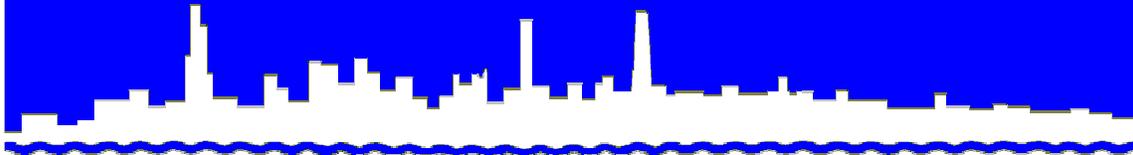


*Protecting Our Water Environment*



*Metropolitan Water Reclamation District of Greater Chicago*

***RESEARCH AND DEVELOPMENT  
DEPARTMENT***

*REPORT NO. 06-67*

*MONTHLY REPORT OF THE FULTON COUNTY*

*ENVIRONMENTAL PROTECTION SYSTEM*

*AUGUST 2006*

*November 2006*

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*President*

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**Metropolitan Water Reclamation District of Greater Chicago**

100 EAST ERIE STREET CHICAGO, ILLINOIS 60611-3154 312-751-5600

Louis Kollias, P.E., BCEE  
*Director of Research and Development*

November 9, 2006

312-751-5190

Mr. S. Alan Keller, P.E.  
Manager, Permit Section  
Illinois Environmental  
Protection Agency  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, IL 62794-9276

Dear Mr. Keller:

Attached for your information and use is the August 2006 monthly report of the Fulton County Environmental Protection System.

Very truly yours,

Louis Kollias  
Director  
Research and Development

LK:GT:spy  
Attachment  
cc w/enc.:

Mr. Valdis Aistars, USEPA Region V  
Mr. Ash Sajjad, USEPA Region V  
Mr. Matthew Williams, USEPA Region V  
IEPA Permit Section, Springfield  
IEPA Surveillance Section, Peoria  
Chairman of the Fulton County Board  
Fulton County Board of Health  
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**ENVIRONMENTAL PROTECTION SYSTEM  
REPORT FOR FULTON COUNTY, ILLINOIS  
AUGUST 2006**

**Research and Development Department  
G. Tian  
A. Cox**

**November 2006**

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## FOREWORD

The data and information in this report fulfill the frequency of monitoring and the reporting requirements for the Land Application of Biosolids at the Fulton County Land Reclamation Project as specified in the Illinois Environmental Protection Agency Permit No. 2005-SC-5073 for August 2006.

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## ACKNOWLEDGMENT

Thanks are due to the staff of the Analytical Laboratories Division for assistance in conducting analyses and Ms. Sabina Yarn for typing this report.

## DISCLAIMER

Mention of proprietary equipment and chemicals in this report does not constitute endorsement by the Metropolitan Water Reclamation District of Greater Chicago.

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**FULTON COUNTY**  
**DEWATERED BIOSOLIDS REPORT**  
**August 2006**

## DEWATERED BIOSOLIDS REPORT

No dewatered biosolids were applied to fields during the month of August 2006. In addition, no supernatant was available for application to fields during this month. The last supernatant application was made in 1995, and the last biosolids application was made in 2004.

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**FULTON COUNTY**  
**WATER ANALYSIS REPORT**  
**August 2006**

