



**RESEARCH AND DEVELOPMENT  
DEPARTMENT**

**REPORT NO. 08-39**

**CONTINUOUS DISSOLVED OXYGEN MONITORING  
IN THE DEEP-DRAFT CHICAGO WATERWAY SYSTEM  
DURING 2007**

**August 2008**

**CONTINUOUS DISSOLVED OXYGEN MONITORING  
IN THE DEEP-DRAFT CHICAGO WATERWAY SYSTEM  
DURING 2007**

**By**

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## **INTRODUCTION**

The Chicago Waterway System (CWS) consists of 78 miles of canals, which serve the Chicago area for two principal purposes, the drainage of urban storm water runoff and treated municipal wastewater effluent and the support of co



## **MATERIALS AND METHODS**

After careful review of the DO data, weekly summary

## RESULTS

The annual minimum, maximum, and mean DO concentrations measured at all 20 stations during 2007 are shown in Table 2.

The number and percent of measured DO concentrations rejected and removed from the Access<sup>®</sup> database following review during 2007 are summarized in Table 3.

The number and percent of DO concentrations above the applicable IPCB DO standard for each waterway during 2007 are presented in Table 4. The DO data shown in Table 4 do not include the DO concentrations rejected during the data review.

Table 5 shows the percent distribution of DO concentrations from <1.0 mg/L to >5.0 mg/L at the 20 monitoring stations during 2007. The current national one-day minimum DO criterion for adult life stages of fish is 3.0 mg/L (Chapman, 1986).

Individual graphs showing hourly DO concentrations at each monitoring station are indicated in Figures 2 through 20.

Weekly DO summary statistics during 2007 are presented for each monitoring station in Appendix A

TABLE 1: DEEP-DRAFT CONTINUOUS DISSOLVED OXYGEN  
MONITORING STATIONS

Monitoring Station	Waterway	Description of Monitoring Station
<u>Chicago River System</u>		
Main Street	North Shore Channel	3.5 miles below Wilmette Pumping Station, 0.8 mile above North Side

TABLE 1 (Continued): DEEP-DRAFT CONTINUOUS DISSOLVED OXYGEN  
MONITORING STATIONS

Monitoring Station	Waterway	Description of Monitoring Station
<u>Chicago River System (Continued)</u>		
Loomis Street	South Branch Chicago River	3.6 miles below junction with Chicago River, water quality monitor on north-east side Loomis Street bridge, 3 feet below water surface.

TABLE 1 (Continued): DEEP-DRAFT CONTINUOUS DISSOLVED OXYGEN MONITORING STATIONS

Monitoring Station	Waterway	Description of Monitoring Station
<u>Chicago River System (Continued)</u>		
Lockport Powerhouse	Chicago Sanitary and Ship Canal	0.1 mile above Lockport Powerhouse, 1.1 miles above junction with Des Plaines River, water quality monitor on north side of canal, in forebay area on fender wall, 3 feet below water surface.
<u>Des Plaines River System</u>		
Jefferson Street	Des Plaines River	3.0 miles below Lockport Lock, 2.1 miles below junction with Chicago Sanitary and Ship Canal, water quality monitor on southeast side Jefferson Street bridge, 3 feet below water surface.
<u>Calumet River System</u>		
C&W Indiana Railroad	Little Calumet River	5.2 miles below SEPA 1, 1.5 miles above SEPA 2, 3.6 miles below Thomas J. O'3 0 0 8.333.2 Lock an5 wa m, 1,y





TABLE 2: MINIMUM, MAXIMUM, AND MEAN HOURLY  
DISSOLVED OXYGEN CONCENTRATIONS<sup>1</sup>

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TABLE 3: NUMBER AND PERCENT OF DISSOLVED OXYGEN VALUES  
NOT MEETING ACCEPTANCE CRITERIA<sup>1</sup>

