

U. S. DEPARTMENT OF COMMERCE
SINCLAIR WEEKS, Secretary
WEATHER BUREAU
F. W. REICHELDERFER, Chief

CLIMATOLOGICAL DATA

MARYLAND AND DELAWARE

ANNUAL SUMMARY 1955

Volume LIX No. 13



ASHEVILLE: 1956

WEATHER SUMMARY

GENERAL

The year was one of notable extremes in some respects. Record and near-record summer heat, followed by a parade of three hurricanes which drenched the land with the heaviest rainfall ever recorded in many areas, were sandwiched between a January and a December which smashed all records for dryness. In Baltimore, the August deluges and the December dryness set new record extremes of high and low rainfall for all months since 1817. The year averaged out to be a shade warmer and drier than long-term expectancies of temperature and rainfall in the Section.

WEATHER EFFECTS

Winter grains, cover crops, and pastures were in fair to good condition during January, February, and March, being dormant during the unseasonal cold of January. The unseasonable freeze of March 26-29th, which was so ruinous to agriculture in the more southerly states, had little effect in Maryland and Delaware. Peach and other fruit trees were mostly dormant at the time. By late March, land preparation was well under way, and farm activities made normal progress during the spring although in some areas they were hampered by wet ground. The excessive dryness of May was not particularly detrimental to crops except to early-planted corn which had to be replanted in quantity. Abundant rains in June then rejuvenated pastures and favored better crop growth, but they also interfered with cultivation, hay cutting, tobacco planting, and apple spraying. Hot, dry weather in July began to have telling effects by the end of the month. Crop growth came to a standstill, and some damage occurred to corn, tobacco, pastures, and hay crops. Conditions worsened until the time of the torrential rains borne by Hurricanes "Connie" and "Diane" in the middle part of August. Damage by wind and rain was most serious to the southern Maryland tobacco crop, but extensive unestimated damage was done to corn and vegetables as well. Excessive splitting and rotting of tomatoes, and windfall of some peaches and apples also resulted. Cantaloupes were badly damaged, and some early potatoes were reported rotting in the ground in central Delaware. Pastures and most fruit, on the other hand, benefited greatly from the needed rains. In the late summer and fall, farm work was up to date. Freezes late in October ended the growing season, with damage to truck crops in the southeast resulting on the 23rd. By the end of the year, abnormal cold and inadequate snow cover may have resulted in some injury to winter grains and cover crops.

Predominantly dry weather carried over from 1954 maintained below-normal runoff and ground-water levels until August, when hurricane rains brought both to high levels. By December, however, deficient rainfall

had returned them to the subnormal range. Combined storage in Lock Raven and Pretty-boy Reservoirs averaged near 50% of capacity until August, after which time it climbed to 60 - 70% of capacity.

TEMPERATURE

The average temperature for the year was slightly above its long-term expectancy, with 7 individual months averaging more or less warmer than usual. An unseasonably cold January was followed by four unseasonably warm months. April was the fifth warmest of record since 1895 in Maryland and the eighth warmest in Delaware. In contrast, June averaged out to be as unusually cool as April was warm. July and August got back into the heat parade with a vengeance, July smashing the all-time records for high mean temperature that month in both States, and August taking second honors in the same respect. September was outstanding in both States for having experienced an unusually small average diurnal temperature range in the month, which could be laid to excessive cloudiness; mean temperatures in September were near average expectancy. December closed out the year on a very chilly note with average temperatures in both States about 4° below long-term expectancy.

Delaware averages for the year ranged from 56.5° at Dover to 52.5° at Selbyville, while Maryland averages ranged from 58.7° at Crisfield down to 47.5° at Bittering 2 NW. The highest maximum temperatures of the year were 102° at Milford, Del., on July 22nd, and a sweltering 106° at Ocean City, Md., on August 2nd. The greatest number of days in the Section during which temperatures reached 90° or higher was 45 at Coleman, Md., and at National Arboretum, D. C. The lowest minimum temperatures of the year were an even 0° at Newark College Farm, Del., on February 3rd, and -26° at Oakland 1 SE, Md., on January 28th. The least number of 90° days in the Section was a solitary 1 at Bittering 2 NW; the greatest number of days with temperatures dipping to 32° or below was 152 at Oakland 1 SE, Md., and at Sines Deep Creek, Md.

