



Steve Troxler  
Commissioner

## North Carolina Department of Agriculture and Consumer Services

July 6, 2017

Honorable Members of the Environmental Review Commission:

On behalf of the Statistics Division of the North Carolina Department of Agriculture and Consumer Services, I respectfully submit to you the results of the 2016 Agricultural Water Use Survey. This report was prepared to fulfill the requirements of N.C. Gen. Stat. § 106-24(b), as amended by Session Law 2008-143.

As required by 7 U.S.C. § 2276, the report includes aggregated data for the entire state. The full report is available at <http://www.ncagr.gov/stats/environmental/index.htm>. It includes aggregated county and river basin water use data, where such information can be produced with accuracy and in compliance with federal law.

The survey contacted more than 2,700 farms, with an 89% response rate showing 945 farms that withdrew 10,000 gallons or more water per day. It is significant that, when comparing historic total ground and surface statewide withdrawals of water for agricultural production with total withdrawals from all users (nonagricultural and agricultural combined, as recorded by the Department of Environmental Quality and currently reported on their website), the survey demonstrates that agricultural use in 2016 on an average basis still accounts for less than 1% of all withdrawals.

I hope that the information supplied here is useful as you discuss legislation and policy that has implications for our farmers and agribusinesses. Our staff is available to answer questions regarding the survey and its results, and I trust you will call upon them as needed. They are extraordinary, and their work is made much easier as a result of the partnerships we have with the Department of Environmental Quality and the many agricultural organizations across North Carolina who have promoted this survey. I look forward to working with each of you to preserve and promote the agriculture industry in the months and years ahead.

Sincerely,

Steven W. Troxler  
Commissioner



**Table 1: Total & Average Daily Water Withdrawn <sup>1</sup>**  
**2016 North Carolina Water Use by Month**

Month	Operations	Monthly Total Ground	Monthly Total Surface	Average Across All Days-Ground	Average Across All Days-Surface
	<i>Number</i>	<i>Gallons</i>	<i>Gallons</i>	<i>Gallons</i>	<i>Gallons</i>
January	657	282,653,194	174,131,399	9,117,845	5,617,142
February	673	263,616,036	171,334,417	9,090,208	5,908,083
March	703	338,797,172	295,967,719	10,928,941	9,547,346
April	767	510,174,646	506,036,217	17,005,822	16,867,874
May	791	548,976,765	634,517,446	17,708,928	20,468,305
June	848	1,086,397,882	1,341,111,526	36,213,263	44,703,718
July	876	1,194,104,566	1,771,106,975	38,519,502	57,132,483
August	840	1,002,189,347	1,532,968,550	32,328,689	49,450,598
September	756	554,706,269	603,694,491	18,490,209	20,123,150
October	696	373,569,478	367,899,789	12,050,628	11,867,735
November	670	300,190,939	164,956,737	10,006,365	5,498,558
December	642	295,667,577	142,529,890	9,537,664	4,597,738
<b>Annual Average</b>				<b>18,416,505</b>	<b>20,981,894</b>

**Operations :**

**945** *Total Operations*

**Daily Withdrawal Capacity (incl. ground & surface):**

**928,052,014** *Gallons*

<sup>1</sup> Users of 10,000 gallons or more per day. Averages reported in this table reflect the average water withdrawn across all days of the month. Farms that reported their withdrawals directly to DEQ by May 19, 2017 have been excluded. The monthly number of operations will not add to the total. Some operations reported both surface and ground water withdrawals, which are counted twice in the monthly number of operations. However, the total number of operations represents operations that withdrew water at any time during the year, regardless if withdrawn from multiple sources.

**Table 2: Demand Use for Days Applied <sup>1</sup>**  
**2016 North Carolina Water Use by Month**

Month	Average Days Applied Ground	Average Days Applied Surface	Total Average Daily-Ground	Total Average Daily-Surface	Total Max Daily-Ground	Total Max Daily-Surface
	<i>Days</i>	<i>Days</i>	<i>Gallons</i>	<i>Gallons</i>	<i>Gallons</i>	<i>Gallons</i>
January	28	14	10,742,818	8,849,160	11,840,500	9,052,527
February	26	13	10,732,934	9,100,885	12,079,747	9,158,515
March	28	14	15,084,033	37,076,311	17,455,108	37,785,945
April	27	15	30,765,220	63,106,410	35,551,281	68,321,736
May	28	18	39,427,597	42,218,924	43,530,867	49,127,097
June	27	17	71,148,004	99,804,322	79,024,803	117,462,669
July	27	17	76,973,738	126,229,501	84,798,198	157,187,547
August	27	17	59,641,287	106,244,328	66,663,092	131,907,020
September	27	18	27,258,590	42,938,760	32,624,371	52,447,935
October	28	17	16,223,414	37,735,191	19,238,663	40,621,676
November	27	15	12,681,671	9,368,855	14,653,500	10,102,615
December	27	15	12,447,159	7,500,601	14,159,220	8,104,467
<b>Annual Average</b>			<b>31,927,205</b>	<b>49,181,104</b>		

<sup>1</sup> Users of 10,000 gallons or more per day. Averages reported in this table reflect the average water withdrawn during the days of application. Farms that reported their withdrawals directly to DEQ by May 19, 2017 have been excluded.