

Weekly Drought Report September 10, 2010

Due to the lack of rainfall over the past 30 days, 90-day departure from normal precipitation deficits have essentially doubled for many of the counties in the western part of the state as well as counties in the southeast. For the remainder of the state, precipitation was either slightly above or slightly below normal for the past 30-days. Since last month, the number of counties in a drought watch/warning/emergency indicator status over a 90-day period has grown from 13 to 43 counties.

A review of the county monitoring gages indicates that the 30-day average streamflow values have declined during the past month in 13 counties scattered between the southwest corner and southcentral portions of the state. There was a slight improvement to 8 counties in the northeast to the point that the drought indicators returned to normal status. Based on the snapshot of the instantaneous streamflows, flows are below normal in many areas across the state.

Ground water levels in five counties in the northeast have shown a modest improvement over the past month (Bradford, Carbon, Columbia, Luzerne and Wayne) while levels declined in 8 counties (Dauphin, Fayette, Juniata, Lawrence, Lebanon, Mercer, Perry and Somerset).

The Weekly Palmer Drought Severity Index (soil moisture) is now showing 7 regions with a drought indicator of “watch”, which is an increase from 5 regions last month.

The 7-day forecast indicates the western half of the state to receive a possible 1.0 inch of precipitation; the remainder of the state trace amounts. The 8–14 day forecast predicts most of the state to receive precipitation in the 1.0 inch range and up to 2 inches in the northwest corner.

In summary, overall conditions have deteriorated as precipitation deficits expand predominantly into the western and southeastern sections of the state. Slight improvements in a segment of groundwater wells and streamflow levels in the northeast have lessened the decline that has been experienced in the northeast over the past several months. Dry conditions have been experienced most of the summer for many areas of the state with the past month of above normal temperatures and large reduction in rainfall exacerbating conditions.

A Statewide Drought Task Force meeting has been scheduled for Sept. 16 to discuss current conditions. A drought watch/warning declaration is recommended at this time based upon the current monitoring conditions. It would signal to water users to begin planning for reduced supplies should the precipitation deficits continue to build.

Weekly Drought Report September 28, 2010

Precipitation

Even though the state received precipitation over the past 14 days, only six counties (Clinton, Lycoming, Mifflin, Northampton, Somerset and Union) have shown improvement to the 90-day precipitation departure drought indicators. The entire western half of the state (with the exception of Lawrence county) and the eastern end, approximately two-thirds of the state, remains in drought “watch” or “warning” or “emergency” levels. Departures for a few counties remain up to 5 inches under the normal 90 day amounts.

Surface Water

A review of the instantaneous streamflows this morning indicates that recent rainfall has improved streamflows across the state, as compared to flows on September 15, 2010. Flows in Western Pennsylvania are mostly above the median flows, with a few gages still indicating below normal flows. In the Eastern portion of the state, instantaneous streamflows remain below normal, although some have improved slightly.

The 30-day average streamflows continue to move downward with five counties with a drought indicator status of “emergency” (Elk, Fulton, Somerset, Philadelphia and Tioga) and four counties with a drought indicator status of “warning” (Beaver, Franklin, Monroe and Pike). 37 counties are now in drought indicator status of “watch”. Of note over the past two weeks is the rapid decline in four out of the five counties that started with the drought indicator status of either “normal” or “watch” on Sept. 15 and are now in “emergency”.

Groundwater

Over the past two weeks, groundwater indicators show a decline in the moving 30-day average groundwater well levels with a few monitoring wells moving from “watch” levels to both “warning” and “emergency” indicator status. With the changes in groundwater usually lagging behind precipitation events, improvements in the moving 30-day average well levels will likely take time in reaction to recent and forecast precipitation events.

Palmer Drought Severity Index

Drought indicators in all ten regions are now in “watch” status.

Precipitation forecast

The 7-day forecast indicates significant cumulative precipitation to fall across the state; about 3 inches in the western part of the state to about 6 inches towards the eastern end. This precipitation would be expected to significantly improve precipitation deficits.

Although there has been a slight reduction to precipitation deficits over the past two weeks, the entire Commonwealth remains in a drought watch or warning declaration status.