Monitoring Station	Waterway	Number of DO Values Rejected	Percent of DO Values Rejected
<u>Chicago River System</u>			
Main Street	North Shore Channel	2,062	24
Foster Avenue	North Shore Channel	175	2
Addison Street	North Branch Chicago River	170	2
Fullerton Avenue	North Branch Chicago River	1	<1
Kinzie Street	North Branch Chicago River	339	4
Clark Street	Chicago River	511	6
Loomis Street	South Branch Chicago River	1,016	12
36 <sup>th</sup> Street	Bubbly Creek	543	6
Interstate Highway 55	Bubbly Creek	3	<1
Cicero Avenue	Chicago Sanitary and Ship Canal	167	2
B&O Central Railroad	Chicago Sanitary and Ship Canal	506	6
Route 83	Chicago Sanitary and Ship Canal	3,316	38
Lockport Powerhouse	Chicago Sanitary and Ship Canal	844	10
<u>Des Plaines River System</u>			
Jefferson Street	Des Plaines River	514	6
<u>Calumet River System</u>			
C&W Indiana Railroad	Little Calumet River	508	6
Halsted Street	Little Calumet River	789	9
Cicero Avenue	Calumet-Sag Channel	1,176	13
104 <sup>th</sup> Avenue	Calumet-Sag Channel	3,621	41
Route 83	Calumet-Sag Channel	340	4

<sup>1</sup>Dissolved oxygen was measured hourly using a YSI Model 6920 or Model 6600 continuous water quality monitor. DO values were rejected based on quality control check and/or operational

TABLE 4: NUMBER AND PERCENT OF DISSOLVED OXYGEN VALUES  
 MEASURED ABOVE THE ILLINOIS POLLUTION CONTROL BOARD'S  
 WATER QUALITY STANDARD<sup>1</sup>

Monitoring Station	Waterway	IPCB DO Standard	Number of DO Values	Number Above Standard	Percent Above Standard
<u>Chicago River System</u>					
Main Street	North Shore Channel	5.0	6,698	5,935	89
Foster Avenue	North Shore Channel	4.0	8,585	8,584	>99
Addison Street	North Branch Chicago River	4.0	8,590	8,572	>99