## WATER ANALYSIS REPORT

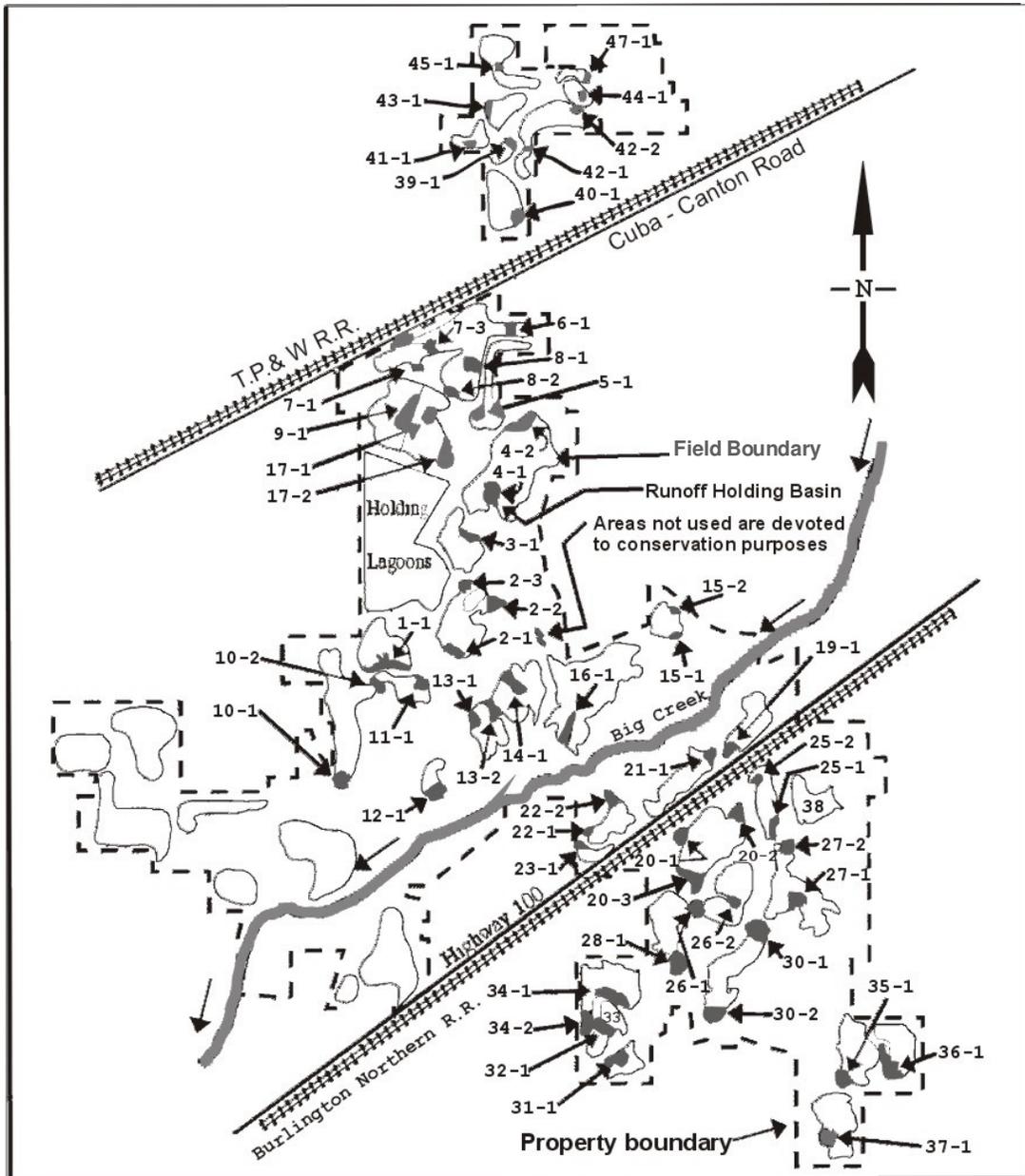
There was no water release and sampling in retention basins during this month. A site plan of farm field and retention basin locations is attached in Figure 1.

The surface water sites (streams, reservoirs, and SP sites) were sampled during the month. A site plan of water monitoring locations is attached in Figure 2. Analytical data of water samples from the surface water sites are presented in Tables 1 through 3.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 1