Weekly Drought Report October 04, 2010

Precipitation

Over the past week, the remnants of tropical storm Nicole dropped 7 to 8 inches of rain on the eastern portion of the state and 4-5 inches of rain on the central portion of the state, which has eliminated the 90-day precipitation deficits for those areas. However, the western side of the state received only 1 to 2.5 inches, which only reduced the precipitation deficits somewhat. Negative 90-day departures over -2.9 inches still exist in Greene, Washington, Beaver, Armstrong and Venango Counties with less negative departures throughout the western part of the state.

Surface Water

Instantaneous streamflows have improved significantly across the Central and Eastern portions of the state. In the West, instantaneous streamflows range from above normal to much below normal. Based upon the Oct. 2, 2010 indicator map, the 30-day running average streamflow conditions have improved to normal status for all counties except Beaver, Elk, Mercer and Somerset which remain in “watch” status.

Groundwater

With the changes in groundwater usually lagging behind precipitation events, improvements in the moving 30-day average well levels will likely take time in reaction to recent and forecast precipitation events. Proportionately more precipitation makes its way as groundwater recharge at this time of year with diminishing evapotranspiration that comes with cooler weather, and less plant uptake.

Palmer Drought Severity Index

At this time, the drought indicators continue to be in “watch” status. However, this indicator is updated on a weekly basis on Tuesdays and may change tomorrow due to the recent precipitation.

Precipitation forecast

The 7-day forecast indicates additional precipitation ranging from 0.5 inches up to about 3 inches in the northcentral part of the state. This precipitation will continue to reduce precipitation departures from normal and result in further improvements in surface water levels and to groundwater through recharge.

A more thorough review of the past weeks precipitation impacts on the drought monitoring indicators will be conducted later this week. It is likely that parts of the Commonwealth will be approaching normal conditions. A recommendation for lifting the drought watch and warning declarations for certain areas may be warranted in the upcoming weeks.

Note- There was a disk failure at USGS over the weekend and the drought indicator maps displayed today do not reflect data beyond Oct. 2, 2010. USGS is resolving the issue and the drought indicator maps will be current beginning on Oct. 6.

Weekly Drought Report October 12, 2010

Precipitation

Overnight precipitation from late Monday the 11th into the 12th ranged from less than 0.10 inches up to areas having up to 2 inches primarily eastward from Jefferson County. A pattern of less precipitation in the west than in the east persists with departures for the 90-day period illustrated by values up to 5.7 above normal in York County and below normal (up to 3.6 inches) in Armstrong County.

The 90-day precipitation indicators are normal or above for all counties except for Washington County that continued in watch status from October 7th and for Warren, Clarion, Armstrong, Allegheny and Beaver Counties that moved from normal to watch status in the past week.

Surface Water

Instantaneous stream flow conditions remain above normal across the Central and Eastern portions of the state with the Western portion still at or below normal. Where rainfall occurred from last night, a slight increase in streamflow levels has been observed. Overall, conditions remain steady for instantaneous streamflow with no significant changes since October 4, 2010. All counties are now at Normal status for 30-day average streamflow.

Groundwater

Over the past week, groundwater indicators in several counties recorded improvements, moving from watch status to normal- Bucks, Montgomery, Luzerne, Carbon, Schuylkill, and Columbia. Those remaining in watch or warning status for groundwater include Fayette, Somerset, Erie, Berks, Monroe, Pike, and Lackawanna. Three counties have emergency indicators for groundwater- Lawrence and Mercer (both use Mercer's well) and Susquehanna County.

Palmer Drought Severity Index

At this time, the drought indicators have turned to "normal or above" status.

Precipitation forecast

Little precipitation is forecast for the next 24 hours with a higher probability of showers in the western part of the Commonwealth on Wednesday increasing in probability statewide into Thursday evening. Longer term forecasts call for up to 2 inches of precipitation extending over the upper $\frac{3}{4}$ of the state over the next two weeks.

Although conditions have improved in eastern and central portions of the state with the reduction of precipitation deficits and higher stream flows, it is unknown at this point on whether improved conditions will be sustained. The 9/16/10 Drought Watch and Warning declarations remain in effect.

Weekly Drought Report October 19, 2010

Precipitation

Over the last 7 days, the eastern half of the state accumulated the most precipitation ranging from 0.5 inches up to over an inch with a few small cell areas receiving over 2 inches. In the western half of the state, precipitation ranged from negligible amounts of 0.01 inches up to about 0.5 inches. The Erie coastline and pockets in and above Pittsburgh area received up to 1.5 inch accumulations.

