



**TOWN OF LEESBURG
DROUGHT ASSESSMENT AND EMERGENCY WATER SUPPLY
RESPONSE PLAN**

**Adopted 4/8/2008 by Ordinance # 2008-0-08
Updated: 2/22/2019 by Ordinance # 2019-O-003**

Table of Contents

1. Purpose
2. Introduction
3. Application
4. Definitions
5. Town of Leesburg Water System
6. Metropolitan Washington Water Supply and Drought Awareness Response Plan:
Potomac River System
7. Authorization
8. Public Education
9. Drought Stages and Actions/Restrictions
10. Water Supply Emergency and Actions/Restrictions
11. Enforcement
12. Variances
13. Termination
14. Appendix

Town of Leesburg Drought Assessment and Emergency Water Supply Response Plan

1. Purpose

The purpose of the Drought Assessment and Emergency Water Supply Response Plan (Plan) is to conserve and protect the available water supply for domestic water use, sanitation, and fire protection, and to minimize the impact of a limited water supply during drought and other declared emergency situations, in accordance with the Virginia Administrative Code (9VAC25-780-120) and Leesburg Town Code § 34-23.

2. Introduction

It is important that the Town initiate this Plan to address drought conditions and manage available water resources during a drought or other emergency crisis to ensure sufficient water is available to maintain water pressure, firefighting supply, drinking, and sanitation requirements. The Plan establishes water use categories and conservation standards (voluntary and mandatory) during conditions such as drought or emergency that necessitate restrictions and enforcement measures.

In order to conserve the available water supply and protect the integrity of our water system, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage (drought) or any other water supply emergency conditions, the Town of Leesburg (Town) hereby adopts the following plan and restrictions on the delivery and consumption of water.

3. Application

The provisions of this Plan shall apply to all persons, customers, and property utilizing water provided by the Town of Leesburg within the Town's utility service area.

4. Definitions

Conservation – those practices and techniques that reduce the consumption of water through increased efficiency, reduced losses, or reuse which results in conservation of the water supply for future use.

Customer – any person, company, organization or entity that uses water supplied by the Town within the Town's service area.

CO-OP – special section of the Interstate Commission on the Potomac River Basin that provides joint management of available water resources during low flow conditions and long-range demand-supply analysis and overall water supply coordination among the major Metropolitan Washington water supply utilities.

Drought – “Drought is a condition of moisture deficit sufficient to have an adverse effect on vegetation, wildlife, and people over a sizeable area.” (Adapted from the U.S. Geological Survey.)

NOAA – National Oceanographic and Atmospheric Administration.

NOAA D1 First Stage Drought – the second of 5 stages of a mathematical index reflecting long-term (Palmer Drought Severity Index) and short-term (Crop Moisture Index) soil moisture.

Water Supply Coordination Agreement – agreement signed by the major utilities and CO-OP that requires major suppliers to coordinate operations. Specifically, it brought the Occoquan (FCWA) and the Patuxent (WSSC) supplies into a coordinated system. The agreement also provides for a 20 year projected supply-demand analysis every five years and specifies a cost share formula.

5. Town of Leesburg Water System

The Town owns and operates a water treatment, transmission, storage and distribution system, and is responsible for providing water service to customers within the Town’s Utility Service Area. The utility service area includes residents and businesses within the corporate limits and areas approved that are adjacent to the corporate limits in Loudoun County.

The Town of Leesburg owns and operates the Kenneth B. Rollins Memorial Water Filtration Plant (WFP). The WFP is a Class I facility that employs a conventional water filtration treatment process and is rated at a capacity of 12.5 million gallons a day. The source water for the facility is the Potomac River.

Treated water is pumped from the WFP suction well into a transmission main where it is conveyed to the Town’s storage tanks, pump stations and customers. The Town maintains four pressure zones and five storage tanks with a combined capacity of eight million gallons.

In addition to the WFP, the Town operates one well with a capacity of 350 gpm that pumps into the Main Zone. The well is operated at times of low demand and periodically as a supplement to WFP production.

In 2003, the Town and Loudoun Water jointly constructed a waterline interconnection across Goose Creek. This interconnection was incorporated into the Riverside Parkway bridge deck, spanning Goose Creek. The purpose of the Interconnection Facility is to provide an emergency water supply capability between the two water systems. The following conditions have been defined as emergency that would trigger the activation of the Interconnection Facility:

1. Source Water Contamination
2. Major Transmission Failure
3. Major Power Failure
4. Major Pump Failure
5. Unexpected Service Interruption or scheduled maintenance.

6. Metropolitan Washington Water Supply and Drought Awareness Response Plan: Potomac River System

The Town has elected to follow the criteria as set forth in the Metropolitan Washington Water Supply and Drought Awareness Response Plan. In June 2000, the Metropolitan Washington Council of Government's (COG) Board approved their plan, which is comprised of four distinct stages of water supply and drought awareness. The COG Drought Coordination Committee developed the plan primarily for those utilities that use the Potomac River for their water supply. The stages are from least severe to most severe and include: Normal, Watch, Warning and Emergency. (See Appendix: Water Supply and Drought Awareness Response Plan.) The stages are further explained in Section 8. The Town of Leesburg is an affiliated water utility with the COG Task Force on Water Supply Issues.

In 1982, the Water Supply Coordination Agreement was developed among the Fairfax Water (FW), Washington Suburban Sanitary Commission (WSSC), and the Washington Aqueduct Division (WAD) of the Corps of Engineers, and the Interstate Commission on the Potomac River Basin (ICPRB). The ICPRB Section for Cooperative Water Supply Operations on the Potomac (CO-OP) was designated by the Water Supply Coordination Agreement to be responsible for coordination of water resources during times of low flow.

