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Water-Data Report 2007

**05529500 McDONALD CREEK NEAR MOUNT PROSPECT, IL**

Upper Illinois Basin  
Des Plaines Subbasin

LOCATION.--Lat 42°05'43", long 87°54'46" referenced to North American Datum of 1927, in SW ¼ SE ¼ sec.23, T.42 N., R.11 E., Cook County, IL, Hydrologic Unit 07120004, on left bank at upstream side of bridge on Camp McDonald Road, 2.5 mi northeast of Mount Prospect, and at mile 2.0.

DRAINAGE AREA.--7.93 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.—

SURFACE-WATER DISCHARGE AND STAGE

DISCHARGE: August 1952 to current year.

STAGE: Water years 1994 to current year.

REVISED RECORDS.--WSP 1915: 1958. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder, phone telemeter, and crest-stage gage. Datum of gage is 639.12 ft above NGVD of 1929 (Cook County Highway Department bench mark) (638.87 ft NAVD 1988). Prior to May 9, 1978, at site 55 ft downstream of present location at same datum. May 1978 to Mar. 1994, at present location. Mar. 7 to Sept. 30, 1994, at temporary site 50 ft upstream of present location at same datum. Oct. 1994, moved back to present location.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--

SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 806 ft<sup>3</sup>/s, Aug. 14, 1987, gage height, 8.08 ft; no flow at times in several years.

**05529500 McDONALD CREEK NEAR MOUNT PROSPECT, 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>	3.4	3.0	39	e9.3	e1.6	79	36	14	8.1	2.2	0.41	2.7
<b>2</b>	32	2.5	27	e7.7	e1.5	64	23	8.1	7.6	1.8	0.32	2.1
<b>3</b>	153	2.2	19	e6.9	e1.4	28	16	6.1	6.1	2.0	0.16	1.8
<b>4</b>	78	1.9	13	e13	e1.3	15	9.4	5.0	24	14	0.10	1.5
<b>5</b>	61	1.8	10	e15	e1.2	11	6.8	3.9	31	7.6	34	1.1
<b>6</b>	34	1.6	8.7	e11	e1.1	7.8	5.3	3.1	17	4.9	17	2.2
<b>7</b>	16	1.6	7.2	e7.3	e1.1	6.6	4.1	3.0	32	3.3	108	6.6
<b>8</b>	9.5	1.7	5.8	e6.3	e1.0	6.8	3.4	3.0	36	2.6	68	3.4
<b>9</b>	6.1	1.4	5.0	4.7	e1.0	24	2.9	3.7	16	3.6	55	2.3
<b>10</b>	4.6	17	4.2	3.3	e0.97	58	2.6	2.7	8.6	7.2	24	4.6
<b>11</b>	14	29	12	3.4	e0.96	37	22	2.1	4.6	6.2	12	6.0
<b>12</b>	8.4	15	40	4.4	e0.95	29	60	1.6	3.4	4.1	11	3.3
<b>13</b>	5.5	9.3	31	4.1	e0.95	26	42	1.5	2.0	2.2	6.0	2.4
<b>14</b>	3.2	6.8	20	5.2	e0.95	18	26	1.5	2.1	1.6	9.2	1.4
<b>15</b>	2.7	5.7	13	19	e0.95	9.5	15	7.1	1.8	1.1	6.0	0.79
<b>16</b>	3.9	4.3	9.4	12	e0.96	7.5	11	18	1.8	0.93	4.0	0.63
<b>17</b>	30	3.3	7.4	7.8	e0.97	6.5	8.3	13	1.6	1.1	2.6	0.58
<b>18</b>	20	2.6	5.9	6.1	e1.0	5.7	6.6	6.9	2.8	7.7	2.2	0.57
<b>19</b>	16	2.3	4.6	4.8	e2.9	5.9	5.7	4.8	4.8	18	103	0.42
<b>20</b>	9.8	1.9	4.1	3.9	e6.1	4.4	4.5	3.0	4.1	7.8	171	0.36
<b>21</b>	8.2	1.8	24	3.7	e12	43	3.9	2.7	3.8	4.1	80	0.45
<b>22</b>	14	1.8	78	3.6	e22	58	3.6	2.4	2.6	2.1	47	0.25
<b>23</b>	8.5	1.6	25	3.2	e11	31	3.1	2.0	2.1	1.0	100	0.26
<b>24</b>	6.0	1.2	12	2.8	e12	17	3.0	1.6	1.7	0.66	179	0.42
<b>25</b>	4.9	1.1	11	2.4	42	11	44	0.99	1.7	0.46	97	7.6
<b>26</b>	11	0.97	e9.7	e2.4	33	7.8	48	42	3.8	1.1	46	4.2
<b>27</b>	14	0.91	e7.5	e2.3	15	6.2	28	32	5.4	4.1	25	2.9
<b>28</b>	9.5	1.6	e5.5	e2.2	10	6.6	15	19	6.5	2.9	14	2.1
<b>29</b>	6.3	23	e7.1	e2.1	---	8.3	10	15	5.3	1.5	8.6	1.5
<b>30</b>	5.3	63	e6.3	e2.0	---	8.2	31	7.6	3.5	0.79	5.5	1.2
<b>31</b>	3.8	---	e9.6	e1.8	---	10	---	4.1	---	0.52	3.8	---
<b>Total</b>	602.6	211.88	482.0	183.7	185.86	656.8	500.2	241.49	251.8	119.16	1,239.89	65.63
<b>Mean</b>	19.4	7.06	15.5	5.93	6.64	21.2	16.7	7.79	8.39	3.84	40.0	2.19
<b>Max</b>	153	63	78	19	42	79	60	42	36	18	179	7.6
<b>Min</b>	2.7	0.91	4.1	1.8	0.95	4.4	2.6	0.99	1.6	0.46	0.10	0.25
<b>Cfsm</b>	2.45	0.89	1.96	0.75	0.84	2.67	2.10	0.98	1.06	0.48	5.04	0.28
<b>In.</b>	2.83	0.99	2.26	0.86	0.87	3.08	2.35	1.13	1.18	0.56	5.82	0.31