The 90-day precipitation indicators are normal or above for counties except for the southwest corner. A lesser amount of precipitation in the west has dropped a few counties having normal 90-day precipitation indicators into watch and warning.

Surface Water

Instantaneous stream flow conditions remain at or above normal across the Central and Eastern portions of the state with the Western portion still at or below normal. All counties are now at Normal status for 30-day average streamflow except for Raccoon Creek in Beaver County, which just went into drought watch status.

A review of eight county drought monitoring stream gages scattered across the state (Armstrong, Beaver, Clearfield, Fulton, Luzerne, Monroe, Somerset and Tioga) indicates that even though the 30-day moving average in 7 out of 8 gages are in normal status, the values are either declining or peaking and suggests that more meaningful precipitation (longer duration and/or increased frequency) will be needed to recover from the drought.

Groundwater

As a result of precipitation over the past few weeks, the 30-day moving averages ground water levels generally are improving for most monitoring well locations. Those remaining in watch, warning or emergency status show an improvement, but not enough to bring them into the next lower status. Those wells should continue to improve if the precipitation forecasted for the next two weeks occurs.

Palmer Drought Severity Index

At this time, the drought indicators remain at “normal or above” status.

Precipitation forecast

Precipitation accumulations over the next 7 days are expected to range from about 0.5 inches to up to 2.5 inches predominately in the southern end of the Commonwealth.

NOAA is calling for higher precipitation accumulations in the western part of the Commonwealth during the week of Wednesday October 27th through Thursday November 4th with a range of about an 1.0 inches in the east up to 4 inches in the west.

Precipitation of those amounts should significantly reduce the departures from normal that remain in the western half of the state as well as immediately raise streamflows levels and over time, groundwater levels.

Although conditions have improved in eastern and central portions of the state with the reduction of precipitation deficits and higher stream flows, it is unknown at this point on whether improved conditions will be sustained. The 9/16/10 Drought Watch and Warning declarations remain in effect.

Weekly Drought Report October 26, 2010

Precipitation

Over the last 7 days, Pennsylvania received between 0.01 to 0.5 inches of precipitation except in a west to east band along the lower third of the state and along the Erie coastline that received between 0.5 and 1.0 inches. Given the next 7 day forecasted amounts, the cumulative precipitation from last week into the next week will be less than the 14-day forecast amounts reported last week.

While the 90-day precipitation indicators are at “Normal” for counties in the eastern half of the state, a significant number of indicators in western counties are dropping from “Normal” to “Watch” and “Warning” with Armstrong County going from “Warning” to “Emergency” indicator.

Surface Water

Instantaneous streamflow reflects the rainfall that occurred last night. At locations where rain fell, the flow values are rising and at locations where rainfall did not occur, mostly across the western portion of the state, instantaneous streamflows continue to decline. For the most part, a review of the instantaneous streamflow gages indicates that flows are at or below normal in the western part of the state and at or above normal in the eastern part of the state.

The 30-day moving average streamflow values all have an indicator of “Normal” except for Beaver County, which is in “Watch”. Overall, the 30-day values continue to rise in response to the heavy rain which occurred approximately one month ago in the eastern part of the state. The values have peaked or have begun to again decline in areas in the western part of the state where rainfall was not as great.

Groundwater

For almost all of the groundwater monitoring wells, the 30-day moving averages for groundwater levels are in “Normal” status and show rising water depth, even for those western monitoring wells for which precipitation departures have remained below average. A previously reported “Emergency” groundwater indicator in Lawrence County has now been corrected and is showing “Normal”.

Precipitation forecast

The precipitation forecast over the next 7 days indicates a range from about 0.25 to 1.0 inches uniformly across the state. Forecasts for November 3rd through November 11th show precipitation accumulations up to 4 inches in the eastern part of the state with the western part of the state once again lagging behind with accumulations between 0.5 inches and 2 inches.

The Drought Watch/Warning declarations remain in effect at this time. Consideration will be given in the next several weeks for lifting the drought declarations in areas where a sustained recovery has been documented.

