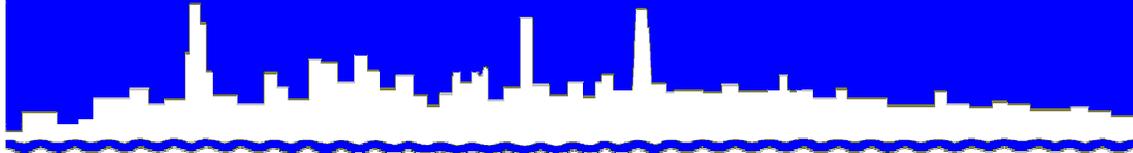


*Protecting Our Water Environment*



***Metropolitan Water Reclamation District of Greater Chicago***

***RESEARCH AND DEVELOPMENT  
DEPARTMENT***

***REPORT NO. 06-61***

***MONTHLY REPORT OF THE FULTON COUNTY***

***ENVIRONMENTAL PROTECTION SYSTEM***

***JULY 2006***

***SEPTEMBER 2006***

Terrence J. O'Brien  
*President*

Kathleen Therese Meany  
*Vice President*

Gloria Alitto Majewski  
*Chairman of Finance*

Frank Avila

James C. Harris

Barbara J. McGowan

Cynthia M. Santos

Patricia Young

Harry "Bus" Yourell

**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*

312-751-5190

September 27, 2006

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 July 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  
Fulton County Zoning Office

Drs.: Granato  
O'Connor  
Cox

Messrs.: Jamjun  
Sobanski  
Quintanilla  
Ryzak

Library

**Metropolitan Water Reclamation District of Greater Chicago**  
100 East Erie Street Chicago, IL 60611-2803 (312) 751-5600

**ENVIRONMENTAL PROTECTION SYSTEM  
REPORT FOR FULTON COUNTY, ILLINOIS  
JULY 2006**

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

**September 2006**

## TABLE OF CONTENTS

	<u>Page</u>
FOREWORD	ii
LIST OF TABLES	iii
LIST OF FIGURES	iv
ACKNOWLEDGMENT	v
DISCLAIMER	v
DEWATERED BIOSOLIDS REPORT	1
WATER ANALYSIS REPORT	2
CLIMATOLOGICAL OBSERVATIONS	7
RECLAMATION OF COAL REFUSE PILES WITH BIOSOLIDS	9

## 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 July 2006.

## LIST OF TABLES

<u>Table No.</u>		<u>Page</u>
1	Fulton County Land Reclamation Project Field Runoff Basin Discharge Data July 2006	4
2	Field Runoff Basin Log at the Fulton County Land Reclamation Project July 2006	5
3	Record of Climatological Observations for July 2006, Fulton County, Illinois, Station SEQ, Sec. 10, R3E, T6N	8

## LIST OF FIGURES

<u>Figure No.</u>		<u>Page</u>
1	Farm Fields and Runoff Basins at the Land Reclamation Project at Fulton County, Illinois	3
2	Water Monitoring Locations at the Land Reclamation Project at Fulton County, Illinois	6
3	St. David Coal Refuse Pile Reclamation Site	10

## 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.

**Metropolitan Water Reclamation District of Greater Chicago**  
100 East Erie Street Chicago, IL 60611-2803 (312) 751-5600

**FULTON COUNTY**  
**DEWATERED BIOSOLIDS REPORT**  
**July 2006**

## DEWATERED BIOSOLIDS REPORT

No dewatered biosolids were applied to fields during the month of July 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.