Both the ICPRB and COG publish monthly water supply outlook documents during peak demand periods (typically April through October) for the Potomac River. The Director of Utilities will stay informed with the status of the Potomac River by reviewing the monthly reports. The Department of Utilities' web page also has a link to ICPRB and COG websites for citizens to obtain additional information regarding Potomac River flow and related topics.

7. Authorization

The Town Manager, upon consultation with and Director of Utilities and with the advice and consent of Council is hereby authorized and directed to implement the applicable provisions of this Plan upon his/her determination that such implementation is necessary to protect the public health, safety, and welfare of the citizens. The decision of the Town Manager to implement the applicable provisions of this Plan shall be ratified by the Town Council within three (3) days of that action.

The Deputy Town Manager, Director of Utilities, or designated representative, shall keep the Town Manager informed of the conditions of water supply and system usage. When the COG initiates a change in the drought stage, the Town may implement the appropriate "actions" as described in Section 9 of this Plan. Additionally, the Town may implement the applicable provisions of this Plan as described in Section 10 in response to other water supply related emergencies that have the potential to impact public health, safety and welfare as deemed necessary by the Town Manager.

8. Public Education

The Town will provide the public with information about the Plan, including information about the conditions under which each stage of this Plan is initiated, the measures to be implemented, and the conditions necessary for termination. The information will be provided through press release, Town’s cable television channel, signs posted in public places and/or the Town's website.

9. Drought Stages and Actions/Restrictions

Table 1 below explains the conditions or triggers that would require the Town to implement a particular stage.

Table 1	
Stage	Conditions for Implementation
1. Normal Wise Water Use	<ul style="list-style-type: none"> • Not Applicable – water supply adequate to meet all demands. • NOAA drought index neutral to D0, abnormally dry –see year round water conservation program.
2. Watch Voluntary Water Conservation	<ul style="list-style-type: none"> • NOAA drought index D1, moderate drought.
3. Warning Voluntary Water Restrictions	<ul style="list-style-type: none"> • ICPRB determines 5% probability of not meeting unrestricted water supply demands over next 1 to 2 months. • NOAA drought index D2, severe drought.
4. Emergency Mandatory Water Restrictions	<ul style="list-style-type: none"> • ICPRB determines 50% probability of not meeting unrestricted water supply demands over next month. • NOAA drought index D3, extreme drought, or greater.

It is important that Town customers understand that most of their water is supplied by the Potomac River. Therefore, the Town generally adheres to the recommendations from the Metropolitan Washington Water Supply and Drought Awareness Response Plan for the Potomac River System. If the Town finds that the Potomac River level is becoming dangerously low, the Town may move into a more severe stage sooner than neighboring jurisdictions or utilities.

No water customer of the Town of Leesburg Department of Utilities shall knowingly make, cause, use or permit the use of water from the Town’s public water system for residential commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provisions of this plan, or in an amount in excess of that use permitted by the drought management plan in effect pursuant to action taken by Director of Utilities or his/her designated representative according to this plan.

The Director of Utilities shall promulgate guidelines which shall set forth the criteria for determining when and where particular regulations within a water use reduction and restriction stage are to be implemented and terminated. Such guidelines shall be updated when, in the opinion of the Director, the conditions of the water system have changed so as to necessitate such update. In

addition, such guidelines shall be available for inspection at the Department of Utilities administrative offices during normal business hours.

10. Water Supply Emergency and Actions/Restrictions

Table 3	
Level	Conditions for Implementation
1. Normal Wise Water Use	<ul style="list-style-type: none"> • Not Applicable – water supply adequate to meet all demands.
2. Warning Voluntary Water Restrictions	<ul style="list-style-type: none"> • Prolonged mechanical or equipment failure at the plant or in the distribution system that compromises production or storage capacity. i.e. tank out of service for maintenance. • Pressure zone specific equipment failures or outages that impact only a portion of the Town’s service area
3. Emergency Mandatory Water Restrictions	<ul style="list-style-type: none"> • Loss of water storage. • Major fire-fighting efforts that overwhelm production or storage capacity • Compromised plant production capacity • Major waterline break. • Loss of treatment in Town’s system. • Contamination of the supply requiring shut down. • Distribution system contamination

If the Town of Leesburg has water supply or water distribution system emergency, the Town may declare an emergency unlike and unassociated with neighboring jurisdictions or utilities.

No water customer of the Town of Leesburg Department of Utilities shall knowingly make, cause, use or permit the use of water from the Town’s public water system for residential commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provisions of this plan, or in an amount in excess of that use permitted by the water supply emergency plan in effect pursuant to action taken by Director of Utilities or his/her designated representative according to this plan.

The Director of Utilities shall promulgate guidelines which shall set forth the criteria for determining when and where particular regulations within a water use reduction and restriction level are to be implemented and terminated. Such guidelines shall be updated when, in the opinion of the Director, the conditions of the water system have changed so as to necessitate such update. In addition, such guidelines shall be available for inspection at the Department of Utilities administrative offices during normal business hours.

11. Enforcement (pursuant to Va. Code §§ 15.2-923; 15.2-924)

1. No person shall knowingly or intentionally allow the use of water from the Town for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this Plan.