Weekly Drought Report November 2, 2010

Precipitation

Over the last 7 days, Pennsylvania received between 0.01 to about 2.0 inches of precipitation with the greatest amounts concentrated in northwest part of the state and in a band running from Harrisburg up through Allentown area.

The rainfall Pennsylvania received over the past week has improved the precipitation indicators. For example, of the 9 county indicators last week that were in warning, only 3 remain today in warning with the others improving to watch or normal condition.

Negative 90-day departures from normal continue to persist in the western third of the state with 12 counties having negative values the highest of which include -4.5 inches in Warren County and -3.8 inches in Armstrong County.

Surface Water

A review of instantaneous streamflows indicate that current flows remain at or above average over all areas of the state except the southern portion west of the Susquehanna River to the Pennsylvania state line. Overall, the instantaneous streamflows are dropping. The 30-day moving average streamflow values are decreasing across the state except for the northwest portion where they continue to rise. Beaver County has now exited "Watch" status and is in "Normal" status. This improvement results in the entire state being in "Normal" status for this date.

Groundwater

The 30-day moving averages of county groundwater well levels are showing mixed results. Of the 17 counties reviewed, 8 monitoring wells (Adams, Beaver, Berks, Elk, Luzerne, Lycoming, Monroe and Tioga) show improvement with increases in groundwater well levels, while 9 monitoring wells show either not much change (Somerset) or declining levels (Allegheny, Armstrong, Bedford, Butler, Fayette, Northumberland, Potter, Venango). All indicators remain in normal status except for Fayette County.

Palmer Drought Severity Index

As was last week, the drought indicators remain at "normal or above" status.

Public Water Supply Agencies (PWSAs)

25 PWSAs remain on restrictions and 7 PWSAs have returned to normal operations with the removal of all restrictions.

Precipitation forecast

Trace levels of precipitation accumulations are forecast over the next 7 days with greater accumulated amounts between 0.25 in the east and 1.5 inches in the west from November 10th through November 18th.

Conditions have improved statewide over the past month. The greatest recovery occurred in the eastern portion of the state due to Tropical Storm Nicole arriving at the tail end of September, which eliminated the 90-day precipitation deficits. Conditions in the western portion of the state improved only slightly. Precipitation deficits remain, ranging from 2 to 4.5 inches and streamflows and groundwater well levels are showing declining trends that will persist unless meaningful precipitation is received in the coming months.

The Statewide Drought Task Force is scheduled to meet next week on Nov. 9. Conditions will be discussed at that time. It is likely that the eastern portion of PA will warrant lifting of the drought watch and warning declarations, with the western portion of PA moving to drought watch from drought warning or remaining in drought watch.

Weekly Drought Report November 8, 2010

Precipitation

Over the last 7 days, Pennsylvania has received between 0.01 to about 2.0 inches of precipitation. Unfortunately, the greatest amount of rain fell in the eastern half of the state and not the western half – the region having precipitation deficits and area that would benefit most from the precipitation. The highest amounts fell from the Philadelphia area up into Lehigh County.

Negative 90-day departures from normal continue to persist in the western third of the state. Precipitation indicators in Forest, Mercer, and Jefferson moved from normal to watch levels. Many of the monitoring stations graphs in the west, although not moving out of their previous status show a decline in moving 90-day precipitation.

Surface Water

A review of instantaneous streamflows indicate that current flows remain at or above average over eastern portion of Pennsylvania with the western portion at or below normal with some gages displaying flows less than 10th percentile level. Overall, the instantaneous streamflows are dropping.

The 30-day moving average streamflow values continue to decline in the western portion of the state with two counties, Beaver and Somerset, moving back in to “Watch” status. It appears that a few more counties may also return to “Watch” status in the western portion of the state unless new rainfall occurs this week and specifically Raccoon Creek at Moffats Mill (Beaver County), moving into “Warning” at the end of the week at its current rate of decline. In the eastern portion of Pennsylvania the 30-day average flows are also decreasing in the northern part with the southern part still enjoying increasing flow values.

Groundwater

Groundwater indicators have not changed from last week’s report. All monitoring well indicators remain as “Normal” except Fayette County’s well whose 30-day moving average remains steady in the “Watch” level. A number of other wells in the west, although in normal are showing a downward trend in their 30-day moving averages while those in the eastern half of the state are at normal or in some cases at way above normal ranges.

