

STATEWIDE DROUGHT PLAN MATRIX

Drought Phase/Triggers	State and Federal Actions	Water Users and Suppliers Actions
<p>NON-DROUGHT PHASE A significant portion of the watershed (see map) is not under drought conditions according to the U.S. Drought Monitor.</p> <p>The U.S. Drought Monitor is a weekly index depicting the location and intensity of drought conditions using a blend of quantitative and qualitative indicators. Drought conditions referenced in this plan are keyed to the U.S. Drought Monitor. http://drought.unl.edu/dm/monitor.html</p>	<ul style="list-style-type: none"> ➤ Develop/maintain precipitation, stream flow, ground water and water quality monitoring programs. ➤ Conduct state and regional water studies and coordinate actions. ➤ Assist water suppliers and other users in developing conservation measures. ➤ Continue and improve water conservation education. 	<ul style="list-style-type: none"> ➤ Develop/update/implement water supply plans (including drought preparedness and response and water conservation programs). ➤ Adopt conservation rate structures and ordinances. ➤ Establish mutual aid agreements, interconnections, conservation education, redundant/alternative supplies, etc. ➤ Minimize water supply system losses and improve water use efficiency.
<p>DROUGHT WATCH PHASE A significant portion of the watershed (see map) is “Abnormally Dry” or in a “Moderate Drought”.</p>	<ul style="list-style-type: none"> ➤ Inform Drought Task Force of conditions. ➤ Intensify selected monitoring activities. ➤ Initiate public awareness. ➤ Notify water suppliers of moderate drought conditions. ➤ Monitor Mississippi River flows and coordinate with the U.S. Army Corps of Engineers (USACE) and hydropower facility owners. 	<ul style="list-style-type: none"> ➤ Monitor potential conflicts and problems and notify DNR of source conflicts. ➤ Public water suppliers provide conservation information and request customers to implement voluntary measures to reduce water use.
<p>DROUGHT WARNING PHASE A significant portion of the watershed (see map) is in a “Severe Drought”, or for public water suppliers using the Mississippi River, the average daily flow at the USGS gage near Anoka is at or below 2000 cfs for five consecutive days.</p>	<ul style="list-style-type: none"> ➤ Convene Drought Task Force. ➤ Increase public drought awareness. ➤ Notify water suppliers of severe drought conditions. ➤ Monitor implementation of the Mississippi River System-Wide Low-Flow Management Plan. 	<ul style="list-style-type: none"> ➤ Public water suppliers implement appropriate water use restrictions contained in their water supply plans. ➤ Other water users implement appropriate conservation measures. ➤ Public water suppliers implement water use reduction actions with a goal of reducing water use to 50% above January levels. ➤ Dam operators implement the Mississippi river System-Wide Low-Flow Management Plan.
<p>RESTRICTIVE PHASE A significant portion of the watershed (see map) is in an “Extreme Drought”, or for public water suppliers using the Mississippi River, the average daily flow at the USGS gage near Anoka is at or below 1500 cfs for five consecutive days.</p>	<ul style="list-style-type: none"> ➤ Notify water suppliers of extreme drought conditions. ➤ Closely monitor river flows. ➤ Continue drought awareness efforts to encourage conservation. 	<ul style="list-style-type: none"> ➤ Follow MDNR allocation restrictions. ➤ Public water suppliers implement water use reduction actions with a goal of reducing water use to 25% above January levels. ➤ All appropriators conserve water and minimize non-essential water uses.
<p>EMERGENCY PHASE A significant portion of the watershed (see map) is in an “Exceptional Drought”, or highest priority water supply needs are not being met, or there are threatened or actual electricity shortages due to cooling water supply shortages, or for public water suppliers in the Twin Cities, the average daily flow of the Mississippi River USGS gage near Anoka is at or below 1000 cfs for five consecutive days.</p>	<ul style="list-style-type: none"> ➤ Advise Governor on need for emergency declaration. ➤ Minnesota Division of Homeland Security and Emergency Management implements MN Emergency Operations Plan (MEOP). ➤ Consider request to the USACE for the release of water from the Mississippi River Headwaters Reservoirs. 	<ul style="list-style-type: none"> ➤ Public water suppliers implement mandatory water use reduction actions with a goal of reducing water use to January levels. ➤ Limit water used based on highest priorities defined in Minnesota Statutes 103G.261. ➤ Implement measures consistent with an emergency declaration. ➤ Provide bottled water, hauled water, and sanitations supplies to users, as needed.