2. Any person who uses water, or allows or causes the use of water, in violation of Drought Stage 4 (Emergency) or Emergency Water Supply Level 3 of this Plan shall be subject to the following penalties:
 - a. For the first offense, violators shall receive a written warning delivered in person or posted on the premises by a representative of the Town of Leesburg Department of Utilities.
 - b. For the second offense, violators shall be assessed a fee not to exceed \$100.00, consistent with the severity of the infraction. The fee shall be imposed on the violator's quarterly water bill.
 - c. For the third and each subsequent offense, violators shall be assessed a fee not to exceed \$250.00 for each offense, imposed on the violator's quarterly water bill.
 - d. Each violation by a person shall be counted as a separate violation by that person, irrespective of the location at which the violation occurs.
 - e. Each day of noncompliance will constitute a separate violation. The fee shall be imposed on the violator's quarterly water bill.
 - f. The penalty for foregoing compliance shall be denial or discontinuation of water service.
3. Any Town Police Officer, or other Town of Leesburg employee designated by the Town Manager, may enforce this section of the Plan by issuance of notice of written violation to any person reasonably believed to be in violation of this Plan.
4. Persons who have been assessed a penalty shall have the right to challenge the assessment by providing a written complaint to the Director of Utilities within 10 days of the notice of penalty assessment. The Director shall determine whether the penalty was properly assessed and notify the complainant, in writing, of the determination. If the Director determines that the penalty was properly assessed, the complainant may appeal that determination by providing written notice to the Town Manager within 10 days of receiving the notice of determination. The Town Manager or a designee shall determine whether the penalty was properly assessed and notify the complainant, in writing, of the determination.
5. The Director of Utilities may waive the penalty if it is determined that the violation occurred due to no fault of the complainant.

12. Variances

1. A customer may file a request for variance from this Plan to the Department of Utilities for the property receiving water service. A request form and instructions are included in the Appendix of this Plan.

2. The Town Manager through consultation with the Deputy Town Manager and Director of Utilities may grant a variance from this Plan upon the determination that special circumstances exist that upon strict enforcement of this Plan may adversely affect the health, sanitation, or safety for the public or the applicant.
3. Variances granted under this section may expire upon escalation of this Plan to the next higher phase or termination of the Plan.

13. Termination

The Town Manager, upon consultation with the Deputy Town Manager, Director of Utilities and with the advice and consent of Town Council, is hereby authorized and directed to terminate the applicable provisions of this Plan upon his/her determination that the applicable provisions are no longer necessary to protect the public health, safety, and welfare of the Town's citizens.

14. Appendix

1. Sample - Notice of Violation - Warning Letter
2. Sample - Notice of Penalty - Assessment Letter
3. Request for Variance
4. Sample - Interstate Commission on the Potomac River Basin (ICPRB) Water Supply Outlook
5. Sample - Washington Metropolitan Council of Government (COG) Regional Drought and Water Supply Status



AMY R. WYKS, P.E.
Director of Utilities

1385 Russell Branch Parkway SE · 20175 · 703-771-2750 · FAX: 703-737-7185 · www.leesburgva.gov

September 12, 2023

Customer Address
123 Address Road
Leesburg, VA 20175

RE: **Warning for Violation of Drought Assessment and Emergency Water Supply Ordinance – Mandatory Water Restrictions**

Dear Customer:

This letter is to notify you that your lawn irrigation system was observed operating on _____. Watering of lawns is prohibited by the Drought Assessment and Emergency Water Supply Response Plan, as codified in Leesburg Town Code § 34-23. Please see the attached code section for further restrictions. Watering with buckets that have a capacity of three (3) or fewer gallons is permitted at any time.

Operation of your lawn irrigation system, like the failure to comply with any of the other mandatory measures included with this warning letter, is a violation of the Town's Drought Assessment and Emergency Water Supply Response Plan. Because this violation is your first offense under the Plan, this letter of "Warning" has been issued. **Please be advised, however, that future violations will subject you to an increasing scale of monetary penalties, as set out in section 34-23 of the Town's Fee Schedule, attached.**

The Department of Utilities is reminding everyone that drought/emergency water supply conditions exist. In order to sustain a stable and safe drinking water supply and to protect the environment, it is imperative that all residents and businesses observe the mandatory water restrictions.

Please contact this department at 703-771-2750 if you have any questions. We sincerely hope that you will abide by the mandatory restrictions and implement suggested water conservation measures. Thank you in advance for your cooperation.

Sincerely,

Amy R. Wyks
Director of Utilities

Attachment



AMY R. WYKS, P.E.
Director of Utilities

1385 Russell Branch Parkway SE · 20175 · 703-771-2750 · FAX: 703-737-7185 · www.leesburgva.gov

September 12, 2023

Customer Name
123 Address Road
Leesburg, VA 20175

Re: Notice of Fee Assessed for Violation of Drought Assessment and Emergency Water Supply Plan Regarding Mandatory Water Restrictions – **Second Offense**

Dear Customer:

This letter is to notify you that your lawn irrigation system was observed operating on _____. Operating an irrigation system during a declared “Stage 4” emergency is in violation of the Drought Assessment and Emergency Water Supply Plan as codified by Leesburg Town Code § 34-23. The Drought Assessment and Emergency Water Supply Plan prohibits lawn irrigation from the public water system.

On _____ the Town’s Department of Utilities issued you a warning letter regarding your failure to comply with the Drought Assessment and Emergency Water Supply Plan’s **Mandatory Water Restrictions**. A copy of that warning letter is attached.

Operation of your irrigation system during a declared drought or water emergency and failure to comply with any of the other mandatory restrictions included with the warning letter, is a violation of the Town’s Drought Assessment and Emergency Water Supply Plan. **Therefore, a \$100 fee will be imposed as a penalty on your next water bill** pursuant to Leesburg Town Code § 34-23 and Appendix B – Fee Schedule.

You have the right to challenge the assessment by providing a written notice to the Director of Utilities within ten (10) days of the date of the assessment of the penalty (date on your next water bill). The Director or a designee shall determine whether the penalty was properly assessed and notify the complainant in writing of a determination. Should the Director or a designee determine that the penalty was properly assessed; the person may appeal that determination by providing written notice to the Town Manager within ten (10) days of receiving the notice of determination from the Director of Utilities. The Director of Utilities or a designee may waive the penalty if it is determined that the violation occurred due to no fault of the customer.

Page 2
Customer Name
Date

Please contact this department at 703-771-2750 if you have any questions regarding the above action. We sincerely hope that you will abide by the mandatory water restrictions and we thank you in advance for your cooperation.

Sincerely,

Amy R. Wyks
Director of Utilities

Encl. Warning letter dated XX

REQUEST FOR VARIANCE FROM MANDATORY RESTRICTIONS

Requesting a (check one) Full Waiver _____ Partial Waiver _____

First Name: _____ Last Name: _____

Daytime Phone: _____ Email: _____

Company Name (if applicable): _____

Property Address where waiver is requested (if applicable):

City: _____ Zip: _____

State Your Substantial Unique Problem Justifying This Request for Waiver:

How Much Water (Daily) Do You Use? _____ gallons

What Time of Day? _____ pm/am (circle one)

Please Describe Your Proposed Water Conservation Plan (attach additional pages if necessary):

_____ (check) I certify that granting this request will not adversely affect public health, safety or welfare.

Applicant Signature

Date

**You may fax this document to 703-737-7185, email to awyks@leesburgva.gov or mail to
Town of Leesburg Department of Utilities, 1385 Russell Branch Parkway, Leesburg, VA
20175**

PROCEDURES FOR REQUESTING RELIEF FROM WATER SHORTAGE EMERGENCY MANDATORY RESTRICTIONS

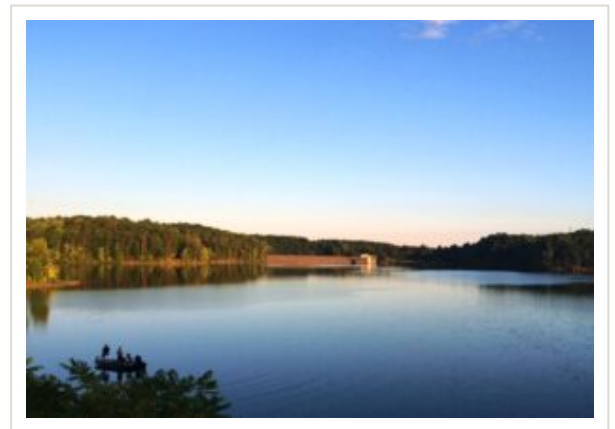
1. Any individual, business or other water user affected by emergency mandatory water restrictions imposed by the Town of Leesburg may request relief from such restrictions.
2. Applications for relief must be filed in writing with Town of Leesburg Department of Utilities by email: awyks@leesburgva.gov; fax: 703-737-7185; or by mail: 1385 Russell Branch Parkway, Leesburg, VA 20175.
3. There are two types of relief available. An applicant for relief may request (1) permission to comply less than fully with certain mandatory restrictions, or (2) a waiver from compliance with certain mandatory restrictions.
4. Applicants for either type of relief must show good cause for the granting of the relief, including evidence that the applicant has a substantial problem not common to other businesses or persons generally.
5. An applicant for waiver from certain restrictions must show that the granting of such a waiver will not adversely affect the public health, safety and welfare of the citizens.
6. Applicants should provide detailed information on their water consumption and time of day or night water is consumed. Applicants should also provide a proposed conservation plan to be put into effect if the request for relief is granted.
7. The Town of Leesburg has the sole authority to rule on applications for relief.

WATER SUPPLY OUTLOOK AND STATUS

Interstate Commission on the Potomac River Basin

What is the Outlook?

ICPRB's Section for [Cooperative Water Supply Operations on the Potomac](#) (CO-OP) was established to serve as a cooperative technical center on water resources in the Potomac basin. CO-OP staff publish the Water Supply Outlook on a monthly basis between April and October of each year. It provides an update on the possibility of water supply releases from the area's reservoirs based on long-term precipitation data, flows, and other information for the Potomac basin.



Little Seneca Reservoir

Download: [Water Supply Outlook – September 2023](#)

Summary/Conclusions

There is a much above-normal probability of releases from the Washington metropolitan area's backup water supply reservoirs for the 2023 summer and fall seasons. These releases are typically prompted by low flows resulting from a combination of insufficient summer precipitation and low groundwater levels. August's average Potomac Basin precipitation was 0.8 inches below normal as of the 29th, with a long-term (12-month) cumulative deficit of about 7.1 inches (11 to 25 percent below normal). Consequently, Little Falls' adjusted stream flow remains below average yet above the historical minimum, and groundwater monitoring indicates below-normal levels. Presently, the Potomac River observed flow at Little Falls Dam, Washington D.C., is at 472 MGD (730 cfs), demanding close monitoring under CO-OP's declared enhanced drought operations since August 25. The Washington Aqueduct voluntarily shifted water withdrawals from Great Falls to Little Falls to ensure river environmental flows. Notably, a substantial portion of the Potomac watershed is facing D1 drought conditions per the U.S. Drought Monitor, triggering a discussion among the Metropolitan Washington Council of Governments (MWCOC) Drought Coordination Technical Committee (DCTC) to potentially initiate a "Drought Watch" stage. Despite basin conditions, the Potomac River's flows are currently adequate to meet the water

demands of the Washington metropolitan area without requiring releases from upstream reservoirs. Thanks to well-designed drought-contingency plans, the area is well-prepared to handle further reductions in flow.

ICPRB's Low Flow Outlook

There is a 34 to 51 percent conditional probability that natural Potomac flow will drop below 600 to 700 million gallons per day (MGD) at Little Falls through December 31 of this year; at these flow levels, water supply releases from Jennings Randolph and Little Seneca reservoirs may occur.

Releases occur when the predicted flow is less than demand plus a required environmental flow-by. Drinking water demand ranges from 400 to 700 MGD during the summer months, and the minimum flow-by at Little Falls is 100 MGD. Natural flow is defined as observed flow at the Little Falls gage plus total Washington metropolitan Potomac withdrawals, with an adjustment made to remove the effect of North Branch reservoir releases on stream flow.

The conditional probability is estimated by analyzing the historical stream flow records and considering recent stream flow values, precipitation totals for the prior 12 months, current groundwater levels, and the current Palmer Drought Index. Past years in which watershed conditions most closely resemble current conditions are weighted more heavily in determining conditional probability. The historical, or unconditional, probability is based on analyzing the historical record without weighing current conditions. The 34 to 51 percent conditional probability compares to the 7 to 14 percent historical probability and is considered the more reliable indicator.

[USGS Potomac real-time gages](#)

Drought Status:

[US Drought Monitor](#)

[CO-OP Drought Monitoring Updates](#) (link updated July 2022)

[Maryland Drought Status](#)

[Virginia Drought Status](#)

[West Virginia Drought Monitor](#)

[Pennsylvania Drought Status](#)

[Forecasted U.S. Conditions Summary](#)

Recent precipitation and forecasts:

[CO-OP's Potomac Basin Precipitation Map](#)

[Precipitation maps from the MARFC](#)

[Quantitative Precipitation Forecast, MARFC 3 days](#)

[Quantitative Precipitation Forecast, NWS 1-5 days](#)

Groundwater Conditions:

[Basin groundwater levels](#)

Water Supply Outlook Archive:

2023: [April](#) | [May](#) | [June](#) | [July](#) | [August](#) | [September](#) | [October](#)

2022: [April](#) | [May](#) | [June](#) | [July](#) | [August](#) | [September](#) | [October](#)

2021: [April](#) | [May](#) | [June](#) | [July](#) | [August](#) | [September](#) | [October](#)

2020: [April](#) | [May](#) | [June](#) | [July](#) | [August](#) | [September](#) | [October](#)

2019: [April](#) | [May](#) | [June](#) | [July](#) | [August](#) | [September](#) | [October](#)

2018: [April](#) | [May](#) | [June](#) | [July](#) | [August](#) | [September](#) | [October](#)

2017: [April](#) | [May](#) | [June](#) | [July](#) | [August](#) | [September](#) | [October](#)

2016: [April](#) | [May](#) | [June](#) | [July](#) | [August](#) | [September](#) | [October](#)

2015: [April](#) | [May](#) | [June](#) | [July](#) | [August](#) | [September](#) | [October](#)

2014: [October](#)

Please [contact us](#) if you would like to be notified when new Water Supply Outlooks are posted.

> [CONTACT US FOR MORE INFORMATION](#)

RECENT NEWS

News from Around the Basin – September 7, 2023

September 07

Some voluntary and mandatory water restrictions in the western part of the watershed, plus some other consequences of dry weather, in this week's Potomac News Reservoir Sept... [Read More](#)

> [VIEW MORE NEWS](#)

Resources & Maps

The ICPRB provides various maps and other resources for public use to further understanding of the watershed.

> [EXPLORE OUR RESOURCES](#)



[Sign Up for our Mailing List](#)

ICPRB, 30 WEST GUDE DRIVE, SUITE 450, ROCKVILLE, MD 20850

301.984.1908

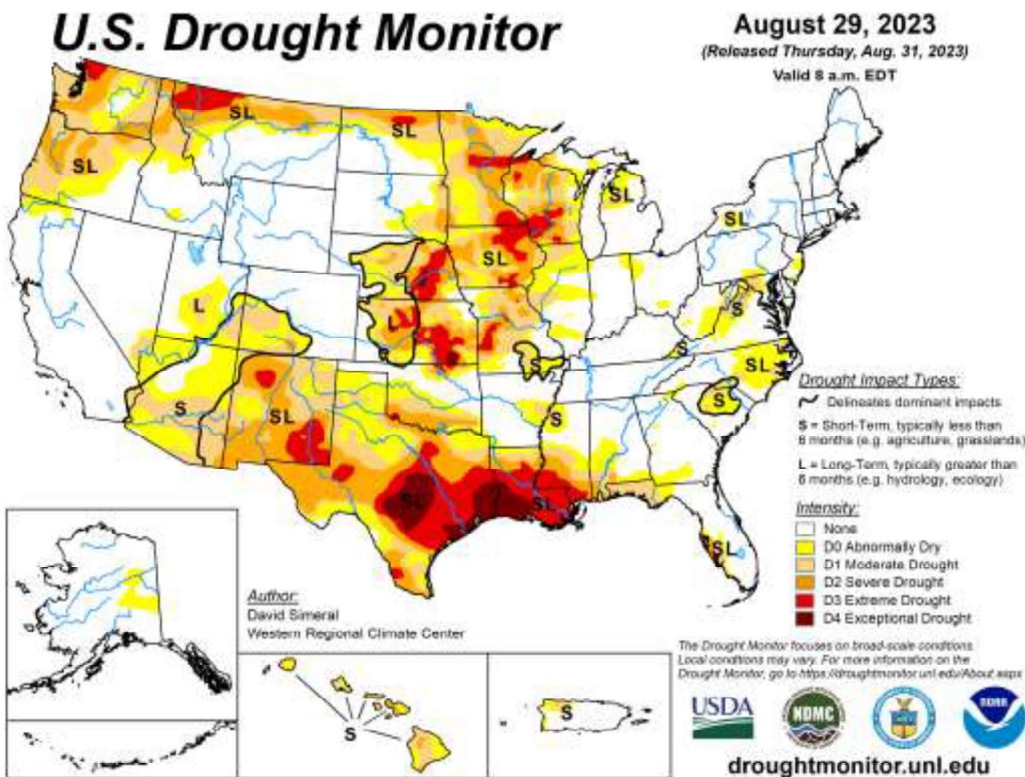
Copyright © ICPRB 2023 / Privacy Policy / Website Design by Wood Street, Inc.