Public Water Supply Agencies (PWSAs)

25 PWSAs remain on restrictions and 7 PWSAs have returned to normal operations with the removal of all restrictions.

Precipitation forecast

Forecasts call for no precipitation through the majority of this week with slight chances of showers late in the week into next. However, the forecast for November 16 through November 24th is calling for up to 3 to 4 inches of precipitation in the eastern half of the state down to 2 inches in the far west.

Summary

The Statewide Drought Task Force is scheduled to meet tomorrow at 10:00 am. Conditions will be discussed at that time. Given the improved conditions for approximately 2/3 of the state, I am recommending we lift the drought watch and warning declarations for the eastern and central portions of the state. Because there are still precipitation deficits and declining streamflows in the western portion of PA, I am recommending this portion of the state either remain in drought watch (13 counties) or downgrade from drought warning to drought watch (8 counties).

Remain in Drought Watch:

Armstrong, Butler, Clarion, Crawford, Elk, Erie, Forest, Indiana, Jefferson, McKean, Venango, Warren, Westmoreland

Downgrade from Drought Warning to Drought Watch:

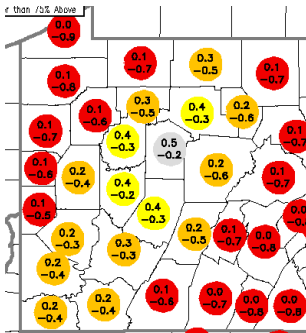
Allegheny, Beaver, Fayette, Greene, Lawrence, Mercer, Somerset, Washington

All remaining counties in Normal.

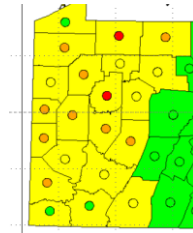
Weekly Drought Report November 16, 2010

Precipitation

Over the last 7 days, Pennsylvania received between 0.1 to about 0.5 inches of precipitation in the central part of the western half of the state.



Negative 90-day departures from normal not only continue to persist in the western third of the state, but track increasing departures. Since last week's report, precipitation indicators in Clarion and Warren Counties have moved from Warning into Emergency levels. Other counties have moved from either



normal or watch into warning levels.

Surface Water

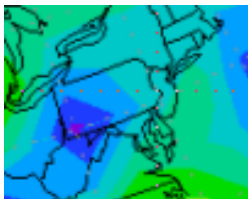
A review of instantaneous streamflows indicate that current flows have continued to drop and now are below normal across the state with only a few gages in the eastern part of the state reporting instantaneous flows above normal. It appears that the lowest flows are occurring across the western part of Pennsylvania with one gage reporting an instantaneous flow at the 6th percentile level.

The 30-day moving average streamflow values have continued or resumed a downward trend this past week across the state. Beaver County is now in Warning status with Fayette, Forest, Indiana, Somerset and Washington Counties in Watch status. At least 3 additional counties in the west may move into Watch status unless significant rainfall occurs. Because the historic 30-day moving average curves are now in their rising position for flows, a lack of significant rainfall in the coming weeks will increase the risk of more counties moving back into Watch/Warning status as the 30-day average flows continue to decrease.

Groundwater

Groundwater indicators have not changed from last week's report. All monitoring well indicators remain as "Normal" except Fayette County's well whose 30-day moving average remains steady in the "Watch" level. A review of several 30-day moving average graphs does not show significant downward nor upward trends.

Precipitation forecast



Forecasts call for modest levels of precipitation in the range of .25 to 1.5 inches through this week. This reflects a change in forecast from the NWS that last week called for up to 3 to 4 inches of precipitation in the eastern half of the state and 2 inches in the far west. Longer term out through December 2nd, the NWS is forecasting up to 3 inches in precipitation in the Southwest corner of the State, which if it occurs, should help precipitation

deficits in that region.