**Metropolitan Water Reclamation District of Greater Chicago**  
100 East Erie Street Chicago, IL 60611-2803 (312) 751-5600

**FULTON COUNTY**  
**WATER ANALYSIS REPORT**  
**July 2006**

## WATER ANALYSIS REPORT

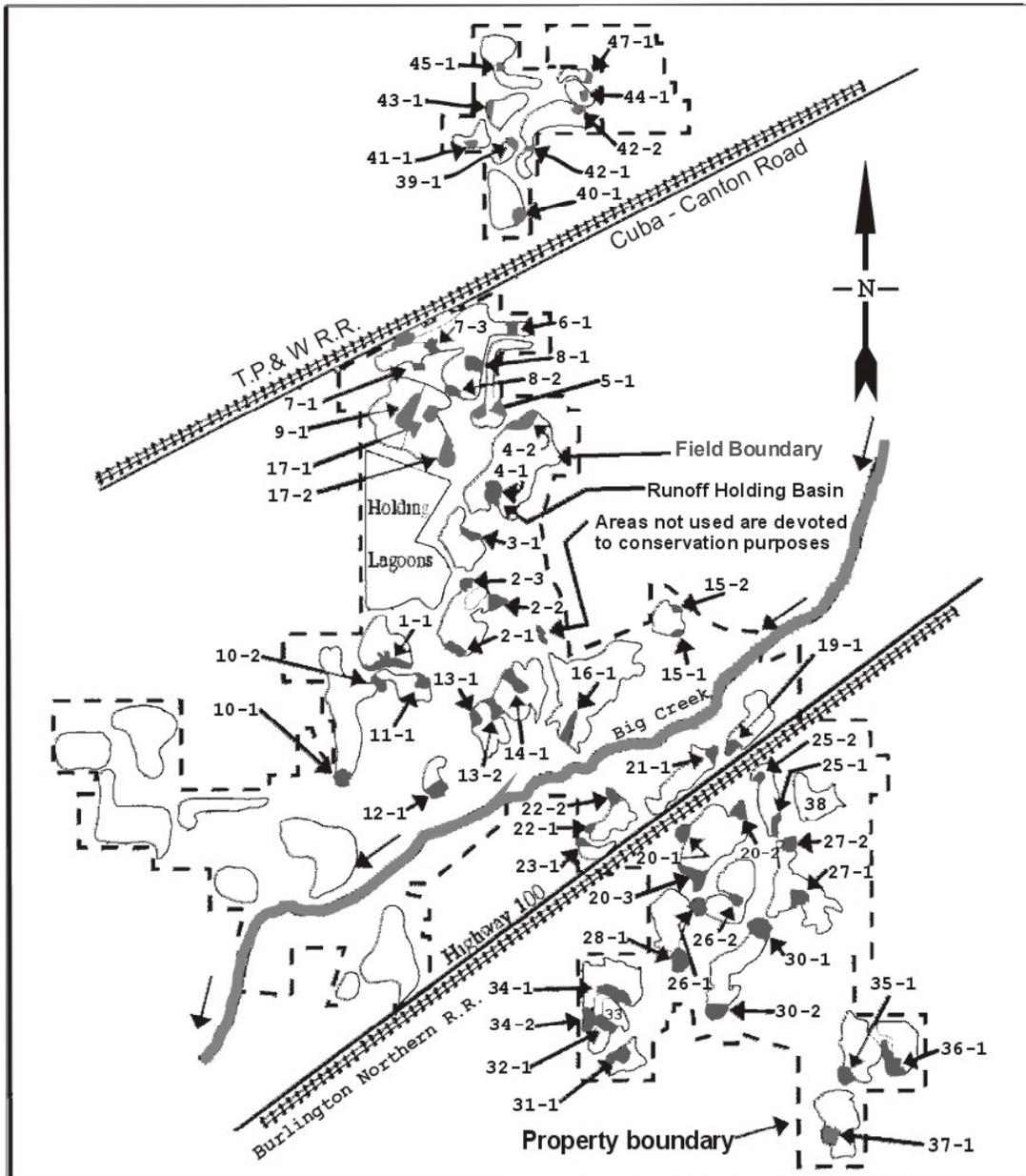
Water monitoring in July 2006 was conducted at the runoff basin only. A site plan of farm field and runoff basin locations is attached in Figure 1. During the month, the discharge from the runoff basin totaled 2.90 million gallons. Analytical data of water samples are presented in Table 1. A log of runoff basin discharge information is presented in Table 2.

The surface water sites (streams, reservoirs, and SP sites) and wells were not sampled during the month. A site plan of water monitoring locations is attached in Figure 2.

