



Water-Data Report 2007

**05530000 WELLER CREEK AT DES PLAINES, IL**

Upper Illinois Basin  
Des Plaines Subbasin

LOCATION.--Lat 42°02'58", long 87°55'05" referenced to North American Datum of 1927, in NW ¼ NW ¼ sec.18, T.41 N., R.12 E., Cook County, IL, Hydrologic Unit 07120004, on right bank 10 ft upstream from bridge on State Highway 58 (Golf Road) in Des Plaines, 2 mi west of U.S. Highway 45, and at mile 3.0.

DRAINAGE AREA.--13.2 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: October 1950 to current year.

STAGE: Water years 1994 to current year.

REVISED RECORDS.--WSP 1915: 1957-60. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 634.02 ft above NGVD of 1929 (Cook County Highway Department bench mark)(633.74 ft NAVD 1988). Prior to Sept. 9, 1968, at site 90 ft downstream and at datum 1.00 ft higher. Sept. 9, 1968 to Sept. 10, 1970, at present site at datum 1.00 ft higher.

REMARKS.--Records fair except those for discharges greater than 100 ft<sup>3</sup>/s, and those for estimated daily discharges, which are poor. Prior to Nov. 15, 1958, effluent from Arlington Heights sewage-treatment plant entered Weller Creek above station.

EXTREMES FOR PERIOD OF RECORD.--

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 1,590 ft<sup>3</sup>/s, June 10, 1967, gage height, 15.09 ft, present datum; no flow at times in most years.

## Water-Data Report 2007

## 05530000 WELLER CREEK AT DES PLAINES, IL—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**  
[*e*, estimated]

<b>Day</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>1</b>	0.62	1.8	10	2.5	e1.1	181	27	3.8	6.4	0.74	0.75	2.5
<b>2</b>	23	1.3	8.4	1.7	e1.0	26	7.7	3.2	5.1	0.76	0.79	2.2
<b>3</b>	61	1.1	6.0	1.6	e0.96	6.6	7.9	1.8	2.6	1.0	0.72	2.6
<b>4</b>	8.1	1.1	4.7	23	e0.93	6.1	4.6	1.8	17	18	0.73	1.9
<b>5</b>	3.4	1.3	4.0	8.8	e0.91	4.9	3.5	2.0	19	1.3	85	1.7
<b>6</b>	2.1	1.00	3.4	4.7	e0.90	4.1	2.5	1.9	3.3	0.92	4.1	6.3