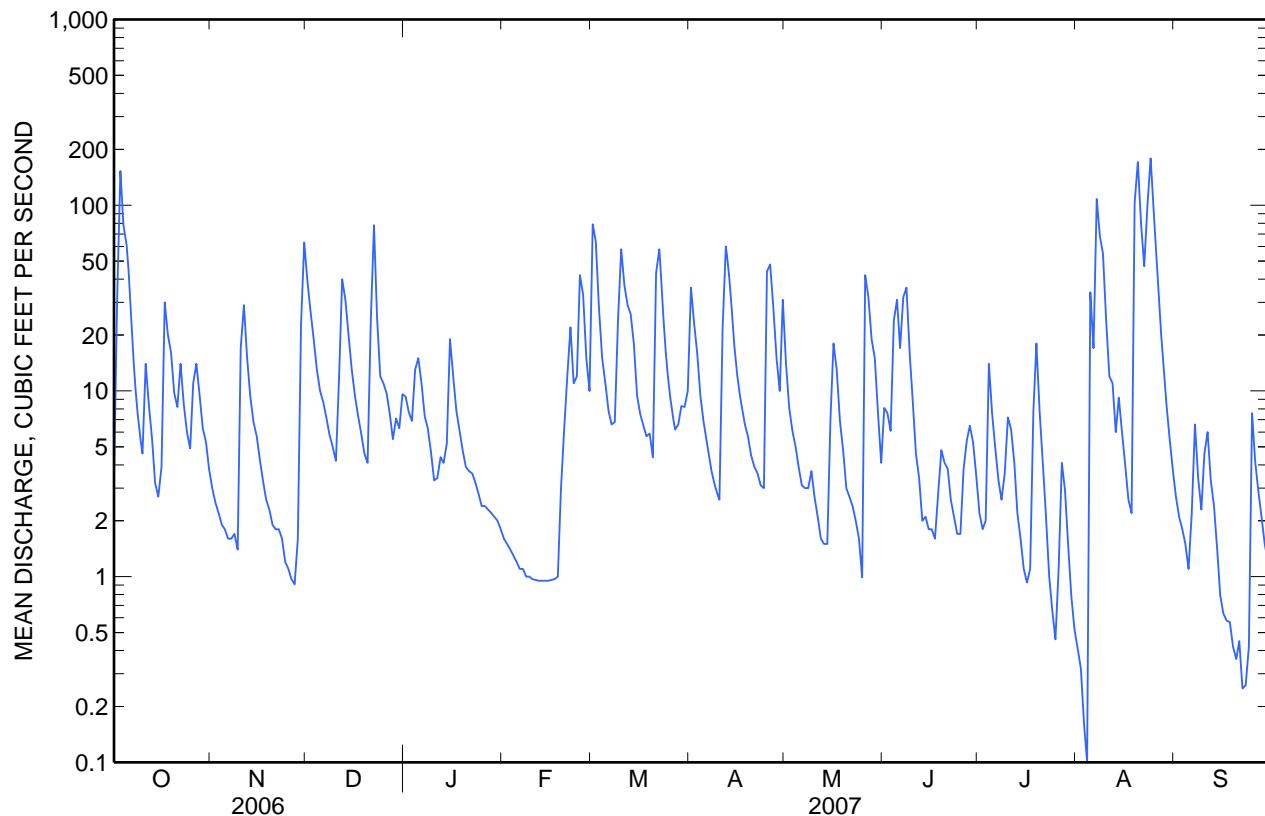
**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2007, BY WATER YEAR (WY)**

