



August 31, 2007

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The ICPRB, through its Section for Cooperative Water Supply Operations on the Potomac (CO-OP), coordinates water supply operations during times of drought and recommends releases of stored water. These operations ensure adequate water supplies for the major Washington metropolitan area water users and for environmental flow levels.

Summary/conclusions:

The probability of releases this summer and fall from the Washington metropolitan area’s back-up water supply reservoirs is lower since the July 24th update to the Outlook, and is now approximately normal. Rainfall in early August increased flows slightly and more recent storms increased flows to well above median for several days. Because of the increased flows, daily monitoring of flow and water demands was discontinued on August 9. Groundwater levels are in relatively good shape, and the Potomac flow has been receding more slowly than it would if groundwater levels were lower.

Generally, the use of Potomac reservoirs is triggered by low flows brought about by a combination of low summer rainfall, low precipitation in the prior 12 months, and low groundwater levels. Precipitation in the prior year has been slightly above average in the Potomac basin, and August precipitation to date has been above normal. In the event that low-flow conditions develop this summer, the metro area is well-protected from a water supply shortage because of carefully designed drought-contingency plans.

ICPRB outlook:

There is a 7 to 15 percent conditional probability that 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 predicted flow is less than demand. Typical summer demand during droughts is equal to about 500 to more than 700 MGD (plus a 100 MGD minimum flow recommendation at Little Falls) and most of the demand is met with water withdrawn from the Potomac.

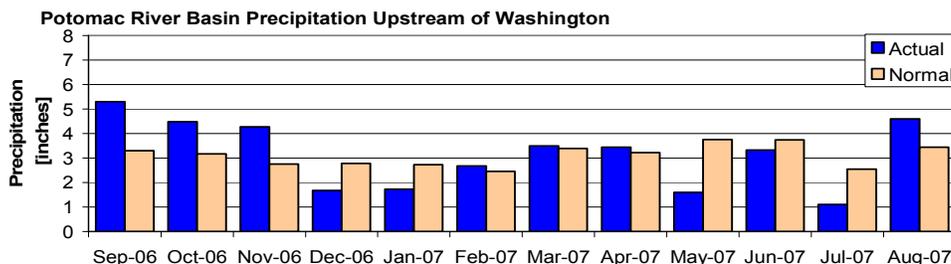
The conditional probability is estimated by analyzing the historical stream flow records and giving consideration to recent stream flow values, precipitation totals for the prior 9 to 12 months, current groundwater levels, and the current Palmer Drought Index. Past years in which watershed conditions most closely resemble current conditions are weighted more heavily in the determination of conditional probability. The historical probability is based on an analysis of the historical stream flow record without weighting for current conditions. The conditional probability of 7 to 15 percent compares to a historical probability of 8 to 13 percent and is considered the more reliable indicator.

Outlook for Potomac River at Little Falls – Watershed conditions as of August 29, 2007

Low flow threshold (MGD)	Historical probability of lower flow Sep 1 through December 31	Conditional probability of lower flow Sep 1 through December 31
1200	0.64	0.82
1000	0.48	0.66
800	0.24	0.28
700	0.13	0.15
600	0.08	0.07