<b>7</b>	1.5	0.93	3.7	3.6	e0.89	3.0	2.2	1.4	1.8	0.76	198	16
<b>8</b>	1.1	1.0	2.8	3.6	e0.88	4.0	2.3	1.3	1.6	0.66	106	3.6
<b>9</b>	0.94	0.93	2.7	2.9	e0.87	45	2.1	2.8	1.3	3.0	26	1.9
<b>10</b>	0.95	34	2.4	2.8	e0.87	31	2.4	1.1	1.2	3.2	5.2	12
<b>11</b>	18	25	8.6	2.2	e0.87	11	41	0.83	1.2	1.4	2.7	5.3
<b>12</b>	3.1	5.3	24	5.4	e0.88	9.2	41	0.70	1.2	0.91	10	2.1
<b>13</b>	1.5	3.2	9.1	4.2	e0.88	8.5	15	0.66	1.3	0.79	2.5	1.7
<b>14</b>	0.98	2.2	5.9	6.5	e0.90	7.1	10	0.76	1.7	0.64	19	2.1
<b>15</b>	0.80	1.9	4.4	22	e0.92	6.2	8.5	11	1.4	0.63	7.7	1.5
<b>16</b>	3.8	3.5	3.5	6.8	e0.96	4.4	6.5	14	1.4	0.54	5.4	1.3
<b>17</b>	41	1.5	3.2	5.5	e1.0	3.4	5.7	3.8	1.5	0.96	1.9	1.2
<b>18</b>	9.1	1.4	2.2	4.3	e1.1	2.8	5.5	1.4	5.9	62	4.4	1.3
<b>19</b>	6.7	1.3	2.0	3.2	e1.6	2.9	6.1	1.1	10	29	224	1.0
<b>20</b>	3.4	1.1	2.1	3.8	e4.8	2.4	4.7	0.80	1.6	2.1	280	1.0
<b>21</b>	4.1	1.1	29	3.0	e8.2	58	2.9	0.81	1.1	0.99	42	1.0
<b>22</b>	11	1.1	124	3.0	e15	24	3.1	0.79	1.0	0.73	9.9	0.92
<b>23</b>	3.9	1.0	12	2.7	e10	10	3.7	0.84	1.0	0.75	284	1.0
<b>24</b>	2.4	0.96	6.6	2.3	13	8.6	2.9	0.93	1.1	0.68	199	0.93
<b>25</b>	1.8	0.97	5.2	e2.2	e23	6.6	60	1.4	0.93	0.62	82	21
<b>26</b>	12	1.0	3.9	2.2	12	5.5	26	40	2.9	1.2	20	3.7
<b>27</b>	6.7	0.95	3.0	2.2	5.9	4.5	8.3	7.1	2.1	4.4	18	0.82
<b>28</b>	3.1	1.8	2.6	e2.0	4.2	9.4	5.3	2.9	0.97	1.0	12	0.72
<b>29</b>	2.1	56	2.4	e1.8	---	5.0	4.0	1.8	1.1	0.79	4.5	0.61
<b>30</b>	1.7	67	2.1	e1.6	---	4.1	11	1.5	0.80	0.71	3.5	0.50
<b>31</b>	1.4	---	5.6	e1.5	---	20	---	1.2	---	0.60	3.1	---
<b>Total</b>	241.29	222.74	309.5	143.6	114.52	525.3	333.4	115.42	99.50	141.78	1,662.89	100.40
<b>Mean</b>	7.78	7.42	9.98	4.63	4.09	16.9	11.1	3.72	3.32	4.57	53.6	3.35
<b>Max</b>	61	67	124	23	23	181	60	40	19	62	284	21
<b>Min</b>	0.62	0.93	2.0	1.5	0.87	2.4	2.1	0.66	0.80	0.54	0.72	0.50
<b>Cfsm</b>	0.59	0.56	0.76	0.35	0.31	1.28	0.84	0.28	0.25	0.35	4.06	0.25
<b>In.</b>	0.68	0.63	0.87	0.40	0.32	1.48	0.94	0.33	0.28	0.40	4.69	0.28