FIGURE 1: CONTINUOUS DISSOLVED OXYGEN MONITORING AND AMBIENT WATER QUALITY MONITORING SAMPLE STATIONS

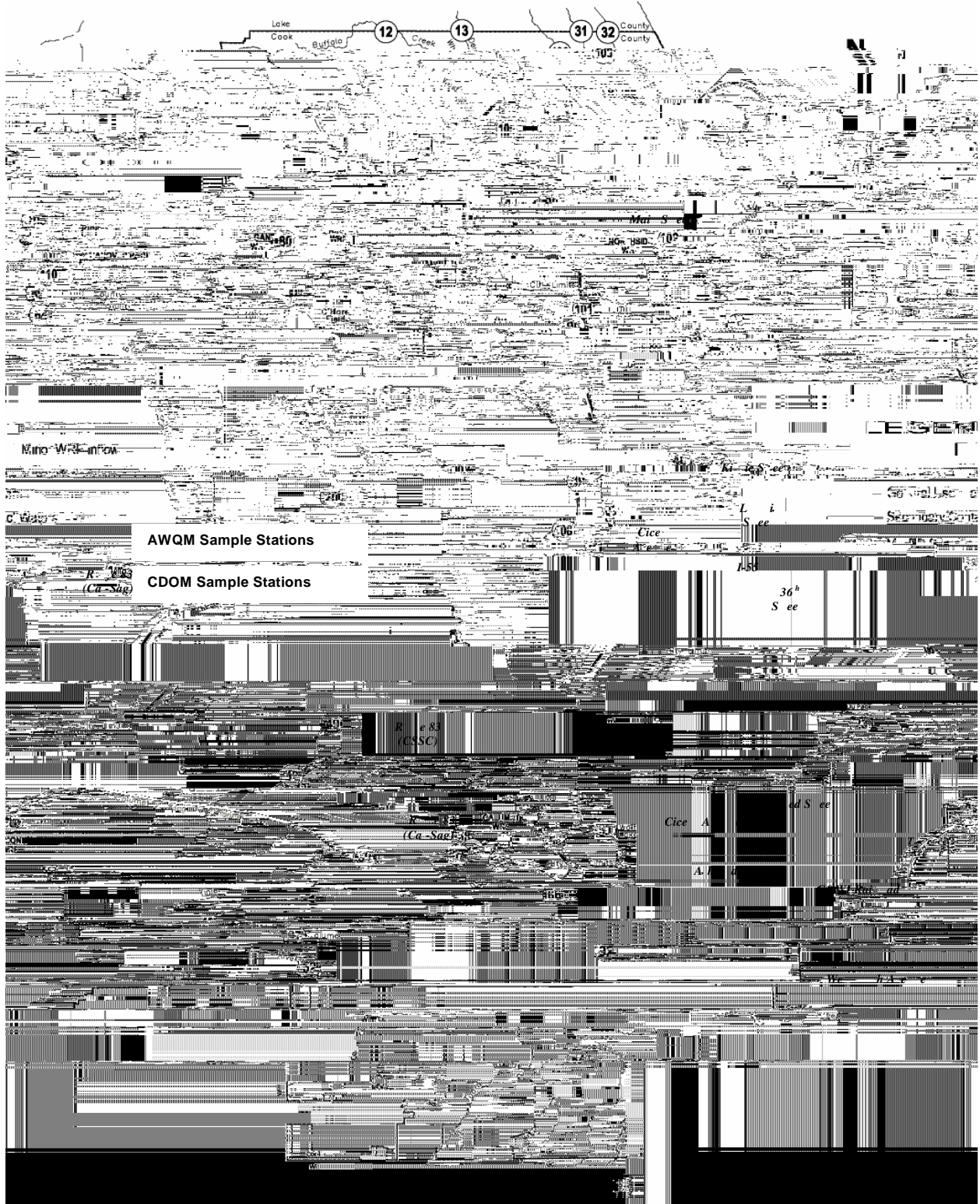


FIGURE 2: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT MAIN STREET ON THE NORTH SHORE CHANNEL FROM JANUARY 2007 THROUGH DECEMBER 2007