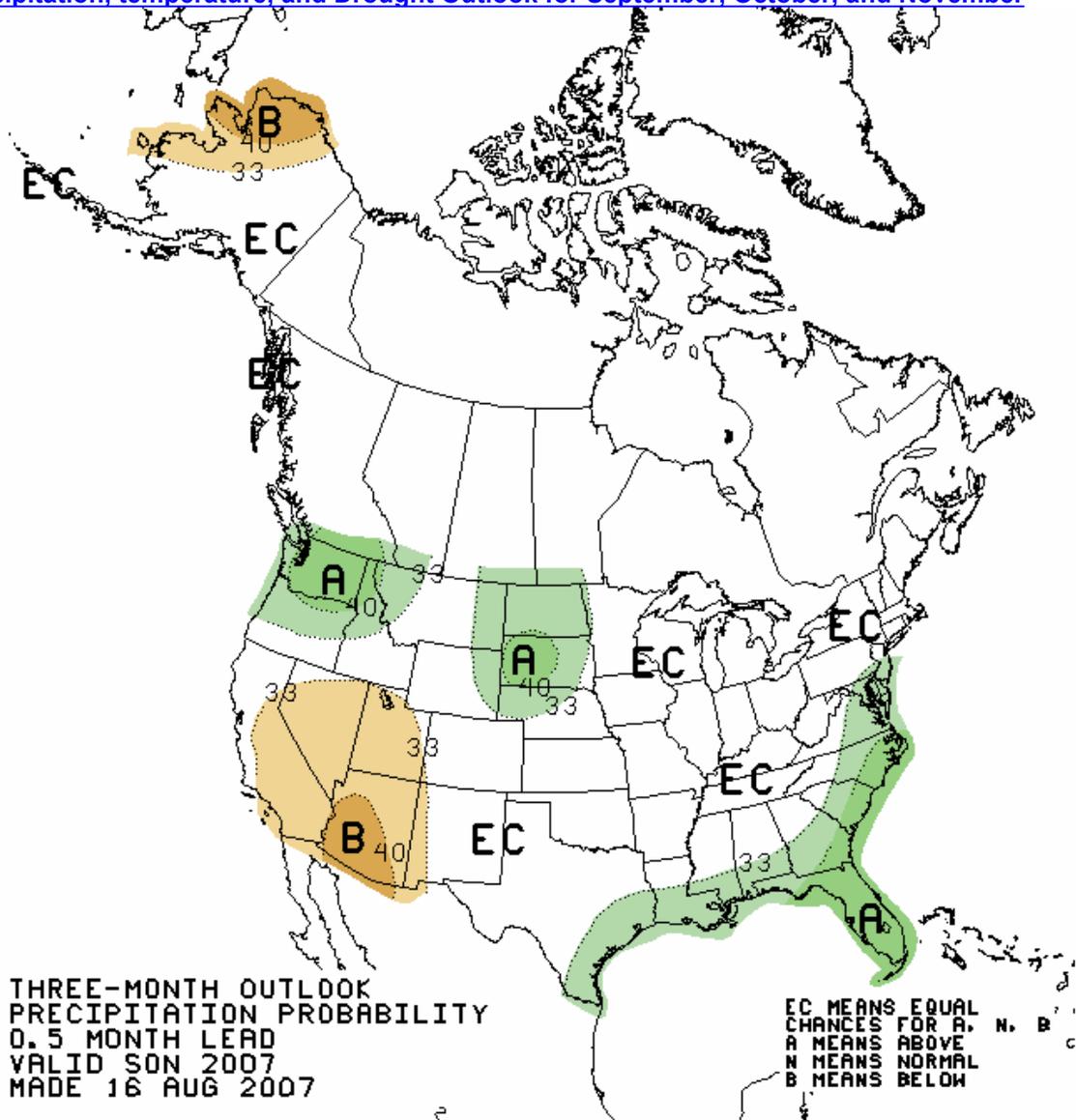
Precipitation summary for the Potomac basin:

The National Weather Service’s Middle Atlantic River Forecast Center reports that precipitation in the Potomac basin upstream of Washington, D.C., has been .42 inches above average for the prior 12 months (since September 1, 2006), for a total of 37.7 inches. August precipitation through the 29th amounts to 4.59 inches, 1.15 inches above normal.