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

TABLE 1

FULTON COUNTY LAND RECLAMATION PROJECT FIELD RUNOFF BASIN DIS-  
CHARGE DATA JULY 2006

---

Basin No.	Sample Date	pH	TSS (mg/L)	BOD <sub>5</sub> (mg/L)	F. coli. per 100 ml	Discharge Date	Discharge Amount (MG)
3-1	7/13	8.3	10.0	7	100	7/14	2.90

---

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 2

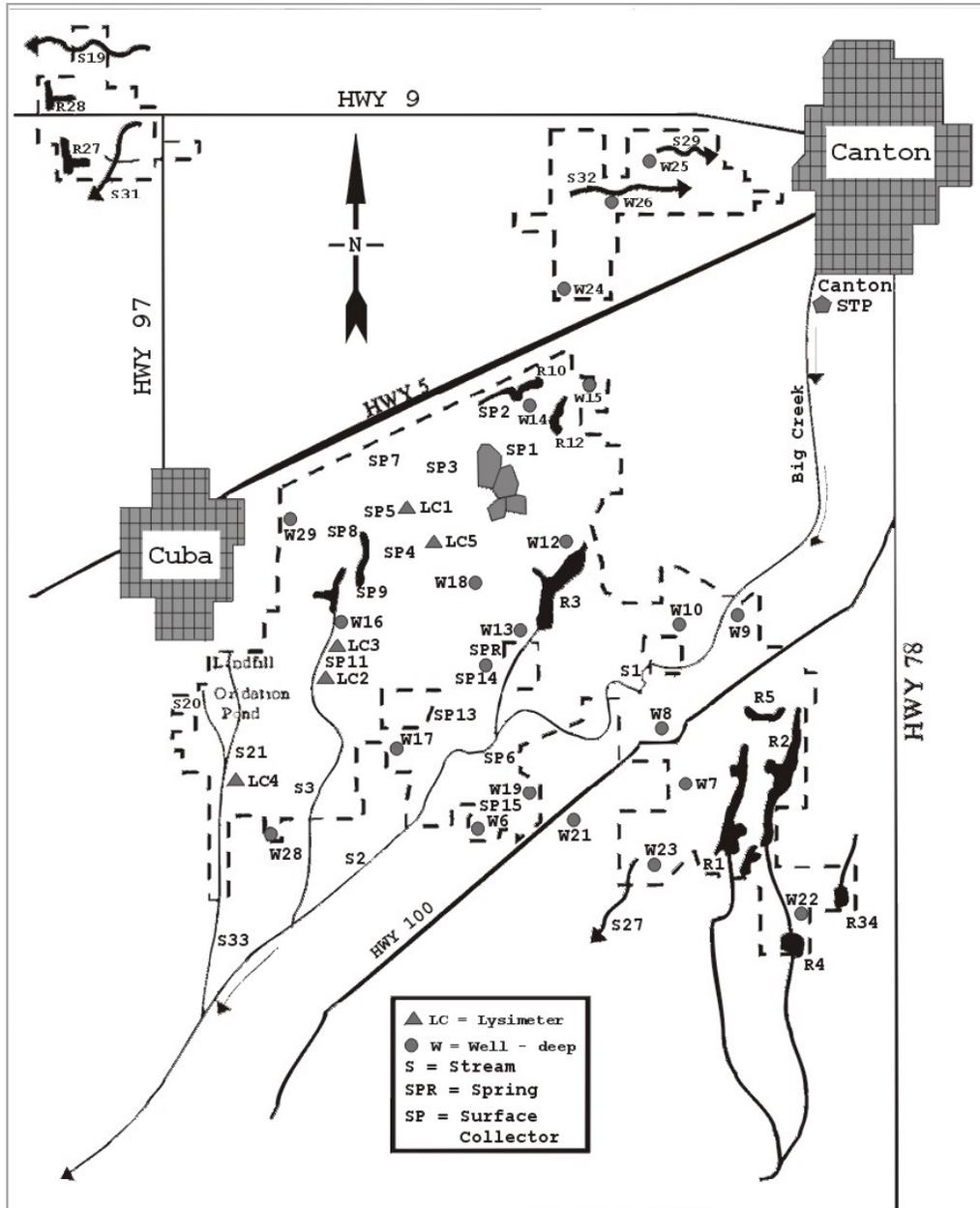
FIELD RUNOFF BASIN LOG AT THE FULTON COUNTY LAND RECLAMATION PROJECT JULY 2006

Basin No.	Date Opened	Time Opened	Date Closed	Time Closed	Opening Stage (Feet)	Closing Stage (Feet)	Time Open (Hours)	Volume Released (MG)	Release Type	Reason Closed	R & D Dept.Ok	R & D Dept. Sample
3 - 1	7/14/06	12:40	7/18/06	9:15	3.80	0.00	92.58	2.90	Regular	Empty	YES	YES

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**  
100 East Erie Street Chicago, IL 60611-2803 (312) 751-5600

**FULTON COUNTY**  
**CLIMATOLOGICAL OBSERVATIONS**  
**July 2006**

## CLIMATOLOGICAL OBSERVATIONS

The daily climatological observations for July 2006 are summarized in Table 3. The total precipitation recorded for the month was 5.13 inches.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

TABLE 3

RECORD OF CLIMATOLOGICAL OBSERVATIONS FOR JULY 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	34.1	18.1	26.0	0.01		3.1	12.1	S
2	35.4	21.5	27.1	0.01		2.0	13.4	SW