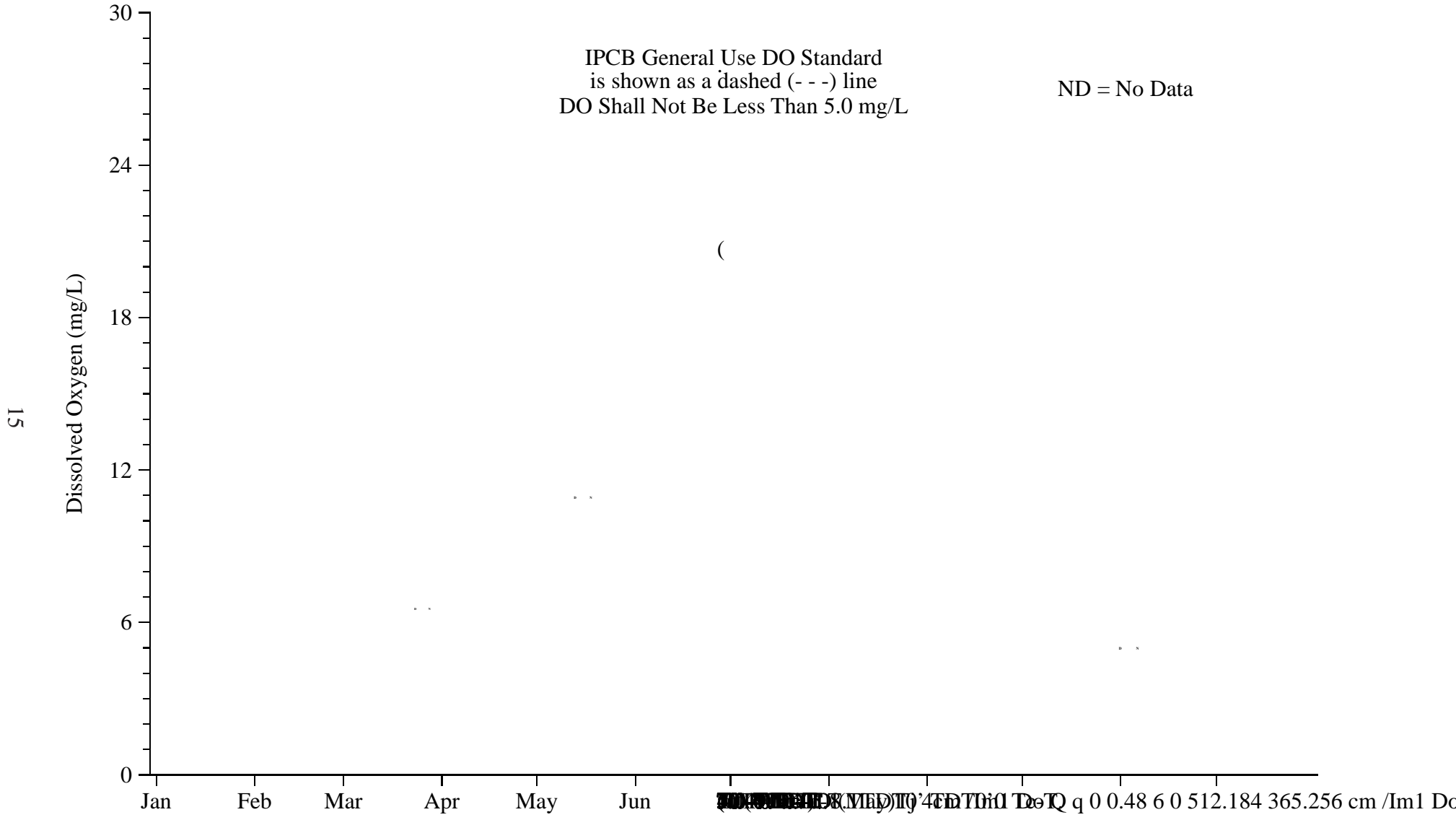


FIGURE 3: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT FOSTER AVENUE ON THE NORTH SHORE CHANNEL FROM JANUARY 2007 THROUGH DECEMBER 2007