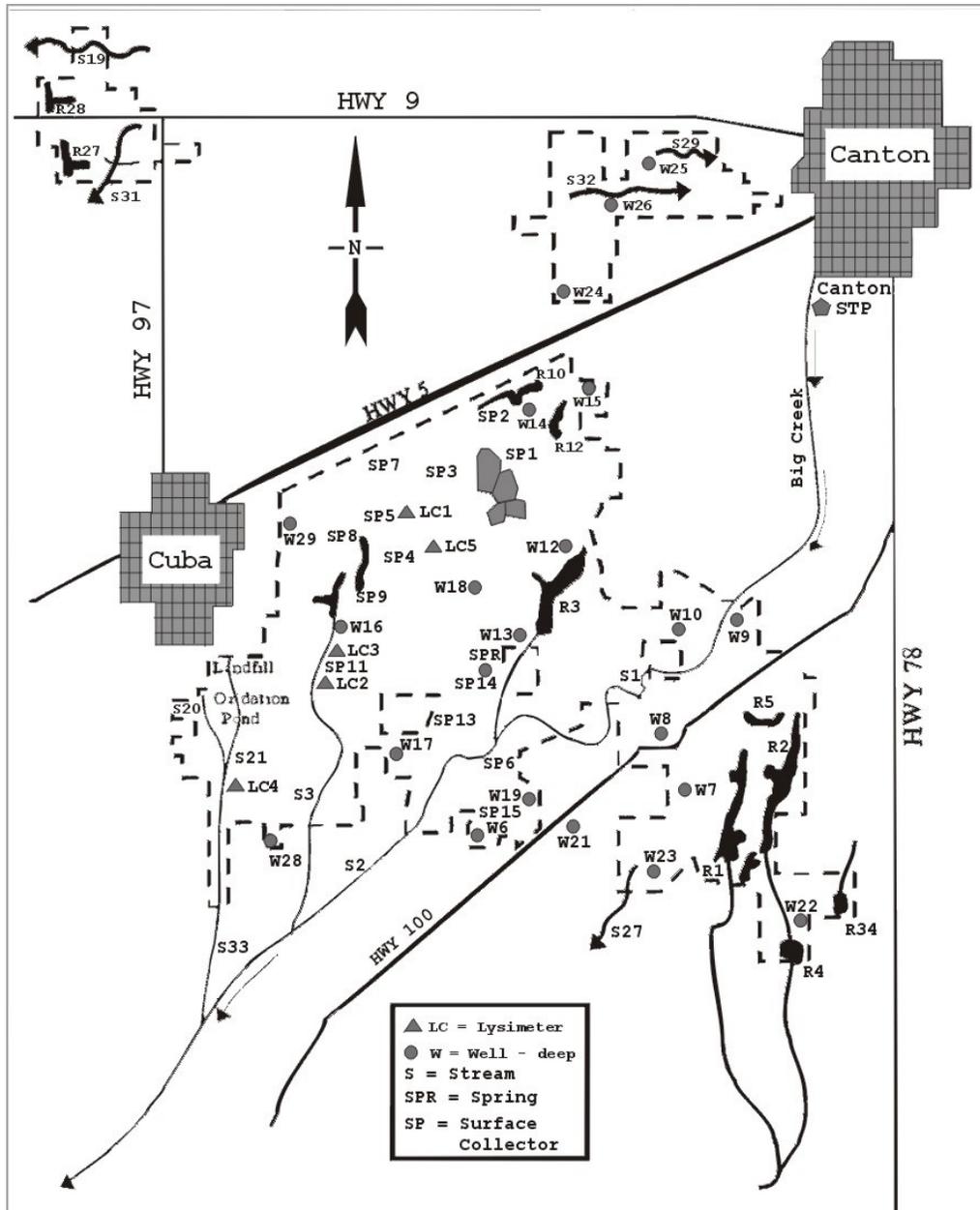
FARM FIELDS AND RUNOFF BASINS AT THE LAND RECLAMATION PROJECT AT FULTON COUNTY, ILLINOIS



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 2

WATER MONITORING LOCATIONS AT THE LAND RECLAMATION PROJECT AT FULTON COUNTY, ILLINOIS



METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 1

FULTON COUNTY LAND RECLAMATION PROJECT SPRING AND STREAM DATA  
AUGUST 2006

Stream Number	Sample Date	Total P	NH <sub>3</sub> -N	NO <sub>2</sub> -N	NO <sub>3</sub> -N	Cd	Cu	Hg
		----- mg/L -----						µg/L
Spring 01	8/8	0.00	0.000	0.000	0.033	0.0000	0.009	0.00
S1	8/8	1.82	0.080	0.000	6.10	0.0000	0.006	0.00
S2	8/8	1.01	0.080	0.000	2.58	0.0000	0.000	0.00
S3	8/8	0.08	0.000	0.000	0.327	0.0000	0.011	0.00
S20	8/8	3.39	0.000	0.000	17.2	0.0000	0.003	0.00
S21	8/8	1.42	0.700	0.000	6.88	0.0011	0.037	0.00
S27	8/8	1.76	1.85	0.000	0.446	0.0000	0.003	0.00
S29	8/8	0.31	0.410	0.000	0.979	0.0000	0.008	0.00
S32	8/8	1.16	0.590	0.000	0.128	0.0000	0.002	0.00
S33	8/8	1.18	0.020	0.000	7.53	0.0000	0.000	0.00
MDL*		0.04	0.020	0.150	0.005	0.0002	0.002	0.06

\*MDL = Method detection limit of laboratory; values less than these are reported as zeros.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2

FULTON COUNTY LAND RECLAMATION PROJECT RESERVOIR DATA AUGUST 2006

Reservoir Number	Sample Date	Total P	NH <sub>3</sub> -N	NO <sub>2</sub> -N	NO <sub>3</sub> -N	Cd	Cu	Hg
		----- mg/L -----						μg/L
R 1	8/8	0.00	0.030	0.000	0.053	0.0000	0.006	0.00
R 2	8/8	0.57	1.69	0.000	0.020	0.0000	0.006	0.00
R 3	8/8	0.12	0.000	0.000	0.039	0.0000	0.004	0.00
R 4	8/8	0.49	0.150	0.200	1.07	0.0000	0.008	0.00
R 5	8/8	0.27	0.020	0.000	0.025	0.0000	0.003	0.00
R 10	8/8	0.07	0.000	0.000	0.034	0.0000	0.004	0.00
R 12	8/8	0.49	0.000	0.000	0.156	0.0000	0.003	0.00
R 34	8/8	1.95	0.240	0.000	1.85	0.0000	0.012	0.00
MDL*		0.04	0.020	0.150	0.005	0.0002	0.002	0.06