Regional Drought and Water Supply Status September 2023

Summary of Current Conditions in the COG Region - As of August 31, 2023

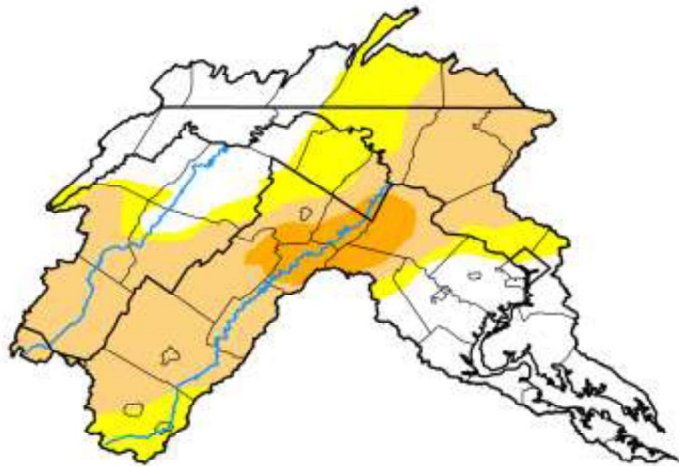
The latest U.S. Drought monitor indicates that abnormal dryness and moderate drought conditions are still present in the COG region along with a small area of severe drought in Loudoun County, Virginia. Potomac streamflow levels dropped significantly since our last report and triggered drought operations by [ICPRB's CO-OP](#). These operations include issuing morning and afternoon updates to stakeholders regarding streamflow, weather, and demand conditions and using river flow forecasting tools to determine whether changes are needed to meet upcoming water demands. Such operational changes could include scheduling water supply releases from our area's upstream reservoirs, Jennings Randolph, and Little Seneca. The most recent Water Supply Outlook from ICPRB predicts up to 51% probability that flows will be low enough to require water releases from these reservoirs.

The current drought stage as defined in COG's [Metropolitan Washington Water Supply and Drought Awareness Response Plan](#) (the Plan) is Normal, The Drought Coordination Technical Committee is scheduled to meet next week to discuss the possibility of entering a Drought WATCH, the second stage of the Plan. If declared, a press release will be issued urging residents and businesses to voluntarily conserve water along with a reminder that our water supply is well-protected due to decades of careful planning and preparation. For more information, please visit COG's Water Supply and Drought website: <https://www.mwcog.org/drought>



U.S. Drought Monitor Potomac Watershed

August 29, 2023
(Released Thursday, Aug. 31, 2023)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	33.81	18.92	41.08	6.22	0.00	0.00
Last Week 08-24-2023	33.80	40.44	25.76	0.00	0.00	0.00
3 Months Ago 06-01-2023	36.37	48.77	16.86	0.00	0.00	0.00
Start of Calendar Year 01-01-2023	99.06	0.04	0.00	0.00	0.00	0.00
Start of Water Year 09-29-2022	89.89	10.11	0.00	0.00	0.00	0.00
One Year Ago 08-01-2022	97.85	2.15	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

David Simeral
Western Regional Climate Center



droughtmonitor.unl.edu

Drought Stage - Normal

The current drought stage as defined in [COG's water supply and drought awareness response plan \(the Plan\)](#) is Normal in the COG region. COG's Plan focuses on tracking and responding to drought conditions as it relates to regional water supply.

The Virginia Department of Environmental Quality (VADEQ) issued a drought Watch for the Northern Virginal region due to low groundwater levels. MDE issued a [drought watch advisory](#) for the northern part of Montgomery County and central and western portions of the state encouraging voluntary water conservation. The areas served by WSSC are not included in this advisory.

