



2019 Bulletin 70 Rainfall Update

BULLETIN 70 RAINFALL DATA

- For the past 30 years, stormwater management facilities have been designed based on rainfall depths contained in the Illinois State Water Survey (ISWS) Bulletin 70, which was released in 1989.
- In March 2019, ISWS released a new version of Bulletin 70 that accounts for the last 30 years of rainfall data.
- As shown in the table below, design rainfall depths have increased for DuPage County with the 100-year, 24-hour rainfall depth increased by approximately one inch (7.58 inches vs. 8.57 inches of precipitation).

BULLETIN 70 100-YEAR RAINFALL DEPTH COMPARISON DUPAGE COUNTY				
Storm Duration	1989 Bulletin 70 Rainfall Depth (in)	2019 Bulletin 70 Rainfall Depth (in)	Difference (in)	Difference (%)
1-hour	3.56	4.03	0.47	13.2
2-hour	4.47	4.97	0.50	11.2
3-hour	4.85	5.49	0.64	13.2
6-hour	5.68	6.43	0.75	13.2
12-hour	6.59	7.46	0.87	13.2
18-hour	6.97	8.06	1.09	15.6
24-hour	7.58	8.57	0.99	13.1

WHAT DOES THIS MEAN FOR DUPAGE COUNTY?

- DuPage County has adopted the new Bulletin 70 rainfall data with an anticipated effective date of January 1, 2020.
- Stormwater conveyance systems (storm sewers and overland flow routes) for new development may require increases in size due to the higher rainfall depths.
- Stormwater detention volumes for new developments will increase on average by approximately 20%.
- Retrofits to stormwater management system components may be necessary for new development on previously permitted sites.
- The Illinois Department of Natural Resources – Office of Water Resources (IDNR-OWR) will be adopting the new Bulletin 70 rainfall data. Any floodplain and floodway studies that determine new floodplain boundaries and need IDNR-OWR approval must utilize the new rainfall data starting January 1, 2020.

DATA PROVIDED BY:



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