Summary

The Statewide Drought Task Force met last week on Nov. 9 to receive reports from the NWS and DEP. Following discussion of the reports, the Task Force concurred with the DEP recommendation to lift the drought watch and warning declarations for the eastern and central portions of the state. In addition, due to the continued and increasing precipitation deficits in the western portion of the state, the recommendation included continuing the drought watch in 13 counties and moving 8 counties from drought warning to drought watch. A press release was issued to the public on Nov. 10. with the following drought declaration information:

The drought watch and drought warning designations were lifted in Adams, Bedford, Berks, Blair, Bradford, Bucks, Cambria, Cameron, Carbon, Centre, Chester, Clearfield, Clinton, Columbia, Cumberland, Dauphin, Delaware, Franklin, Fulton, Huntingdon, Juniata, Lackawanna, Lancaster, Lebanon, Lehigh, Luzerne, Lycoming, Mifflin, Monroe, Montgomery, Montour, Northampton, Northumberland, Perry, Philadelphia, Pike, Potter, Schuylkill, Susquehanna, Tioga, Union, Wayne, Wyoming and York counties.

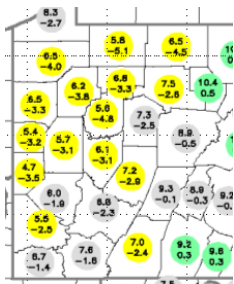
The following western Pennsylvania counties remain in drought watch status: Armstrong, Butler, Clarion, Crawford, Elk, Erie, Forest, Indiana, Jefferson, McKean, Venango, Warren and Westmoreland.

DEP upgraded the following counties from drought warning to drought watch status: Allegheny, Beaver, Fayette, Greene, Lawrence, Mercer, Somerset and Washington.

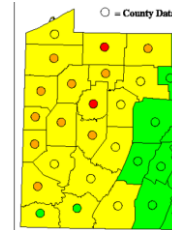
Weekly Drought Report November 23, 2010 (drafted but left incomplete and not submitted)

Precipitation

Over the last 7 days, Pennsylvania received between 0.1 up to about 1 inches of precipitation over most of the state with pockets of precipitation up to about 3 inches in the central part of the of the state.



As with past reports over the past month, negative 90-day precipitation departures from normal continue to persist in the western third of the state, but not uniformly. Since last week's report, precipitation indicators in Mercer and Forest Counties have moved from Watch into Warning levels while Armstrong County moved from Warning down to Watch level.

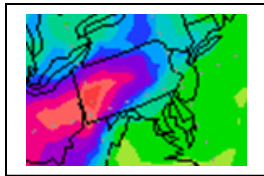


Surface Water

Groundwater

Groundwater indicators have not changed over the past several weeks. All monitoring well indicators remain as "Normal" except Fayette County's well whose 30-day moving average remains steady in the "Watch" level. A number of monitoring wells, without a pattern, show slight increases in levels while others show slight decreases and others somewhat level. With winter and freezing ground conditions approaching, decreasing groundwater recharge would be expected.

Precipitation forecast



Forecasts call for significant levels of precipitation accumulations up to 5 to 6 inches in the west part of the state – the area most needing it. This reflects a change in forecast from the NWS that last week called for up to 3 to 4 inches of precipitation in the eastern half of the state and 2 inches in the far west. Longer term between December 1 and December 9th the NWS is forecasting between 1 to 2 inches in precipitation mostly in the eastern part of the State.

Summary

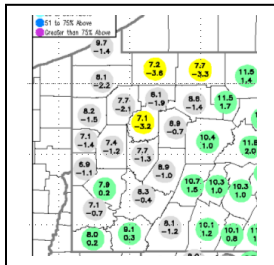
The following western Pennsylvania counties remain in drought watch status: Armstrong, Butler, Clarion, Crawford, Elk, Erie, Forest, Indiana, Jefferson, McKean, Venango, Warren and Westmoreland.

DEP upgraded the following counties from drought warning to drought watch status: Allegheny, Beaver, Fayette, Greene, Lawrence, Mercer, Somerset and Washington.

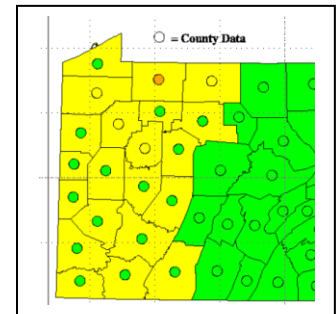
Weekly Drought Report November 30, 2010

Precipitation

[Information on cumulative precipitation over past 7 days not available from NWS at time of this writing].