Potomac Streamflow – Below median levels

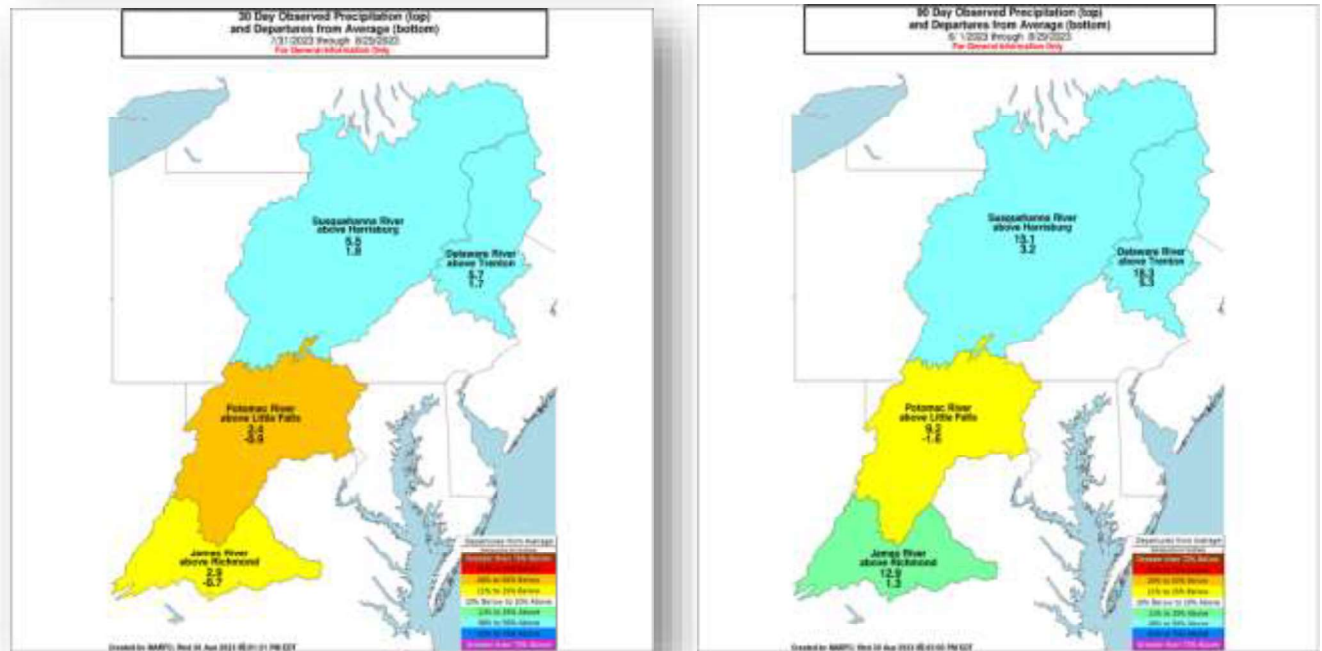
Instantaneous flows readings:

- Little Falls: 610 cfs (median, 2,390 cfs) Source: as of August 31 [USGS Little Falls](#)
- *Point of Rocks: 1,310 cfs (median 2,350 cfs) Source: as of August 31 [USGS Point of Rocks](#)
- *Hydropower operations affect river flows and large fluctuations were observed at the Shepherdstown and Point of Rocks gages.

Potomac Basin Precipitation 30 and 90 Day (through 08.31.23) –Below Normal

The Potomac Basin received 2.4 inches of precipitation in the last 30 days, 0.9 inches below normal and 9.2 inches, 1.6 inches below normal over the past 90 days.

Source: [Middle Atlantic River Forecast Center](https://www.mafcc.gov/)



Groundwater Levels – Below Normal

In the COG region, groundwater levels are below normal.

Source: <https://dashboard.waterdata.usgs.gov/app/nwd/?region=lower48&aoi=default>

Reservoir Levels - Normal

Drinking water reservoirs at Jennings Randolph and Little Seneca are currently slightly below their normal pool levels.

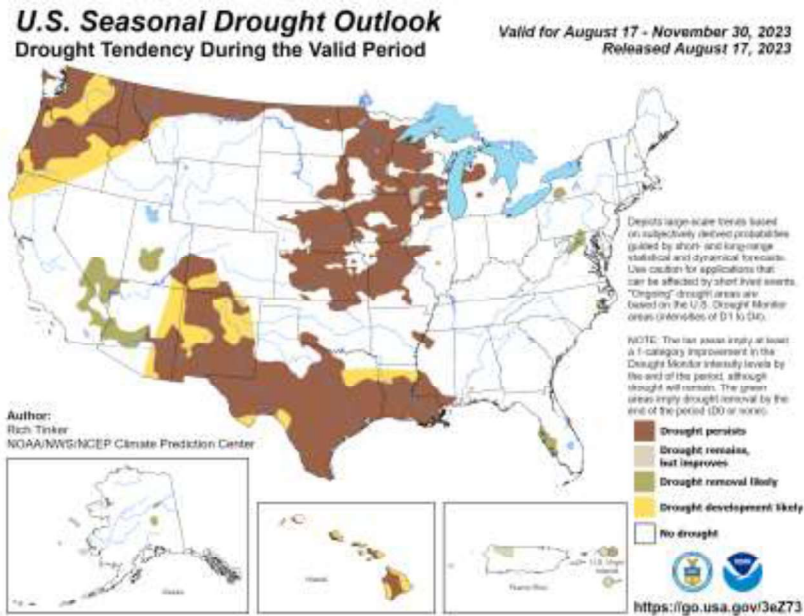
Source: <http://www.nab-wc.usace.army.mil/nab/potopub.html>

Probability of Reservoir Releases – Above Normal

As of the September 2023 report, there is a **much above-normal probability** of releases from the Washington metropolitan area's back-up water supply reservoirs for the 2023 summer and fall seasons. Generally, the use of Jennings Randolph and Little Seneca reservoirs is triggered by low flows brought about by a combination of low precipitation and low groundwater levels. There is a **34 to 51** percent conditional probability that natural Potomac flow will drop below 600 to 700 million gallons per day (MGD) at Little Falls through December 31 of this year. Source: [ICPRB](https://www.icprb.org/)