3	35.2	21.2	26.6	0.02		1.9	10.3	SW
4	32.2	18.6	24.7	0.46		1.9	9.8	NW
5	29.2	15.1	21.7	0.00		1.2	6.3	N
6	31.2	13.5	22.2	0.00		1.1	5.8	N
7	31.2	13.3	22.5	0.00		0.6	4.0	N
8	32.7	16.1	23.8	0.00		1.5	8.0	SE
9	34.0	19.6	23.1	0.01		1.9	8.9	S
10	32.7	19.4	25.3	0.12		1.7	8.0	S
11	28.6	21.4	23.8	0.10		1.4	4.9	SW
12	34.7	21.8	25.4	0.05		1.2	7.6	S
13	34.3	20.7	25.7	0.00		1.4	6.7	E
14	32.9	20.6	26.0	0.00		2.1	8.9	SW
15	37.6	20.8	28.9	0.00		0.9	5.4	SW
16	38.4	21.8	29.4	0.00		1.8	7.2	SE
17	37.4	22.5	29.7	0.01		2.7	8.5	S
18	35.1	22.6	28.6	0.00		2.1	7.6	NE
19	35.4	20.1	25.1	2.22		2.7	17.0	NE
20	33.2	21.7	26.1	0.15		2.4	13.4	SE
21	25.2	17.3	21.1	0.22		1.8	9.8	N
22	29.6	14.9	20.6	1.00		1.4	12.5	NW
23	33.2	14.8	23.6	0.01		0.9	6.3	NW
24	33.8	19.1	26.0	0.00		2.1	8.0	SE
25	33.9	20.0	26.7	0.00		2.2	7.2	SE
26	32.8	20.7	26.0	0.42		2.0	9.4	SE
27	33.0	21.3	26.4	0.31		2.1	13.0	SW
28	34.8	21.3	27.9	0.01		1.3	6.3	SW
29	36.9	22.5	29.1	0.00		1.4	5.8	SE
30	37.4	22.6	29.7	0.00		1.6	4.9	SE
	36.6	25.0	30.5	0.00		2.5	7.2	SE
Sum				5.13	0.0	Observer: Josh DeWees Station: R&D Lab		
Avg	33.6	19.7	25.8					
Extreme	38.4	13.3		2.22	0.0			

**Metropolitan Water Reclamation District of Greater Chicago**  
100 East Erie Street Chicago, IL 60611-2803 (312) 751-5600

**FULTON COUNTY**  
**RECLAMATION OF COAL REFUSE PILES WITH BIOSOLIDS**  
**July 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