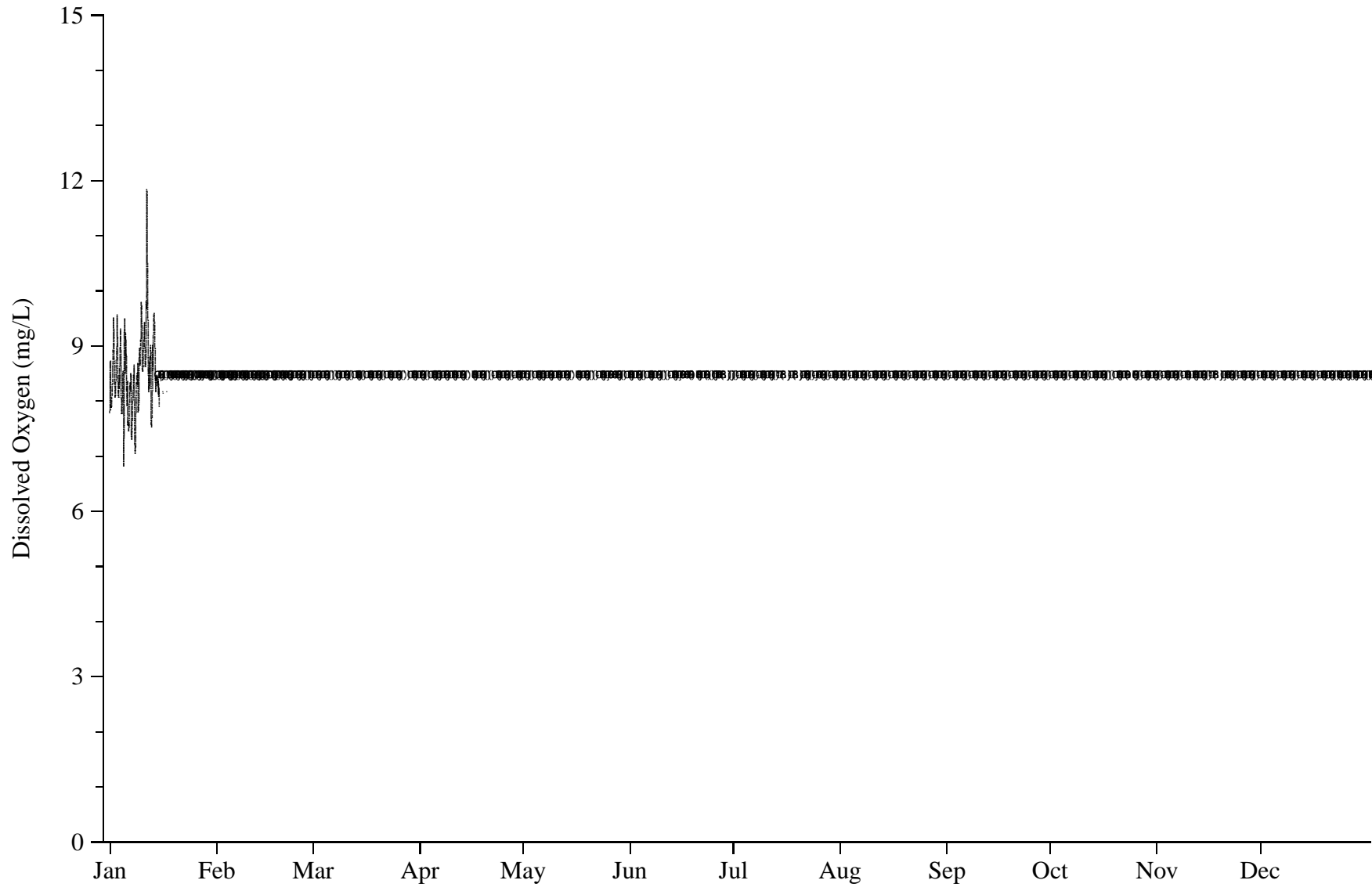




FIGURE 4: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT ADDISON





FIGURE 7: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURL

FIGURE 8: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT LOOMIS STREET ON THE SOUTH BRANCH CHICAGO RIVER FROM JANUARY 2007 THROUGH DECEMBER 2007

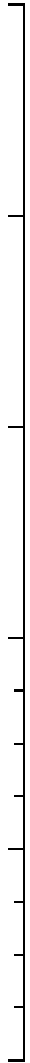


FIGURE 9: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT 36TH STREET  
ON

FIGURE 10: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT INTERSTATE HIGHWAY 55  
ON BUBBLY CREEK FROM JANUARY 2007 THROUGH DECEMBER 2007

FIGURE 11: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT CICERO AVENUE  
ON THE CHICAGO SANITARY AND SHIP CANAL







FIGURE 14: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT LOCKPORT POWERHOUSE ON THE CHICAGO SANITARY AND SHIP CANAL FROM JANUARY 2007 THROUGH DECEMBER 2007



FIGURE 15:

FIGURE 16: DISSOLVED



FIGURE 18: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT CICERO AVENUE ON THE CALUMET-SAG CHANNEL FROM JANUARY 2007 THROUGH DECEMBER 2007