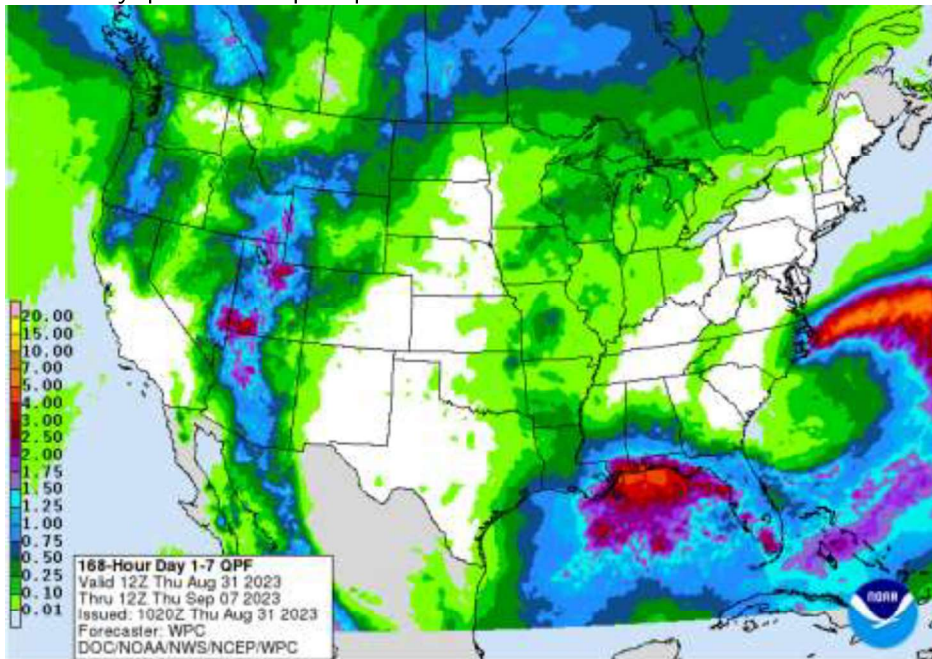
Seasonal Drought Outlook - Drought Removal Likely

Yellow areas are likely to see drought develop. Brown areas are likely to see drought persist. Tan means drought is likely to improve at least one category, and **green means drought is likely to end**. NOAA Climate.gov map, based on data from NOAA Climate Prediction Center.



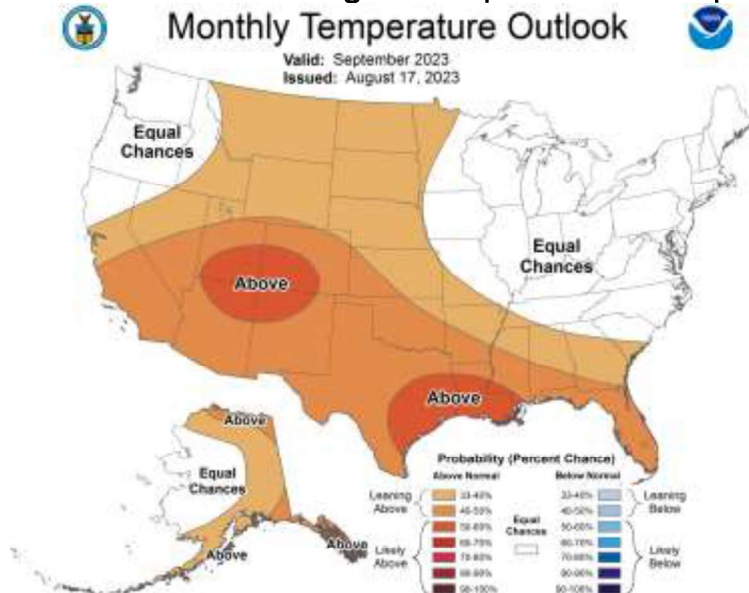
Short Term Precipitation Outlook

The 7 Day quantitative precipitation forecast calls little to no rain in the COG region.

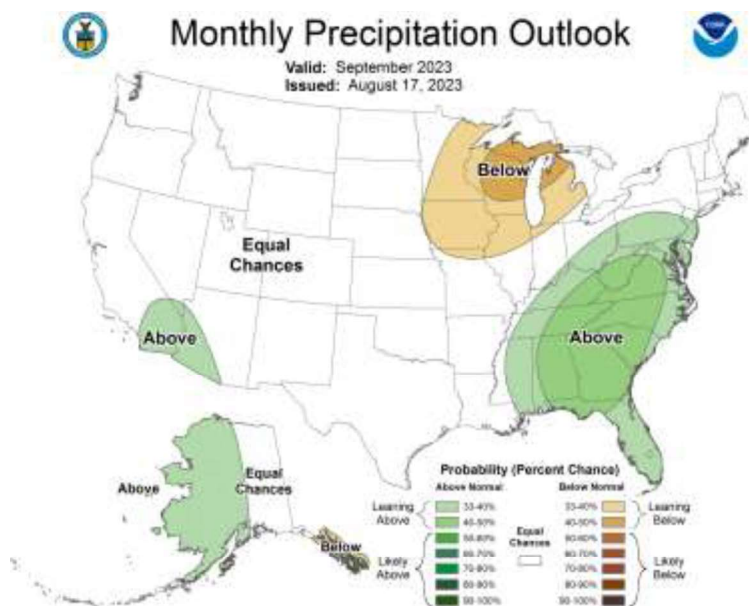


Source: [NOAA NWS Weather Prediction Center](https://www.weather.gov) and COG

U.S. Climate Outlook for August – Temperature and Precipitation



The Monthly Temperature Outlook for September 2023 indicates that there are equal chances for a warm, cool, or near-average September. For more details on how to interpret these maps, [Understanding NOAA's monthly climate outlooks](#). Map by NOAA Climate.gov, based on data from the Climate Prediction Center.



The Monthly Precipitation Outlook for September 2023 indicates our region is leaning towards above normal amounts of precipitation for the month. For more details on how to interpret these maps [Understanding NOAA's monthly climate outlooks](#). Map by NOAA Climate.gov, based on data from the Climate Prediction Center.