\*MDL = Method detection limit of laboratory; values less than these are reported as zeros.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 3

FULTON COUNTY LAND RECLAMATION PROJECT, SURFACE WATERS - PUTNAM TOWNSHIP, DISTRICT PROPERTY (WESTERN SECTION) AUGUST 2006

Surface Water	Sample Date	Total P	NH <sub>3</sub> -N	NO <sub>2</sub> -N	NO <sub>3</sub> -N	Cd	Cu	Hg
		----- mg/L -----						μg/L
SP 6	8/08	0.51	0.000	0.000	0.175	0.0009	0.018	0.00
SP 14	8/08	0.06	0.020	0.000	0.098	0.0000	0.000	0.00
	MDL*	0.04	0.020	0.150	0.005	0.0002	0.002	0.06

\*MDL = Method detection limit of laboratory; values less than these are reported as zeros.

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**FULTON COUNTY**  
**CLIMATOLOGICAL OBSERVATIONS**  
**August 2006**

## CLIMATOLOGICAL OBSERVATIONS

The daily climatological observations for August 2006 are summarized in Table 4. The total precipitation recorded for the month was 2.86 inches.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 4

RECORD OF CLIMATOLOGICAL OBSERVATIONS FOR AUGUST 2006,  
FULTON COUNTY, ILLINOIS, STATION SEQ, SEC.10, R3E, T6N

Date	Temperature °C			Precipitation		Wind		
	Max	Min	Avg	rain, melted snow	snow, sleet, hail	m/S	m/S	Dir
				(inches & hundredths)	(inches & tenths)	Avg	Max	
1	36.8	23.9	30.0	0.00		2.4	8.5	SE
2	36.4	24.2	29.6	0.04		3.2	10.3	S
3	29.0	19.6	23.6	0.16		1.9	14.8	NW
4	34.8	18.1	25.3	0.01		1.0	5.8	NW
5	32.0	18.7	25.1	0.00		2.2	7.2	E
6	33.4	20.0	26.4	0.01		2.0	8.5	SE
7	29.4	21.3	24.6	0.43		1.2	8.5	NW
8	28.6	19.1	22.6	0.15		2.3	6.7	NE
9	29.4	19.1	23.1	0.92		2.0	9.8	NE
10	29.1	22.0	24.1	0.11		1.8	8.9	W
11	27.0	19.5	22.8	0.00		2.6	8.5	NE
12	30.3	16.9	22.7	0.00		2.2	8.0	NE
13	31.6	17.4	24.0	0.00		2.2	6.7	E
14	27.6	16.7	22.7	0.02		1.7	6.3	NW
15	31.3	14.9	22.5	0.00		1.2	6.7	NW
16	31.5	15.4	23.1	0.01		1.1	5.4	E
17	30.4	16.7	23.2	0.00		1.9	6.7	NE
18	32.2	21.9	25.0	0.45		1.4	7.6	NE
19	31.2	20.8	24.4	0.00		1.4	5.8	NW
20	30.0	17.3	22.8	0.00		1.5	6.3	N
21	32.1	15.8	22.5	0.00		0.8	3.6	N
22	32.2	16.0	23.7	0.00		0.7	4.9	SW
23	32.9	17.9	25.1	0.00		1.7	7.2	SE
24	32.6	19.3	25.0	0.00		2.5	8.9	SE
25	31.6	20.1	24.8	0.00		2.2	7.6	SE
26	28.2	21.5	23.4	0.08		1.5	6.7	S
27	27.3	20.9	23.1	0.07		1.6	6.7	NE
28	21.2	19.8	20.3	0.31		2.3	6.7	NE
29	22.0	17.4	19.2	0.09		1.1	6.7	NE
30	24.4	18.3	21.2	0.00		1.6	7.6	NE
31	28.8	16.9	22.1	0.00		2.3	8.0	NE
Sum				2.86	0.0	Observer: Josh DeWees Station: R&D Lab		
Avg	30.2	18.9	23.8					
Extreme	36.8	14.9		0.92	0.0			

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**FULTON COUNTY**  
**RECLAMATION OF COAL REFUSE PILES WITH BIOSOLIDS**  
**August 2006**

## RECLAMATION OF COAL REFUSE PILES WITH BIOSOLIDS

Lysimeters and drainage tiles at the St. David coal refuse pile reclamation site were not sampled during the month. Locations for all lysimeters and drainage tile sampling sites are shown in Figure 3.

Lysimeters at the Big Ten (Morgan Mine) and the United Electric coal refuse pile sites were also not sampled during the month.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 3

ST. DAVID COAL REFUSE PILE RECLAMATION SITE