Parting from the trend over the past weeks, the current 90-day precipitation departures from normal have shown improvement statewide. Warren County remains in watch condition with the highest negative departure of -3.6 inches.



All county 90- day precipitation indicator points are now in normal or above conditions except for five counties in the Northwest; four of which are in watch and one in warning. All five moving total precipitation graphs are plotting improving trends.

Surface Water

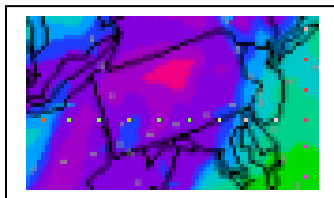
A review of instantaneous streamflows indicates that flows are below normal in the Delaware Basin and in the Lower and Middle Susquehanna and Ohio Basins. Above normal flows exist across the rest of the state. Currently, instantaneous streamflows are decreasing across the state.

The 30-day moving average streamflow values have improved in the last two weeks where we now have only 3 counties in Watch Status; Greene, Philadelphia and Washington. All other counties previously in Warning or Watch are now in Normal Status. The counties which returned to Normal Status are Beaver County from Warning and Fayette, Forest, Indiana and Somerset Counties from Watch Status. The 30-day moving averages are increasing across the state except in the southeast where they are either moving horizontally or decreasing.

Groundwater

Groundwater indicators have not changed over the past several weeks. All monitoring well indicators remain as "Normal" except Fayette County's well whose 30-day moving average remains steady in the "Watch" level. Forecasted precipitation over the next few days will likely, over time, result in improvements to groundwater levels statewide.

Precipitation forecast



Forecasts are calling for between 3 to 6 inches in cumulative precipitation over the next 7 days with more modest cumulative amounts between December 8 and December 16.

The NWS has issued a flood watch for a good portion of the central part of Pennsylvania from north to south borders.

Summary

At this time, the following western Pennsylvania counties remain in drought watch status: Allegheny, Armstrong, Beaver, Butler, Clarion, Crawford, Elk, Erie, Fayette, Forest, Greene, Indiana, Jefferson, Lawrence, McKean, Mercer, Somerset, Venango, Warren Washington and Westmoreland.

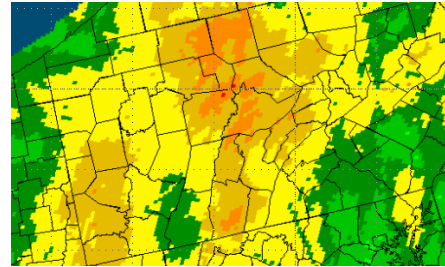
If the precipitation forecast is realized in the next week or so, it is likely the remaining western counties will recover sufficiently and the drought watch declaration can be removed following consultation with the Drought Task Force.

A Drought Task Force meeting will be scheduled for the week of Dec. 14, 2010.

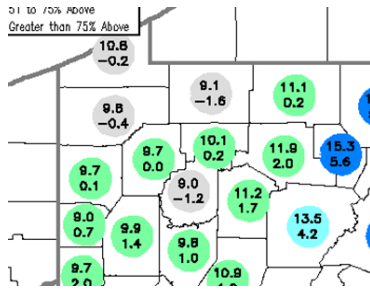
Weekly Drought Report December 7, 2010

Precipitation

Over the past 7 days, Pennsylvania received between 1 and 5 inches of precipitation with the greatest depths in two areas –in the central and southwest as shown in the graphic.



7 day precipitation 1



90 day precip departures 1

All 90-day precipitation departures are positive, indicating normal or above normal precipitation except for three counties – Erie, Crawford and Clarion.

All county 90- day precipitation indicators are green indicating normal or above conditions.

Surface Water

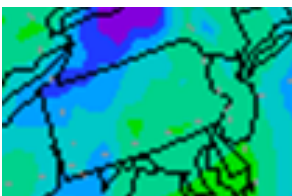
A review of instantaneous streamflows indicates that flows are now nearly 100 percent above normal across the state. Even though instantaneous flows are decreasing at this time; the rate of decline is less severe when compared to the conditions experienced in early to mid November and it appears that they will return to at or somewhat below normal. It appears that some streams may begin to freeze and gages will also begin to be affected by cold weather, therefore any significant flow changes without rainfall will have to be reviewed carefully.