PRECIPITATION

The year opened with by far the driest January of record in Maryland and Delaware, precipitation averaging about 6/10-inch and a mere 16% of normal. Only once in Maryland and twice in Delaware had lesser monthly amounts ever been observed at any time of year since 1895. December proved to be even more of a spectacular month in the same respect. In Delaware, 2/3 of an inch of precipitation fell which was some 20% of normal and which established a new dryness record for December. In Maryland, only 4/10 of an inch fell during the month; this was 13% of normal, set a new dryness record for December, and came within a mere one hundredth of an inch of tying the record

WEATHER SUMMARY (Continued)

for dryness for any month of any year since 1895 in the State. In the Baltimore area, dryness records dating back to 1817 were broken in December. Sandwiched between these unusual months were several other remarkably wet or dry months, but especially outstanding was August with a phenomenal 12.42 inch average rainfall in Maryland and 11.07 inch fall in Delaware. Almost entirely dumped by two hurricanes in the space of one week, these Statewide rainfall averages easily broke the previous wetness record in Maryland for any month of the year since 1895, and took second honors in Delaware behind the all-month record for that State of 12.73 inches in August 1933. Rainfall in the Baltimore area during August 1955 was greater than it had ever been during any month since 1817.

Delaware totals for the year ranged from 43.18 inches at Selbyville down to 34.95 inches at Wilmington City Hall, while Maryland totals ranged from 53.40 inches at Snow Hill to 20.79 inches at Ocean City. The greatest rainfall in one day in each State occurred with the passage of "Connie" August 12-13th: 4.10 inches at Middletown 2 S, Del., and a whopping 9.54 inches at Cheltenham 1 NW, Md. The greatest number of days in the Section with at least 0.10 inch precipitation was an estimated 98 at Oakland 1 SE, Md. The least number of days in this category was 44 at Laurel 3 W, Md., and a like number estimated at Ocean City, Md. The greatest number of days with at least 1.00 inch precipitation was 18 at Crisfield, Md.

SNOWFALL

Snowfall during the year totaled 13.3 inches in Maryland and 9.8 inches in Delaware, or a little over half of long-term expectancy. January and December being cold and very dry, and February and March being wet but warm enough to favor precipitation in the form of rain, none of these months could match par on the snowfall course. November, however, was appreciably snowier than usual. The greatest annual snowfall in Delaware was 19.5 inches at Wilmington Newcastle WB Airport, and in Maryland, 73.7 inches at Oakland 1 SE. Greatest depths on the ground were 4 inches at Dover, Del., on February 2nd, and 16 inches at Bittinger 2 NW, Md., on January 29th.

DESTRUCTIVE STORMS

A total of 29 persons in Maryland and 1 in

Delaware reportedly lost their lives during the year as the result of severe weather. In August, hurricanes "Connie" and "Diane", which tracked more or less northward through Maryland within 5 days of each other, and drenched both States with unprecedentedly heavy rains, left 14 dead, a conservative \$2,500,000 in property damage, and considerable unestimated crop damage in their wake. The victims had all been aboard a schooner in Chesapeake Bay during the approach of "Connie" and had disregarded storm warnings. No deaths and relatively small damage were sustained in Delaware during these hurricanes. Numerous thunderstorms during the year, most of them during March and July, caused an estimated \$203,000 in damage about 10% of which was in Delaware and about 1% of which was to crops. 15 persons lost their lives as a result of these storms, 12 of whom drowned when winds capsized their small boats.

Following up "Connie" and "Diane" was hurricane "Ione", which flirted with the southern Maryland and Delaware borders on September 19-20th before ambling out to sea. No damage was reported in either State as a result of this storm. More detailed descriptions of these hurricanes may be found in the August and September 1955 issues of this publication and of "Climatological Data, National Summary."