	<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>	4.25	5.24	5.02	4.52	6.26	9.89	11.7	8.06	7.13	4.65	5.83	4.16
<b>Max</b>	31.2	28.5	27.2	20.7	26.5	36.2	35.0	31.3	33.5	26.2	40.0	23.9
(WY)	(2002)	(1986)	(1983)	(1999)	(1997)	(1979)	(1999)	(1996)	(1970)	(1957)	(2007)	(1972)
<b>Min</b>	0.00	0.00	0.00	0.00	0.00	1.58	2.05	1.46	0.50	0.02	0.00	0.00
(WY)	(1953)	(1954)	(1954)	(1954)	(1954)	(1956)	(1989)	(1988)	(1963)	(1953)	(1953)	(1953)

**05529500 McDONALD CREEK NEAR MOUNT PROSPECT, IL—Continued****SUMMARY STATISTICS**

	<b>Calendar Year 2006</b>	<b>Water Year 2007</b>	<b>Water Years 1952 - 2007</b>	
<b>Annual total</b>	2,928.87	4,741.01		
<b>Annual mean</b>	8.02	13.0	6.39	
<b>Highest annual mean</b>			13.0	2007
<b>Lowest annual mean</b>			1.17	1963
<b>Highest daily mean</b>	153 Oct 3	179 Aug 24	476 Aug 14, 1987	
<b>Lowest daily mean</b>	0.42 Mar 4	0.10 Aug 4	0.00 A	
<b>Annual seven-day minimum</b>	0.63 Feb 27	0.39 Sep 18	0.00 Sep 12, 1952	
<b>Maximum peak flow</b>		220 Aug 23	806 Aug 14, 1987	
<b>Maximum peak stage</b>		5.34 Aug 23	8.08 Aug 14, 1987	
<b>Instantaneous low flow</b>		0.06 Aug 4		
<b>Annual runoff (cfsm)</b>	1.01	1.64	0.806	
<b>Annual runoff (inches)</b>	13.74	22.24	10.95	
<b>10 percent exceeds</b>	18	32	14	
<b>50 percent exceeds</b>	4.1	5.5	2.3	
<b>90 percent exceeds</b>	1.3	1.1	0.10	

A At times in several years.