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2007, BY WATER YEAR (WY)**

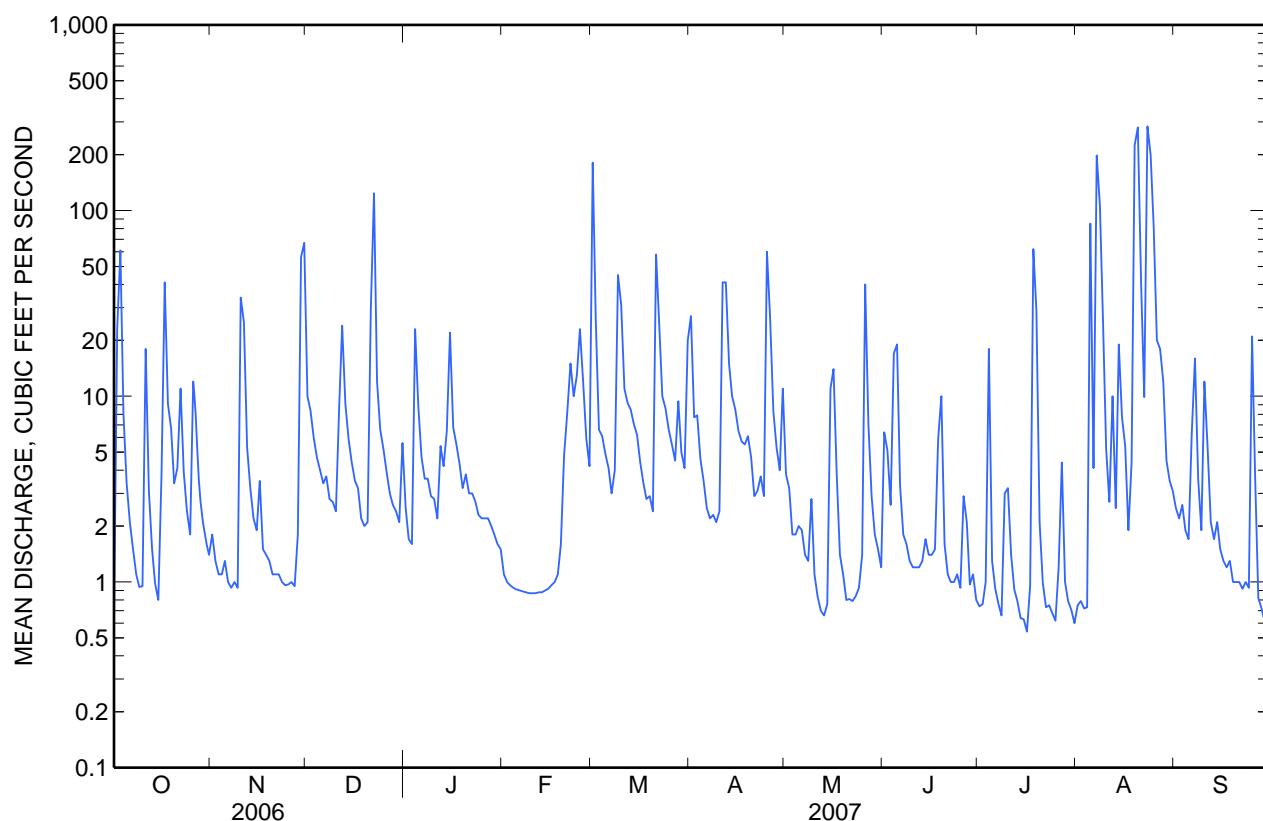
	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>Mean</b>	7.14	7.93	6.61	6.64	8.92	14.5	18.2	12.9	11.8	8.83	11.6	8.32
<b>Max</b>	39.0	46.4	34.3	43.2	38.2	107	54.1	64.0	54.1	38.4	69.9	55.7
(WY)	(2002)	(1986)	(1983)	(1974)	(1997)	(1979)	(1975)	(1974)	(1972)	(1957)	(1987)	(1972)
<b>Min</b>	0.13	0.31	0.08	0.08	0.19	0.72	2.24	1.44	0.90	2.41	0.32	0.60
(WY)	(1963)	(1963)	(1964)	(1959)	(1972)	(1968)	(1989)	(1982)	(1982)	(1998)	(1973)	(1966)

**05530000 WELLER CREEK AT DES PLAINES, IL—Continued****SUMMARY STATISTICS**

	<b>Calendar Year 2006</b>		<b>Water Year 2007</b>		<b>Water Years 1951 - 2007</b>	
<b>Annual total</b>	2,550.69		4,010.34			
<b>Annual mean</b>	6.99		11.0		10.3	
<b>Highest annual mean</b>					23.4	1974
<b>Lowest annual mean</b>					3.07	1963
<b>Highest daily mean</b>	124	Dec 22	284	Aug 23	1,120	Aug 14, 1987
<b>Lowest daily mean</b>	0.21	Sep 21	0.50	Sep 30	0.00	A
<b>Annual seven-day minimum</b>	0.48	Aug 7	0.73	Jul 29	0.00	Nov 4, 1958
<b>Maximum peak flow</b>			927	Aug 23	1,590	Jun 10, 1967
<b>Maximum peak stage</b>			8.36	Aug 23	B15.09	Jun 10, 1967
<b>Instantaneous low flow</b>			0.18	Oct 1		
<b>Annual runoff (cfsm)</b>	0.529		0.832		0.778	
<b>Annual runoff (inches)</b>	7.19		11.30		10.57	
<b>10 percent exceeds</b>	17		22		21	
<b>50 percent exceeds</b>	2.3		2.8		2.2	
<b>90 percent exceeds</b>	0.78		0.87		0.29	

A At times in most years.

B Present datum.