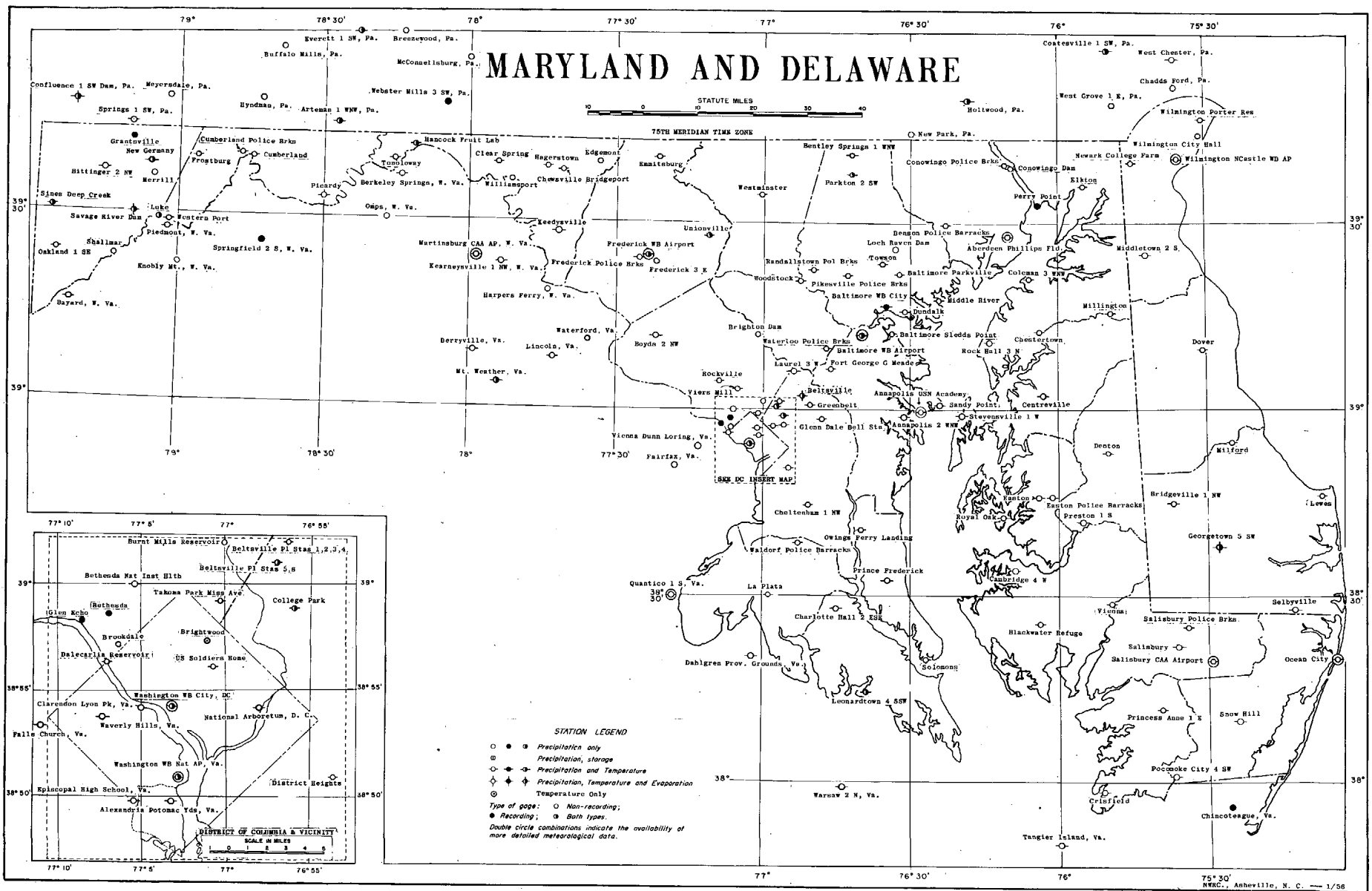
FLOODS

After prolonged heavy rains in early March, light flooding resulted on the Monocacy at Frederick, Md., and again on the lower Potomac near Washington, D. C.; no damages were reported. Also, in June, northern suburbs of Baltimore experienced a flash flood which inundated some streets to a depth of 2 1/2 to 4 feet. Oakland, Md., was host to another flash flood in July which inflicted locally heavy property damage. Hurricanes "Connie" and "Diane" caused extensive soil erosion and damage to residential basements in both States. But flooding as such was largely confined to the Monocacy Basin, Rock Creek, and the Anacostia River after "Connie"; and to the Potomac River Basin after "Diane". Heavy rains again in October caused some local flooding in Baltimore and on Rock Creek and the Anacostia River in Washington, D. C.

Details of each month's weather may be found in the monthly issues of this publication.

J. M. Mitchell, Jr.

MARYLAND AND DELAWARE



AVERAGE TEMPERATURES AND DEPARTURES FROM NORMAL

MARYLAND AND DELAWARE
1955

Table 1-Continued

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure	Temperature	Departure
MILFORD	33.6	- 2.3	37.8	2.0	46.8	2.1	56.6	3.0	66.1	2.0	69.1	- 3.2	80.4	3.6	76.9	1.8	67.2	- 2.1	58.5	2.3	44.5	- 3.1	30.8	- 7.3	55.7	- 1.3
NEWARK COLLEGE FARM	31.5	.5	33.3	3.3	43.7	2.6	55.3	4.2	64.9	2.8	68.2	- 1.7	80.7	5.9	71.2	5.0	67.3	.9	57.9	2.5	42.7	- 1.0	29.5	- 3.7	54.4	1.8
SELBYVILLE	33.8		37.8		46.8		56.2		64.5		68.6		79.0		77.0		67.8		58.6		46.5		33.3		52.5	
WILMINGTON NCASTLE NB AP	31.5	- 1.8	34.1	.4	43.5	1.0	54.8	3.0	64.8	2.0	68.7	- 3.1	81.2	5.3	77.9	4.1	67.2	- .8	58.1	1.9	43.3	- 2.2	29.9	- 5.2	54.6	.4
WILMINGTON PORTER RESV	31.0	- 1.7	33.8	1.2	42.5	.2	54.0	1.9	63.9	.9	68.1	- 3.2	79.9	3.9	76.7	2.7	66.6	- 1.5	58.1	1.3	42.9	- 2.8	29.5	- 5.5	53.9	.2
STATE AVERAGE	32.8	- 2.3	36.2	1.3	45.4	1.8	55.8	3.0	64.9	1.7	69.6	- 2.9	80.5	4.3	77.6	3.2	67.6	- .9	58.6	1.0	44.7	- 1.9	31.4	- 5.3	55.3	.2
SECTION AVERAGE	32.6	- 1.2	35.3	1.4	45.7	2.7	56.7	4.2	65.2	2.3	68.0	- 3.0	79.9	4.5	77.1	3.5	67.6	- 1.1	58.0	1.4	43.6	- 1.8	31.4	- 4.0	55.1	.8

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL

Table 2

Table with columns: Station, January, February, March, April, May, June, July, August, September, October, November, December, Annual. Each month column contains two sub-columns: Precipitation and Departure. The table lists 100+ stations across Maryland and Delaware, including Aberdeen Phillips Fld, Annapolis, Baltimore, and various rural locations, ending with a State Average row.

See Reference Notes Following Station Index

TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL

MARYLAND AND DELAWARE
1955

Table 2—Continued

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual		
	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	Precipitation	Departure	
DELAWARE																											
BRIDGEVILLE 1 NW	.59	-3.02	2.93	-.33	4.01	-.20	3.81	-.32	1.94	-1.78	5.91	2.32	2.02	-3.10	9.52	4.84	3.98	.61	3.46	.34	2.22	-.48	1.41	-1.73	41.80	-1.81	
DOVER	.64	-3.09	2.45	-.71	3.59	-.44	2.71	-.87	2.17	-1.64	5.01	2.15	1.55	-3.17	13.23	8.35	1.82	-1.86	3.27	.37	1.78	-1.36	.39	-2.93	39.23	5.19	
GEORGETOWN 5 SW	.55		3.15		3.90		2.62		2.62		4.75		3.60		9.30		2.81		5.34		2.20		.85		41.64		
LEWES	.66		2.96		4.63		3.01		1.79		6.61		1.08		7.58		3.83		4.90		2.87		1.05		40.97		
MIDDLETOWN 2 S	.93		2.39		4.66		2.26		1.20		6.43		.68		11.36		2.26		2.46		1.13		.23		36.19		
MILFORD	.55	-3.31	3.05	-.40	4.06	-.05	3.80	-.15	1.82	-2.03	6.91	3.22	2.44	-2.07	10.63	5.59	2.10	-1.42	2.96	-.34	2.29	-.70	.73	-2.81	41.36	-4.17	
NEWARK COLLEGE FARM	.41	-2.74	3.08	.10	4.51	1.07	2.91	-.54	1.19	-3.12	6.84	3.11	.23	-4.69	14.00	9.65	1.42	-1.94	4.08	.99	1.54	-1.60	.17	-3.41	40.18	-3.12	
SELBYVILLE	.59		3.00		3.75		2.18		2.04		8.23		2.29		8.14		3.68		5.69		2.14		1.45		43.18		
WILMINGTON NCASTLE WB AP	.59	-2.97	2.93	-.05	4.86	1.25	2.55	-1.09	1.18	-2.63	6.34	2.32	.16	-4.33	12.09	6.81	2.27	-1.53	2.62	-.37	1.36	-1.97	.19	-2.80	37.14	-7.36	
WILMINGTON CITY HALL	.33	-3.19	2.93	-.23	4.75	1.16	2.35	-1.18	1.15	-2.59	5.65	1.45	.47	-4.24	12.37	7.44	1.31	-2.15	2.81	-.28	.94	-2.15	.09	-3.36	34.93	-9.32	
WILMINGTON PORTER RESV	.46	-3.08	2.74	-.23	4.43	.65	2.28	-1.54	1.33	-2.45	5.43	1.38	.65	-4.14	11.16	6.06	1.83	-1.79	3.15	.17	1.38	-1.81	.16	-3.14	43.00	-9.92	
STATE AVERAGE	.58	-2.95	2.87	-.29	4.26	.39	2.81	-.72	1.73	-1.93	6.33	2.56	1.47	-3.14	11.07	6.13	2.60	-.80	3.79	.71	1.87	-1.12	.66	-2.72	40.04	-3.88	
SECTION AVERAGE	.55	-2.79	2.92	.02	4.43	.78	2.94	-.56	2.19	-1.51	5.54	1.59	2.11	-2.15	12.29	7.68	2.19	-1.17	4.13	1.12	1.79	-.97	.43	-2.73	41.51	-.69	

Table 3

TEMPERATURE EXTREMES AND FREEZE DATA

MARYLAND AND DELAWARE 1955

Table with columns: Station, Highest, Date, Lowest, Date, Last spring minimum of (16° or below, 20° or below, 24° or below, 28° or below, 32° or below), First fall minimum of (16° or below, 20° or below, 24° or below, 28° or below, 32° or below), Number of days between dates (16° or below, 20° or below, 24° or below, 28° or below, 32° or below).

See reference notes following Station Index.

