



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 slightly for the Village of Shorewood with the 100-year, 24-hour rainfall depth increased by 0.1 inches (8.47 inches vs. 8.57 inches of precipitation).

BULLETIN 70 100-YEAR RAINFALL DEPTH COMPARISON VILLAGE OF SHOREWOOD				
Storm Duration	1989 Bulletin 70 Rainfall Depth (in)	2019 Bulletin 70 Rainfall Depth (in)	Difference (in)	Difference (%)
1-hour	3.98	4.03	0.05	1.3
2-hour	4.91	4.97	0.06	1.2
3-hour	5.42	5.49	0.07	1.3
6-hour	6.35	6.43	0.08	1.3
12-hour	7.37	7.46	0.09	1.2
18-hour	7.79	8.06	0.27	3.5
24-hour	8.47	8.57	0.10	1.2

WHAT DOES THIS MEAN FOR SHOREWOOD?

- Will County is expected to adopt the new Bulletin 70 rainfall data in the Summer of 2019, 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 less than 5%.
- 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:

