

North Olmsted Information	
<>	North Olmsted is located within the Lake Erie and Rocky River watersheds.
<>	The Lake Erie watershed has an area of 30,140 square miles.
<>	The Rocky River watershed has an area of 294 square miles.
<>	The city maintains over 181 miles of sanitary sewer pipe, 162 miles of storm sewer pipe, and 16 miles of open ditches within the city limits.

Definitions	
Groundwater:	Water that is present underground in the spaces within soil and rocks.
Rainfall	The amount of rain that falls over a duration of time.
Sanitary Waste:	Water that originates inside buildings from kitchens, baths, and floor drains, and flows to a treatment plant before being discharged to a lake or stream.
Stormwater:	Rainwater or melting snow that flows over land to a lake or stream.
Watershed:	An area that drains to a common point, such as a lake.

Storm frequency is the probability that a certain rainfall intensity will occur within any year. For example, a 5-Year storm has a 20% (one in five) chance of occurring within any year. The following 3 tables compare flow resulting from a 2000 sf roof during various intensity storms with the capacity of typical 4" or 6" house laterals.

Storm Frequency	Duration (min): 5		Rainfall		Flow From Roof gal/hr	Capacity of Lateral	
	inches	inches/hr	ft/hr	cf/hr		4" dia. at 1/8"/ft	6" dia. at 1/8"/ft
	1-Year	0.323	3.876	0.323		646	4,832
2-Year	0.387	4.644	0.387	774	5,790	4,680	13,380
5-Year	0.465	5.580	0.465	930	6,957	4,680	13,380
10-Year	0.527	6.324	0.527	1,054	7,884	4,680	13,380
25-Year	0.607	7.284	0.607	1,214	9,081	4,680	13,380
50-Year	0.668	8.016	0.668	1,336	9,994	4,680	13,380
100-Year	0.728	8.736	0.728	1,456	10,891	4,680	13,380

Storm Frequency	Duration (min): 10		Rainfall		Flow From Roof gal/hr	Capacity of Lateral	
	inches	inches/hr	ft/hr	cf/hr		4" dia. at 1/8"/ft	6" dia. at 1/8"/ft
	1-Year	0.502	3.012	0.251		502	3,755
2-Year	0.605	3.630	0.303	605	4,526	4,680	13,380
5-Year	0.723	4.338	0.362	723	5,408	4,680	13,380
10-Year	0.814	4.884	0.407	814	6,089	4,680	13,380
25-Year	0.928	5.568	0.464	928	6,942	4,680	13,380
50-Year	1.010	6.060	0.505	1,010	7,555	4,680	13,380
100-Year	1.100	6.600	0.550	1,100	8,228	4,680	13,380

Storm Frequency	Duration (min): 30		Rainfall		Flow From Roof gal/hr	Capacity of Lateral	
	inches	inches/hr	ft/hr	cf/hr		4" dia. at 1/8"/ft	6" dia. at 1/8"/ft
	1-Year	0.815	1.630	0.136		272	2,032
2-Year	0.989	1.978	0.165	330	2,466	4,680	13,380
5-Year	1.220	2.440	0.203	407	3,042	4,680	13,380
10-Year	1.390	2.780	0.232	463	3,466	4,680	13,380
25-Year	1.620	3.240	0.270	540	4,039	4,680	13,380
50-Year	1.790	3.580	0.298	597	4,463	4,680	13,380
100-Year	1.970	3.940	0.328	657	4,912	4,680	13,380

Highest Daily Precipitation (inches) Recorded at Hopkins Airport since 1938						
1	2	4	6	7	9	10
9/7/96	8/20/05 8/13/94	6/24/14 7/19/11	8/14/11	5/24/55 10/15/54	8/7/07	8/30/47
4.59	3.55	3.54	3.51	3.36	3.33	3.01
Source: NOWData - NOAA Online Weather Data, National Climatic Data Center						

For more information about stormwater, visit
 link: <https://www.north-olmsted.com/engineering-department/storm-water-program/>