

**NEW JERSEY DEPARTMENT OF AGRICULTURE  
STATE SOIL CONSERVATION COMMITTEE  
Chapter 251, PL 1975 as amended,  
Engineering Policies- Technical Bulletin**

<b><u>Technical Bulletin:</u></b> 2004-4.0	<b><u>Effective Date:</u></b> January 1, 2005
<b><u>Subject:</u></b> NRCS revisions to 24 hr design storm depths	<b><u>From:</u></b> Hunter Birckhead, P.E., Section Chief

**1.01 PURPOSE**

To distribute the revised 24 hr NRCS design rainfall depth tables for use in runoff modeling with NRCS procedures such as TR-55 and TR-20

**1.02 SUMMARY**

The National Oceanographic and Atmospheric Administration (NOAA) is responsible for developing statistical estimates of rainfall amounts for various return periods. Based on recent updates by NOAA, these changes have been incorporated by NRCS into their 24 hr design storm depth tables and have been released for use in New Jersey.

The attached table provides the previous and revised 24hr rainfall depths for each county in New Jersey for the 1, 2, 5, 10, 25, 50 and 100 year return periods. These new depths are to be used in calculating stormwater runoff effective January 1, 2005.

NRCS 24 hr Design Storm Rainfall Depths Revised September 2004, 2nd revision

SSCC - NJDA - SCD

Storm Period County	1 yr		2 yr		5yr		10yr		25yr		50yr		100yr	
	old	new	old	new	old	new	old	new	old	new	old	new	old	new
Atlantic	2.8	2.8	3.5	3.3	4.5	4.3	5.5	5.2	6.2	6.5	6.8	7.6	7.6	8.9
Bergen	2.7	2.8	3.3	3.3	4.3	4.3	5.3	5.1	5.7	6.3	6.5	7.3	7.5	8.4
Burlington	2.8	2.8	3.4	3.4	4.4	4.3	5.3	5.2	6.0	6.4	6.6	7.6	7.4	8.8
Camden	2.8	2.8	3.4	3.3	4.4	4.3	5.3	5.1	5.9	6.3	6.6	7.3	7.4	8.5
Cape May	2.9	2.8	3.5	3.3	4.6	4.2	5.6	5.1	6.3	6.4	6.9	7.5	7.7	8.8
Cumberland	2.8	2.8	3.4	3.3	4.5	4.2	5.4	5.1	6.0	6.4	6.8	7.5	7.5	8.8
Essex	2.7	2.8	3.3	3.4	4.3	4.4	5.3	5.2	5.7	6.4	6.4	7.5	7.5	8.7
Gloucester	2.8	2.8	3.4	3.3	4.4	4.2	5.3	5.0	5.9	6.2	6.6	7.3	7.4	8.5
Hudson	2.7	2.7	3.3	3.3	4.3	4.2	5.3	5.0	5.7	6.2	6.4	7.2	7.5	8.3
Hunterdon	2.6	2.9	3.2	3.4	4.2	4.3	5.0	5.0	5.7	6.1	6.5	7.0	7.3	8.0
Mercer	2.7	2.8	3.3	3.3	4.3	4.2	5.2	5.0	5.8	6.2	6.4	7.2	7.5	8.3
Middlesex	2.7	2.8	3.3	3.3	4.3	4.3	5.2	5.1	5.9	6.4	6.4	7.4	7.5	8.6
Monmouth	2.8	2.9	3.4	3.4	4.4	4.4	5.3	5.2	6.0	6.5	6.5	7.7	7.5	8.9
Morris	2.6	3.0	3.3	3.5	4.3	4.5	5.2	5.2	5.7	6.3	6.5	7.3	7.5	8.3
Ocean	2.8	3.0	3.5	3.4	4.5	4.5	5.4	5.4	6.2	6.7	6.6	7.9	7.5	9.2
Passaic	2.6	3.0	3.3	3.5	4.3	4.4	5.4	5.3	5.7	6.5	6.5	7.5	7.6	8.7
Salem	2.8	2.8	3.3	3.3	4.4	4.2	5.3	5.0	5.9	6.2	6.6	7.3	7.4	8.5
Somerset	2.7	2.8	3.3	3.3	4.3	4.3	5.2	5.0	5.7	6.2	6.5	7.2	7.5	8.2
Sussex	2.6	2.7	3.2	3.2	4.2	4.0	5.0	4.7	5.7	5.7	6.6	6.6	7.5	7.6
Union	2.7	2.8	3.3	3.4	4.3	4.4	5.3	5.2	5.8	6.4	6.4	7.5	7.5	8.7
Warren	2.6	2.8	3.2	3.3	4.1	4.2	4.9	4.9	5.6	5.9	6.5	6.8	7.2	7.8