

Corps Water Management Weekly Status Report – 11 December 2017

Weather Summary:

More rain than expected this past week, with 1-2 inches at all projects except Philpott (closer to half-inch), boosting downstream flows below Jordan and Falls and raising their lake levels slightly as well. A return to drier and more seasonable conditions this week, with slightly improved rain chances in the 8-14 day outlook. The December outlook calls for equal chances of below-, near-, and above-normal precip, along with below-normal temps. The longer term Dec-Jan-Feb outlook still show below-normal precip, along with above-normal temps.

Reservoir Summaries:

| Reservoir | 11-Dec-17 0800 Elev (ft-msl) | Guide Curve (ft-msl) | Forecast 18-Dec-17 Elevation (ft-msl) | Average Net Inflows | | Rainfall at Dam | |
|-----------|------------------------------------|----------------------------|--|-------------------------|-----------------------|-------------------|-----------------|
| | | | | 7-day cfs (% median) | Dec cfs (% median) | 7-day (inches) | Dec (inches) |
| Falls | 248.66 | 251.5 | 248.5 | 288 (49%) | 215 (37%) | 2.01 | 2.01 |
| Jordan | 212.22 | 216.0 | 212.1 | 420 (28%) | 335 (22%) | 1.88 | 1.88 |
| Scott | 1030.49 | 1030.0 | 1030.4 | 408 (73%) | 404 (72%) | 0.92 | 0.92 |
| Kerr | 294.42 | 296.5 | 294.0 | 2501 (34%) | 2211 (30%) | 1.59 | 1.59 |
| Philpott | 970.46 | 971.5 | 970.1 | 77 (31%) | 103 (47%) | 0.43 | 0.43 |

| Reservoir | Current Flood Storage % Remaining | Current Water Quality % Remaining | Forecast 60% WQ Remaining | Forecast 40% WQ Remaining | Current Water Supply or Power Pool % Remaining | Forecast 80% WS or PP Remaining | Forecast 60% WS or PP Remaining |
|-----------|--|--|------------------------------------|------------------------------------|---|--|--|
| Falls | 100 | 63 | * | * | 72 | 17 Oct | * |
| Jordan | 100 | 48 | 06 Oct | * | 100 | * | * |
| Scott | 99 | | | | 100 | * | * |
| Kerr | 100 | | | | 75 | 06 Oct | * |
| Philpott | 100 | | | | 91 | * | * |

NOTE: Water Quality, Water Supply, and Power Pool forecasts extend through end of Mar 2018.

* indicates that storage remaining does not drop below indicated threshold by end of forecast period.

Falls: Currently near elev 248.65 ft (2.85 ft below guide curve). Releases are currently near 50 cfs (releasing through piggy-back gates). Clayton is currently near 580 cfs and falling after a bump to over 2000 cfs this weekend in response to rain. Due to diminished water quality storage, we are still currently targeting a reduced daily average flow target at Clayton equal to about 90% of full target (or about 165 cfs). Will maintain piggy-back gate releases as long as downstream flows allow.

Jordan: Currently near elev 212.2 ft (3.8 ft below guide curve) and still rising slightly following recent rain. Outflows are currently near 200 cfs and are expected to remain near that level. Lillington is currently near 542 cfs and falling slowly from peak near 700 cfs this past weekend in response to rain. Allowable minimum flow target range is 300 to 450 cfs +/- 50 cfs, but currently targeting closer to 300 cfs.

W. Kerr Scott: Currently near elev 1030.5 ft (0.5 ft above guide curve) and steady following a slight rise. Currently releasing about 375 cfs. Wilkesboro is currently near 485 cfs; minimum flow target at Wilkesboro is 400 cfs.

Kerr/Philpott: Kerr is currently near elev 294.4 ft (2.1 ft below falling guide curve) and falling in response to generation this week. This week's energy declaration supports minimum energy requirement for Kerr (with no transfer of any energy from Philpott) and equates to a 7-day average release of ~2900 cfs. Anticipate lake level near elev 294 by the end of the week without additional rain. Lake level forecast reflects tentative replacement energy purchases by SEPA beginning next week to maintain dependable capacity level at Kerr (elev 294), which will reduce weekly energy declaration from 3000 MWH to 2000 MWH. Reduced releases would still be near 2000 cfs, which still meets Dominion's minimum releases requirements.

Philpott is currently near elev 970.4 ft (1.1 feet below guide curve) and falling in response to generation this week. Single unit generation of full minimum energy commitment this week (no partial transfer to Kerr), with 5 to 8 hours of generation each day through Thursday (ranging from 200-300 cfs daily average releases; no generation on Friday).