The 30-day moving average streamflow values have improved since last week and all gages are now reporting 30-day averages in the Normal range. Greene, Philadelphia and Washington Counties have now returned to Normal Status. Nearly all 30-day flows are above normal with the exception with Greene County which is near the Watch line and movement into Watch status is likely within the week if no significant rainfall occurs.

Groundwater

All monitoring well indicators remain as “Normal” except Fayette County’s. Lawrence County’s well who also shows a watch and declining depths is being investigated by the USGS for possible error.

Precipitation forecast



Precipitation 12/15 -12/23 1

Forecasts are calling for between ½ to 2.5 inches in cumulative precipitation over the next 7 days with more amounts up to 1.5 inches between December 15 and December 23.

Summary

Almost all of the drought monitoring indicators have returned to normal and recovery from the drought appears to be sustained at this time. The most recent improvement occurred in the western half of the state, which received either above normal or normal precipitation for the month of November and eliminated the precipitation deficits that had persisted into early to mid November.

Conditions will be assessed early next week and it is likely the drought watch declaration can be removed following consultation with the Drought Task Force, which will be meeting on either Dec. 15 or 16, 2010.

Weekly Drought Report December 14, 2010

Precipitation

The state received mixed amounts of precipitation over the past 7-days. The eastern portion and a small pocket on the western edge of the state received generally normal to above normal quantities, about 1 to 1.5 inches. The remainder of the state received somewhat below normal amounts, less than 0.5 inches.

All county 90- day precipitation indicators remain in green indicating normal or above conditions.

Surface Water

A review of instantaneous streamflows indicates that flows remain above normal except for the extreme southern portion of the Ohio River Basin. Instantaneous flows are decreasing at this time after the rainfall event that occurred over the weekend.

The 30-day moving average streamflow values are all at Normal status. A cursory review of the gage plots indicate that the 30-day average flows continue to rise across the state moving them further into the Normal range of the curves for this time of year.

Groundwater

All monitoring well indicators remain at "Normal" except Fayette County's.

Precipitation forecast

The 7-day forecast indicates 0.5 to 1 inches of precipitation for most of the state. The 8-14 day forecast indicates 2.0 to 2.5 inches of precipitation for the state.

Summary

As was reported last week, recovery from the drought appears to be sustained at this time and lifting the drought watch for the 21 counties in the western portion of the state is recommended. Following discussion of current conditions, a recommendation to lift the drought watch will be presented to the Drought Task Force for consideration and concurrence at the Dec. 16, 2010 10:00 am meeting.

Weekly Drought Report December 20, 2010

Precipitation

Over the past 7-days, the eastern portion and a pocket on the western edge of the state received approximately 1 to 1.5 inches of precipitation, while the western portion of the state received 0.5 inches or less.

All county 90- day precipitation indicators remain in green indicating normal or above conditions.

Surface Water

A review of instantaneous streamflows indicates that flows remain at normal except for scattered areas in the western portion of the state and the extreme southeast corner, which are at slightly below normal.

The 30-day moving average streamflow values are all at Normal status.

Groundwater

All monitoring well indicators remain as “Normal” except Fayette County’s well whose 30-day moving average remains steady in the “Watch” level.

Precipitation Forecast

The 7-day forecast indicates from a trace amount for the east up to 1 inch for the western portion of the state. The 8-14 day forecast predicts from 1.5 to 2.5 inches across the state.

Summary

After a hot and dry summer, drought watches or warnings were issued in September for all 67 counties. By Nov. 10, conditions had returned to normal for 46 eastern and central counties. However, the remaining 21 counties continued to experience 90-day precipitation deficits as high as four inches.

Significant rainfall in early December eliminated those deficits and surface water levels have returned to normal for this time of year. The Pennsylvania Drought Task Force used reports and forecasts from the National Weather Service in conjunction with DEP’s drought monitoring program to form the recommendation.

A press release was issued on 12/17/10 following recommendations of the Pennsylvania Drought Task Force to lift the drought watch declarations for 21 western counties.

Watches were lifted for Allegheny, Armstrong, Beaver, Butler, Clarion, Crawford, Elk, Erie, Fayette, Forest, Greene, Indiana, Jefferson, Lawrence, McKean, Mercer, Somerset, Venango, Warren, Washington and Westmoreland counties.