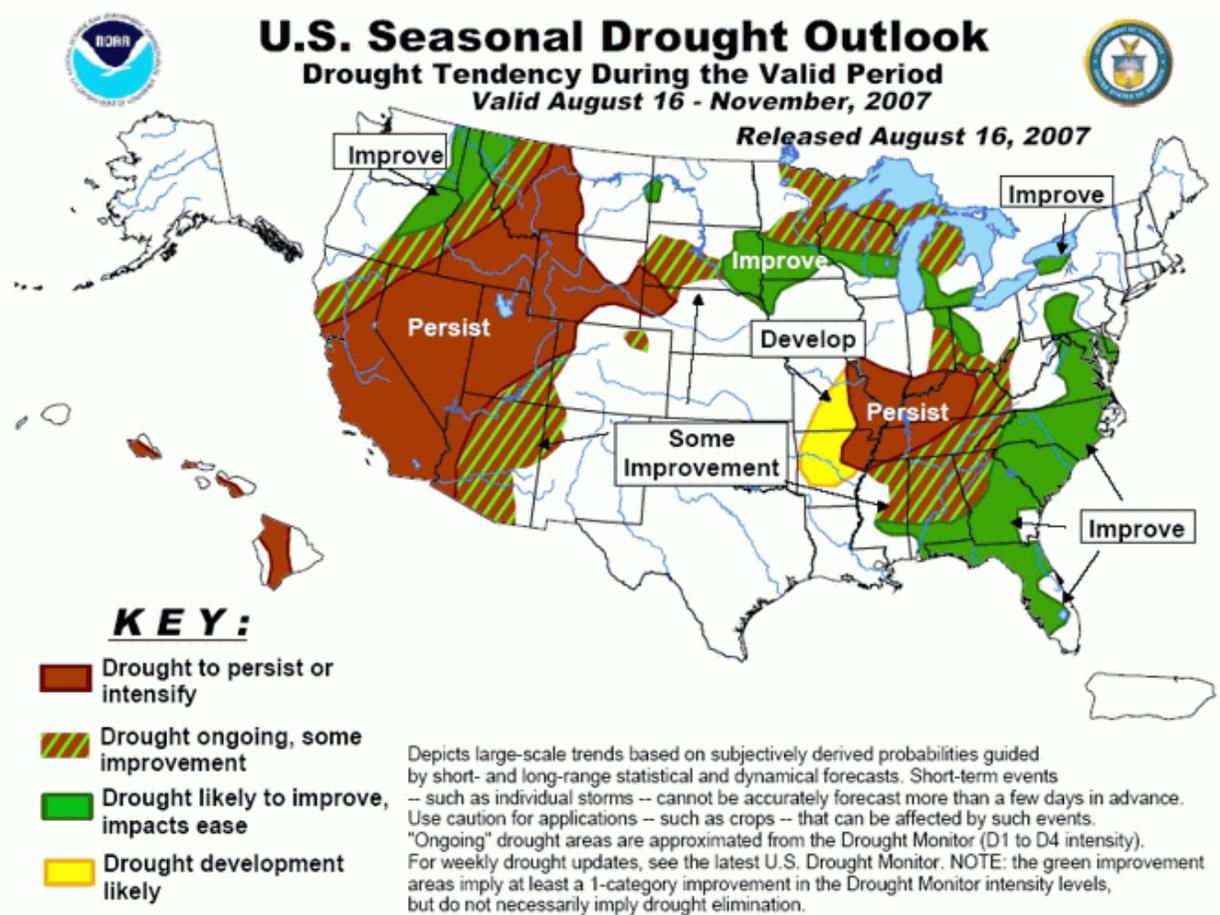


Data source: Middle Atlantic River Forecast Center, NWS

Precipitation, temperature, and Drought Outlook for September, October, and November