**05529500 McDONALD CREEK NEAR MOUNT PROSPECT, 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>	0.99	0.96	2.11	---	---	2.93	2.04	1.46	1.13	0.91	0.75	0.94
<b>2</b>	1.62	0.93	1.82	---	---	2.64	1.71	1.24	1.21	0.88	0.72	0.91
<b>3</b>	4.31	0.91	1.60	---	1.01	1.85	1.52	1.14	1.14	0.89	0.68	0.88
<b>4</b>	2.95	0.89	1.42	---	1.09	1.49	1.29	1.08	1.68	1.43	0.66	0.86
<b>5</b>	2.59	0.88	1.33	---	---	1.34	1.17	1.02	1.91	1.21	1.92	0.83
<b>6</b>	1.99	0.86	1.26	---	---	1.22	1.10	0.97	1.54	1.07	1.54	0.89
<b>7</b>	1.53	0.87	1.19	---	---	1.16	1.03	0.96	1.89	0.99	3.50	1.16
<b>8</b>	1.29	0.87	1.13	---	---	1.17	0.99	0.96	2.03	0.94	2.73	0.99
<b>9</b>	1.14	0.85	1.08	1.06	---	1.64	0.96	1.00	1.52	0.99	2.44	0.91
<b>10</b>	1.06	1.31	1.04	0.98	---	2.51	0.94	0.94	1.25	1.19	1.74	1.02
<b>11</b>	1.46	1.86	1.34	0.99	---	2.06	1.61	0.90	1.06	1.15	1.39	1.13
<b>12</b>	1.25	1.48	2.14	1.05	1.45	1.87	2.55	0.87	0.99	1.03	1.34	0.98
<b>13</b>	1.11	1.29	1.90	1.03	1.40	1.79	2.17	0.86	0.89	0.91	1.14	0.92
<b>14</b>	0.98	1.18	1.62	1.08	---	1.58	1.78	0.85	0.90	0.86	1.26	0.85
<b>15</b>	0.94	1.12	1.43	1.61	---	1.29	1.51	1.08	0.88	0.83	1.13	0.80
<b>16</b>	1.01	1.04	1.29	1.37	---	1.21	1.34	1.56	0.88	0.82	1.02	0.78
<b>17</b>	1.88	0.98	1.20	1.22	---	1.16	1.25	1.41	0.86	0.83	0.93	0.77
<b>18</b>	1.63	0.94	1.13	1.14	---	1.12	1.17	1.18	0.94	1.07	0.91	0.77
<b>19</b>	1.53	0.91	1.06	1.07	---	1.13	1.12	1.07	1.06	1.58	3.36	0.75
<b>20</b>	1.31	0.89	1.03	1.02	---	1.05	1.05	0.96	1.02	1.22	4.60	0.73
<b>21</b>	1.23	0.88	1.72	1.01	---	2.13	1.02	0.94	1.01	1.03	2.98	0.75
<b>22</b>	1.46	0.88	2.92	1.00	---	2.52	1.00	0.92	0.94	0.90	2.28	0.71
<b>23</b>	1.25	0.86	1.77	0.98	1.67	1.91	0.97	0.89	0.90	0.82	3.27	0.71
<b>24</b>	1.14	0.84	1.38	0.95	1.54	1.56	0.96	0.87	0.88	0.78	4.74	0.75
<b>25</b>	1.08	0.83	1.34	0.92	2.15	1.37	2.19	0.82	0.87	0.76	3.32	1.05
<b>26</b>	1.29	0.82	---	0.96	1.94	1.22	2.30	2.13	0.99	0.81	2.26	1.04
<b>27</b>	1.45	0.81	---	0.96	1.50	1.15	1.84	1.94	1.10	1.02	1.77	0.96
<b>28</b>	1.29	0.86	---	0.93	1.33	1.17	1.49	1.60	1.16	0.95	1.46	0.90
<b>29</b>	1.15	1.57	---	0.93	---	1.23	1.32	1.48	1.10	0.86	1.26	0.85
<b>30</b>	1.10	2.62	---	0.91	---	1.24	1.90	1.20	0.99	0.80	1.11	0.84
<b>31</b>	1.01	---	---	---	---	1.27	---	1.03	---	0.76	1.01	---
<b>Mean</b>	1.48	1.07	---	---	---	1.58	1.44	1.14	1.16	0.98	1.91	0.88
<b>Max</b>	4.31	2.62	---	---	---	2.93	2.55	2.13	2.03	1.58	4.74	1.16
<b>Min</b>	0.94	0.81	---	---	---	1.05	0.94	0.82	0.86	0.76	0.66	0.71

**05529500 McDONALD CREEK NEAR MOUNT PROSPECT, IL—Continued**