**05530000 WELLER CREEK AT DES PLAINES, IL—Continued**

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

<b>Day</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>1</b>	0.64	0.67	0.91	0.70	0.84	2.58	1.19	0.74	0.75	0.60	0.60	0.70
<b>2</b>	0.91	0.64	0.86	0.66	0.87	1.17	0.84	0.72	0.77	0.60	0.60	0.68
<b>3</b>	1.62	0.63	0.80	0.66	0.91	0.82	0.85	0.67	0.69	0.61	0.59	0.69
<b>4</b>	0.85	0.63	0.76	0.99	1.06	0.80	0.76	0.67	0.99	0.97	0.60	0.67
<b>5</b>	0.73	0.64	0.74	0.87	0.76	0.77	0.73	0.67	1.03	0.64	1.70	0.66
<b>6</b>	0.68	0.62	0.72	0.76	0.97	0.75	0.70	0.67	0.72	0.61	0.75	0.78
<b>7</b>	0.65	0.62	0.73	0.73	1.05	0.71	0.69	0.65	0.67	0.60	2.75	0.99
<b>8</b>	0.63	0.62	0.71	0.73	0.86	0.74	0.69	0.64	0.66	0.59	1.83	0.73
<b>9</b>	0.62	0.62	0.71	0.71	0.80	1.26	0.68	0.70	0.64	0.70	1.16	0.67
<b>10</b>	0.62	1.05	0.69	0.71	0.75	1.26	0.69	0.63	0.63	0.71	0.78	0.86
<b>11</b>	1.02	1.14	0.85	0.69	0.76	0.92	1.32	0.61	0.64	0.64	0.71	0.78
<b>12</b>	0.72	0.78	1.17	0.77	0.89	0.88	1.40	0.59	0.64	0.61	0.88	0.68
<b>13</b>	0.65	0.72	0.88	0.75	0.89	0.87	1.02	0.59	0.64	0.60	0.70	0.66
<b>14</b>	0.62	0.69	0.80	0.79	0.85	0.83	0.90	0.60	0.66	0.59	1.00	0.68
<b>15</b>	0.61	0.67	0.76	1.12	0.83	0.80	0.86	0.83	0.65	0.59	0.82	0.65
<b>16</b>	0.70	0.72	0.73	0.82	0.81	0.76	0.81	0.95	0.65	0.58	0.78	0.64
<b>17</b>	1.32	0.65	0.72	0.78	0.82	0.73	0.79	0.74	0.65	0.62	0.67	0.64
<b>18</b>	0.87	0.64	0.69	0.75	0.83	0.71	0.78	0.64	0.77	1.23	0.73	0.64
<b>19</b>	0.82	0.63	0.68	0.72	1.04	0.71	0.80	0.63	0.86	1.12	2.89	0.62
<b>20</b>	0.73	0.63	0.68	0.74	1.81	0.70	0.76	0.61	0.66	0.68	3.39	0.62
<b>21</b>	0.74	0.63	1.21	0.72	1.84	1.54	0.71	0.61	0.63	0.62	1.37	0.62
<b>22</b>	0.91	0.62	2.12	0.71	1.85	1.16	0.72	0.60	0.62	0.60	0.90	0.62
<b>23</b>	0.74	0.62	0.94	0.70	1.58	0.91	0.74	0.61	0.62	0.60	3.31	0.62
<b>24</b>	0.69	0.62	0.81	0.69	0.97	0.87	0.71	0.62	0.63	0.59	2.78	0.62
<b>25</b>	0.67	0.62	0.78	0.71	1.92	0.81	1.52	0.64	0.62	0.59	1.84	0.95
<b>26</b>	0.89	0.62	0.74	0.68	0.95	0.79	1.18	1.33	0.68	0.63	1.10	0.72
<b>27</b>	0.82	0.62	0.71	0.68	0.80	0.76	0.86	0.83	0.67	0.73	1.09	0.61
<b>28</b>	0.72	0.65	0.70	0.72	0.75	0.88	0.78	0.71	0.62	0.62	0.95	0.59
<b>29</b>	0.68	1.41	0.70	0.72	---	0.77	0.75	0.67	0.63	0.60	0.76	0.59
<b>30</b>	0.67	1.59	0.68	0.76	---	0.75	0.91	0.65	0.61	0.59	0.73	0.58
<b>31</b>	0.65	---	0.78	0.79	---	0.98	---	0.63	---	0.59	0.72	---
<b>Mean</b>	0.78	0.73	0.83	0.75	1.04	0.94	0.87	0.69	0.69	0.67	1.27	0.69
<b>Max</b>	1.62	1.59	2.12	1.12	1.92	2.58	1.52	1.33	1.03	1.23	3.39	0.99
<b>Min</b>	0.61	0.62	0.68	0.66	0.75	0.70	0.68	0.59	0.61	0.58	0.59	0.58

<b>Water Year 2007</b>	
<b>Mean</b>	0.83
<b>Max</b>	3.39
<b>Min</b>	0.58

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