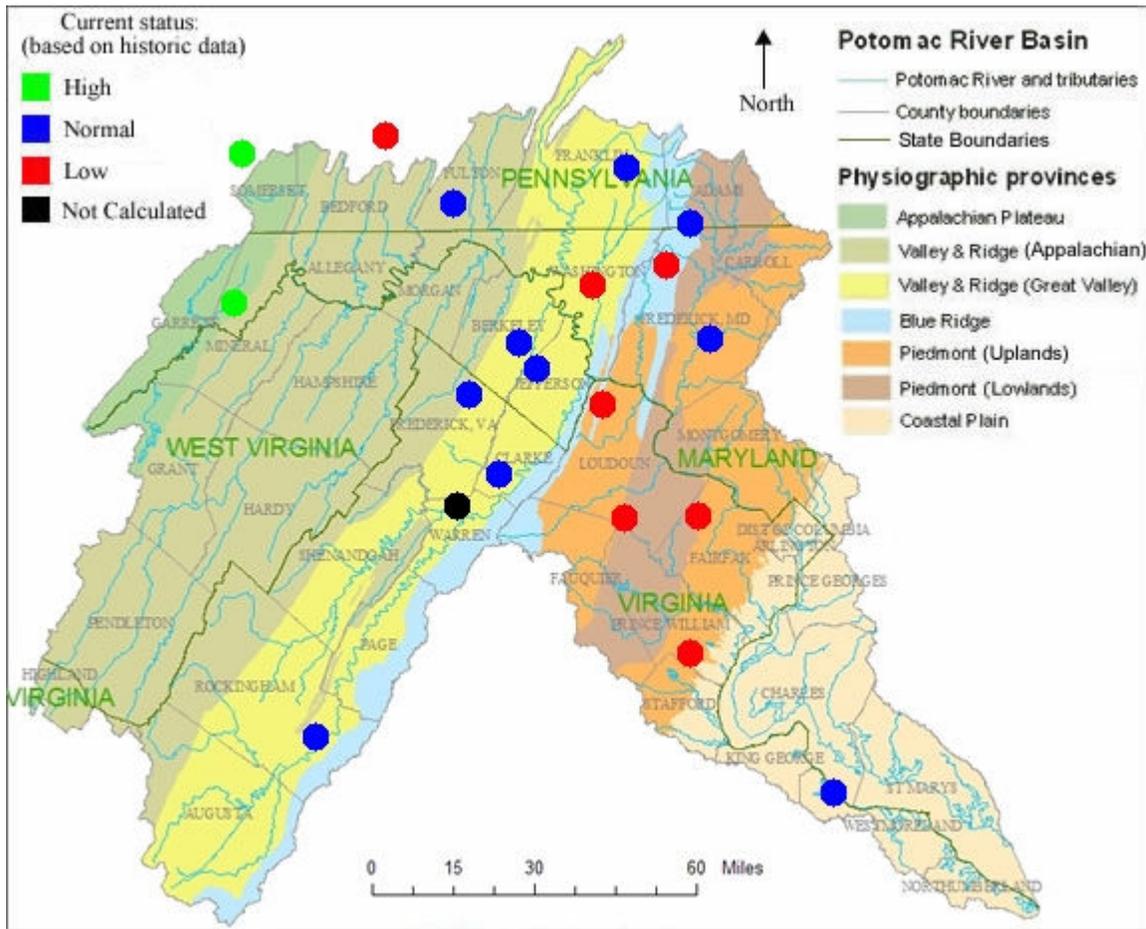


The Climate Prediction Center (CPC) of the National Oceanic and Atmospheric Administration predicts above normal chances of higher than median precipitation over much of the Potomac basin for September, October, and November. The CPC calls for equal chances of above or below average temperatures for September, October, and November. (Image source: CPC).



As of July 19, the CPC's Seasonal Drought Outlook forecasts drought conditions to improve for the Potomac basin. (Image Source: CPC)

Groundwater:



Monitoring wells show that most groundwater levels are “normal” to “low” throughout most of the basin (Image source: United States Geological Survey, created 8/28/2007). The Great Valley has the best (highest) baseflow characteristics during droughts, and six of the seven groundwater wells are “normal” in this physiographic province. In this graphic, USGS defines “high” as greater than 75th percentile, “normal” as between the 25th and 75th percentiles, and “low” as less than the 25th percentile.

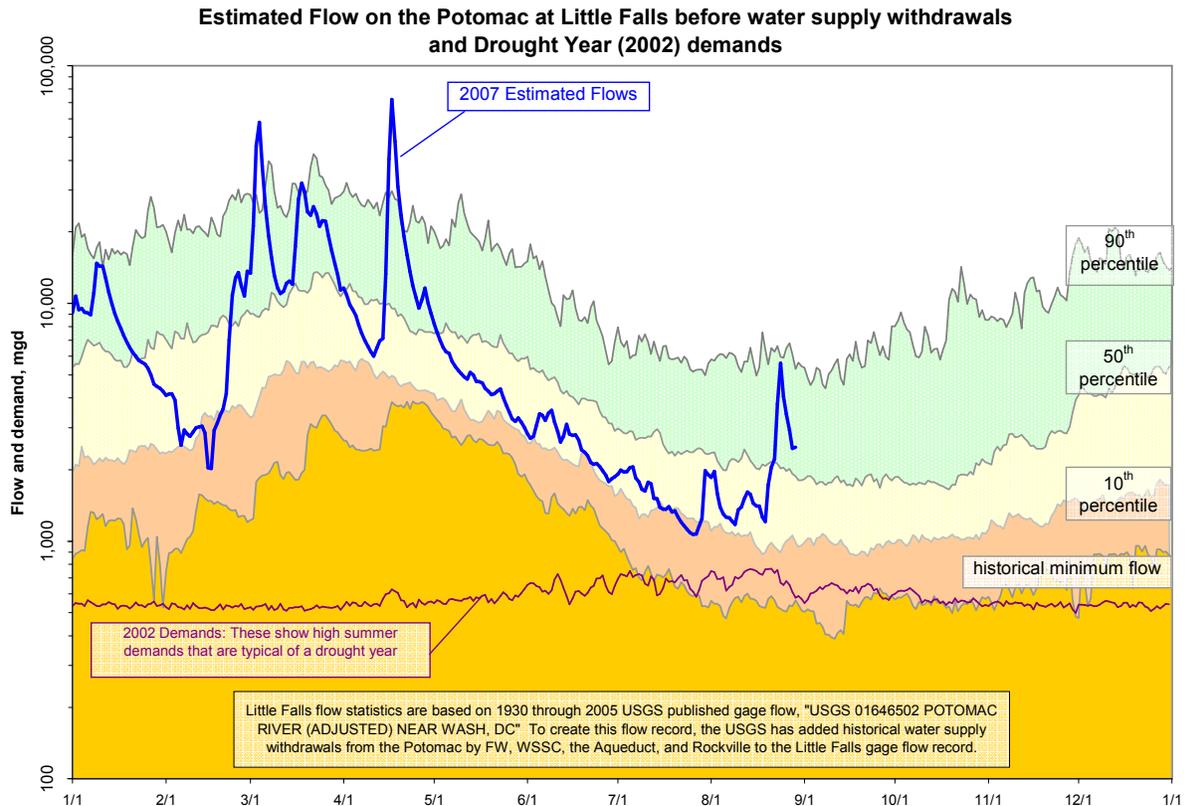
Of the seven real-time wells tracked by ICPRB for drought forecasting, four were lower than the 25th percentile levels and two were lower than tenth percentile levels as of August 29th.

Reservoir Storage:

Facility	Percent Full	Current usable storage, bg	Total usable capacity, bg
WSSC’s Patuxent reservoirs	65	6.6	10.2
FW’s Occoquan Reservoir	70	5.6	8.0
Little Seneca Reservoir	100	3.8	3.8
Jennings Randolph water supply	100	13.3	13.3
Jennings Randolph water quality	74	12.3	16.6
Savage Reservoir	81	5.0	6.2

Estimated Potomac River flow:

The estimated Potomac flow at Little Falls averaged 2.0 billion gallons per day in August, about 22 percent of median flow for August. Estimated flow is the flow that would have occurred before water supply withdrawals, and is based on estimated withdrawal data and on provisional Little Falls gage data. Recent storms increased flows to well above median, but they have been falling toward median over the last several days.



Environmental Flow-by:

Average Potomac flow at Little Falls in August was well above the minimum flow recommendation of 100 MGD.

Drought Status:

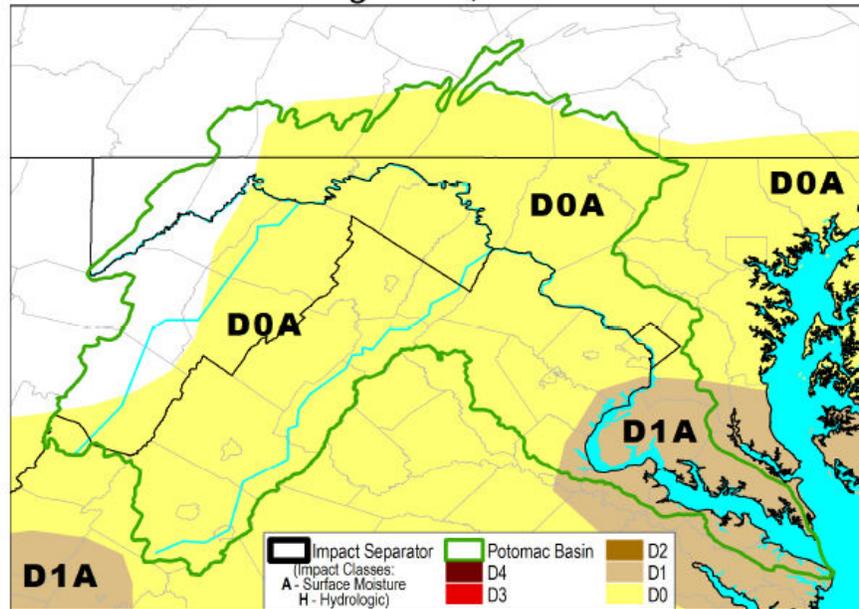
The Metropolitan Washington Council of Government's (MWCOG's) Drought Awareness Response Plan status is "Normal." The drought status may change to "Watch" if so declared by the MWCOG's Drought Coordination Committee. This Committee meets when the CPC's drought monitor shows more than 75 percent of the Potomac basin in D-1 status (see below). As of August 28, only about 12 percent of the Potomac Basin is in D-1 status or dryer.

Drought Monitor and Soil moisture:

The latest Potomac Basin Drought Monitor (see next page) from the NOAA Climate Prediction Center (CPC) indicates "D0 - Abnormally Dry" to "D1- Drought - Moderate" conditions for the Potomac Basin upstream of Washington. The Palmer Drought Severity Index shows "near-normal" to "severe drought" soil moisture conditions for the region (see bottom graphic on the next page).

Potomac Basin Drought Monitor

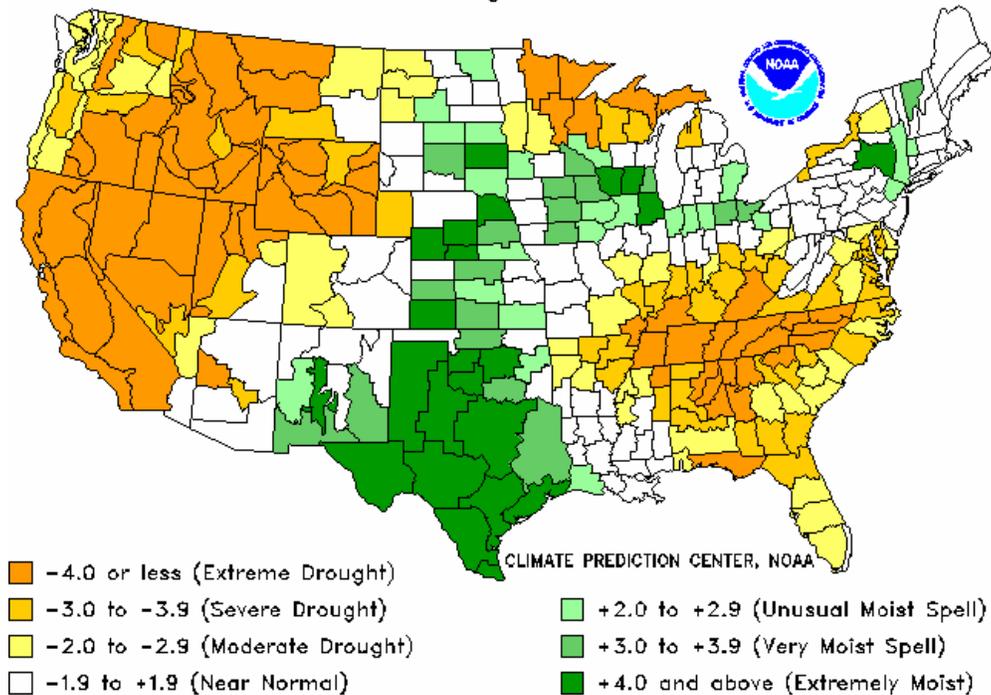
August 28, 2007



Drought Severity Index by Division

Weekly Value for Period Ending 25 AUG 2007

Long Term Palmer



Information provided by the USGS, the Middle Atlantic River Forecast Center, and the National Weather Service.