers and the like wherever possible. In addition to the restrictions for Stage II, the following prohibitions shall apply:

- 1. To use water outside a structure for any purpose other than an emergency involving a fire.
- To engage any service involving any water usage when the service provided can be obtained elsewhere, thereby avoiding such water usage.
- 3. To serve drinking water in restaurants, cafeterias, or other food establishments, upon request only.
- Restaurants, cafeterias and dining facilities serving meals use disposable, biodegradable plates and utensils.

A Stage III Water Shortage Condition may be reverted back to a Stage II once the reservoir level is within three (3) feet of full.

ARTICLE VI: Enforcement and Penalties

When drought or emergency conditions require the declaration of a Stage III Water Shortage Emergency Condition, all customers of the Town of Mars Hill water system shall be subject to the following:

- A residential customer may be subject to 150% of the prevailing water rate for all
 consumption during a billing cycle if it is evidenced that mandatory water restrictions
 and conservation measures have been ignored, or if there has been intentional waste of
 water.
- A customer other than a residential consumer will be subject 50% increase in the prevailing water rate for all consumption during a billing cycle if evident non-

compliance of water restrictions is made known.

3. Any violation of the Town's emergency water use restriction policy may result in the termination of service, as well as all other penalties provided by law, when the Board Of Aldermen, using all means at his disposal, determines that deliberate disregard of the mandatory water restrictions has occurred. In such instances, a \$100.00 reconnect fee may be imposed for restoration of service to a residential consumer and \$250.00

reconnect fee for non-residential consumers. In the event of continued gross non-compliance, the removal of meter will be deemed proper and service will be discontinued and all fees and deposits forfeited. Reconnection will only be made by payment of current due amounts, current water deposit amount, and reconnect fee.

ARTICLE V: Water Rationing

Any plan to ration, limit, or establish limitations on the quantity of water a specific user is authorized to consume, suspend or terminate service must be approved by the Town Board of Aldermen; however, the termination of water service to a particular customer for specific violation of the Water Shortage Response Plan, or for terminations under normal Town policy regarding the payment of user fees shall not require prior approval of the Town Board of Aldermen.

Adopted and approved this the 6th day of March , 2008, by Mayor and Board of Aldermen.

John L. Chandler, Mayor

ATTEST:

Richard L. Morgan, Town Clerk,