TEMPERATURE EXTREMES AND FREEZE DATA

MARYLAND AND DELAWARE
1955

Table 3-Continued

Station	Highest	Date	Lowest	Date	Last spring minimum of										First fall minimum of										Number of days between dates						
					16° or below		20° or below		24° or below		28° or below		32° or below		32° or below		28° or below		24° or below		20° or below		16° or below		16° or below	20° or below	24° or below	28° or below			
					Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.									
DELAWARE																															
BRIDGEVILLE 1 NW	97	7-22+	5	2-3	2-14	10	2-14	10	3-29	22	3-29	22	4-9	32	10-23	30	11-9	25	11-27	23	11-29	16	11-29	16	11-29	16	288	288	243	225	197
DOVER	100	7-22+	4	2-3	2-14	13	2-14	13	3-27	23	3-29	27	3-29	27	11-6	32	11-9	28	11-29	17	11-29	17	12-16	14	305	288	247	225	222		
GEORGETOWN 5 SW	99	7-22	6	2-3+	2-14	6	3-8	19	3-29	21	4-5	27	4-9	30	10-23	29	11-9	26	11-25	23	11-29	17	12-7	16	296	266	241	218	197		
LEWES	98	8-2	10	1-31+	2-14	11	3-8	19	3-29	21	3-29	21	4-9	31	10-23	31	11-10	28	11-27	24	11-29	16	11-29	16	288	266	243	226	197		
MIDDLETOWN 2 S	100	8-2	1	2-3	3-8	16	3-27	18	3-27	18	3-29	26	4-8	30	10-23	31	11-8	28	11-29	15	11-29	15	11-29	15	266	247	247	224	198		
MILFORD																															
NEWARK COLLEGE FARM	102	7-22	5	2-3	2-14	12	3-8	19	3-27	24	3-29	25	3-31	32	10-23	28	10-23	28	11-9	23	11-29	13	11-29	13	288	266	227	208	206		
SELBYVILLE	101	7-22+	0	2-3	2-25	16	3-8	17	3-29	23	3-31	28	4-9	31	10-23	31	11-8	28	11-25	24	11-29	12	11-29	12	277	266	241	222	197		
WILMINGTON N CASTLE WB AP	96	7-22+	7	2-3	2-14	10	2-14	10	3-27	24	3-28	26	4-9	32	10-23	30	11-9	28	11-27	24	11-29	17	12-21	15	310	288	245	226	197		
WILMINGTON PORTER RESVR	101	8-2+	3	2-3	2-14	9	3-8	19	3-27	23	3-29	27	4-8	32	11-8	31	11-9	28	11-28	15	11-28	15	11-28	15	287	265	246	225	214		
WILMINGTON PORTER RESVR	98	7-22+	1	2-3	2-14	13	3-8	18	3-27	23	3-29	25	4-8	32	11-9	29	11-26	28	11-28	18	11-28	18	11-29	14	288	265	246	242	215		

TOTAL EVAPORATION AND WIND MOVEMENT

Table 4

Station		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
BELTSVILLE, MD.	EVAP	-	-	-	-	B6.83	B5.24	B7.44	B7.18	B3.78	B3.00	-	-	-
	DEP	-	-	-	-	.67	-1.22	.30	.99	-.96	-.29	-	-	-
	WIND	-	-	-	-	1240	1225	828	1441	944	940	-	-	-
SAVAGE RIVER DAM, MD.	EVAP	-	-	-	-	B7.24	5.34	6.41	B5.56	B4.47	2.57	-	-	-
	DEP	-	-	-	-	-	-	-	-	-	-	-	-	-
	WIND	-	-	-	B2414	2081	1472	1084	1366	1324	1212	-	-	-
GEORGETOWN 5 SW, DEL.	EVAP	-	-	-	B3.71	6.15	B6.84	B7.29	B5.53	3.54	B3.03	-	-	-
	DEP	-	-	-	-	-	-	-	-	-	-	-	-	-
	WIND	-	-	-	B1760	1291	1394	B 886	1039	923	1089	-	-	-

† CHANGES IN STATION NAMES

NEW NAME

OLD NAME

DATE

BENTLEY SPRINGS 1 WNW, MD.
COLEMAN 3 WNW, MD.

BENTLEY SPRINGS, MD.
COLEMAN, MD

May 1955
December 1955

RELOCATIONS

CENTREVILLE, MD.
COLEMAN 3 WNW
EDGEMONT, MD.
FREDERICK 3 E, MD.
MIDDLETOWN 2 S, DEL.

All equipment moved 60 feet SE
All equipment moved 75 feet N
Rain gage moved 120 feet NE
Rain gage moved 60 feet SE
All equipment moved 0.2 mile S

September 29, 1955
April 1, 1955
June 1, 1954
September 1, 1954
October 1, 1955