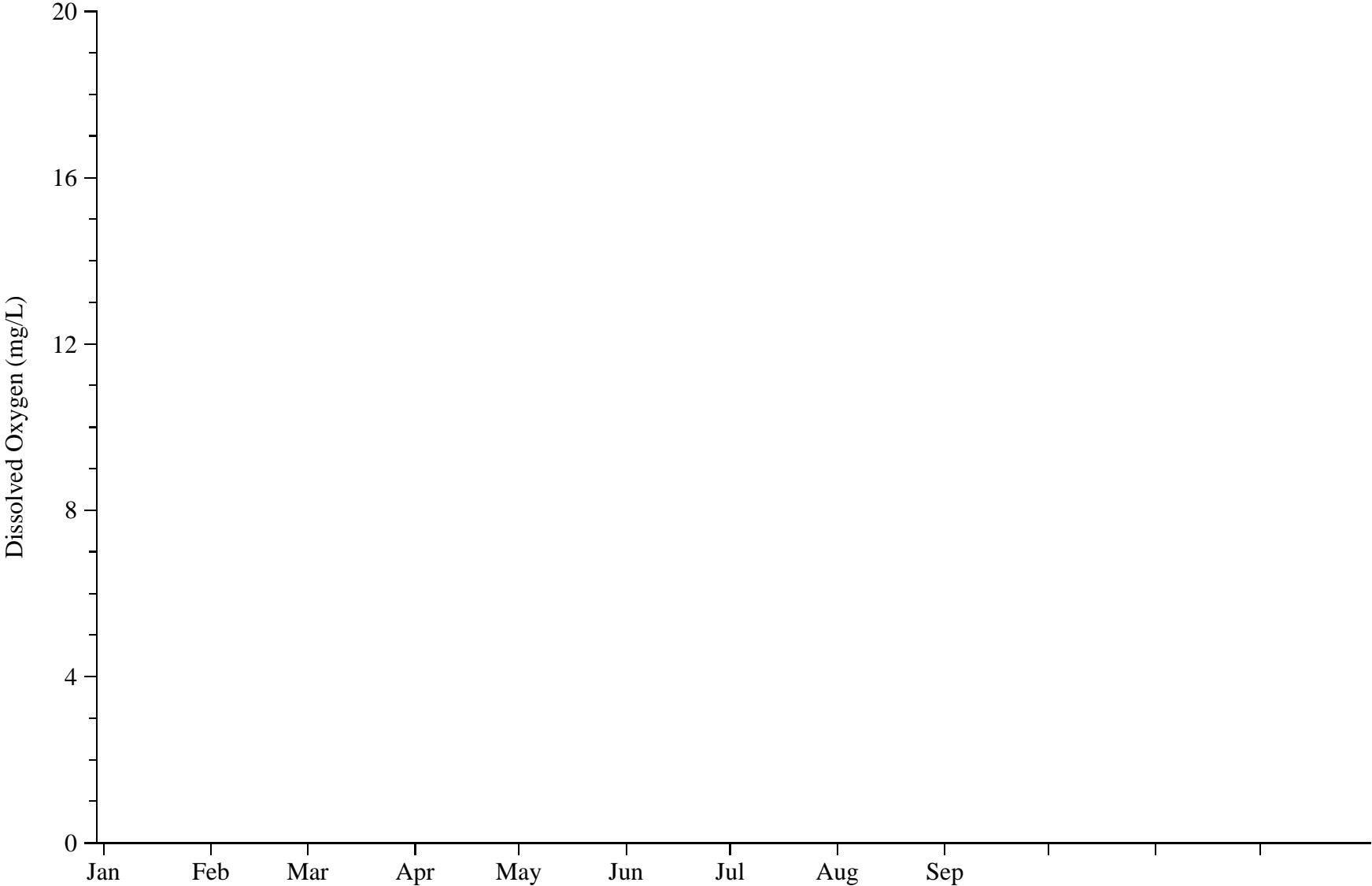


FIGURE 19: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT 104TH AVENUE  
ON THE CALUMET-SAG CHANNEL FROM JANUARY 2007 THROUGH DECEMBER 2007







## REFERENCES

APPENDIX A

WEEKLY DO SUMMARY STATISTICS AT ALL DEEP-DRAFT  
MONITORING STATIONS DURING 2007

TABLE A-1: WEEKLY DO SUMMARY STATISTICS AT MAIN STREET  
ON THE NORTH SHORE CHANNEL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 5.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
01/01/07 - 01/07/07	168	6.0	16.0	10.1	100
01/08/07 - 01/14/07	168	9.5	20.2	14.5	100
01/15/07 - 01/21/07	168	7.1	20.3	12.4	100
01/22/07 - 01/28/07	168	11.0	19.8	14.7	100
01/29/07 - 02/04/07	168	14.1	23.1	17.9	100
02/05/07 - 02/11/07	168	17.0	24.4	22.8	100
02/12/07 - 02/18/07	168	8.9	23.8	15.6	100
02/19/07 - 02/25/07	168	5.4	11.1	8.6	100
02/26/07 - 03/04/07	168	3.2	9.7	5.8	75
03/05/07 - 03/11/07	168	4.5	9.3	7.0	88
03/12/07 - 03/18/07	37	5.8	9.6	7.8	100
03/19/07 - 03/25/07			NO DATA		
03/26/07 - 04/01/07	130	4.3	15.9	9.0	90
04/02/07 - 04/08/07	168	2.2	8.5	5.0	50
04/09/07 - 04/15/07	168	5.2	11.5	7.8	100
04/16/07 - 04/22/07	168	10.6	21.8	15.7	100
04/23/07 - 04/29/07	168	3.6	18.2	9.9	98
04/30/07 - 05/06/07	38	7.1	11.1	8.7	100
05/07/07 - 05/13/07			NO DATA		
05/14/07 - 05/20/07	83	6.4	9.7	8.2	100
05/21/07 - 05/27/07	168	4.2	10.9	8.5	92
05/28/07 - 06/03/07	167	3.9	12.8	9.2	92
06/04/07 - 06/10/07	168	5.7	12.8	9.1	100
06/11/07 - 06/17/07	168	7.7	11.9	9.4	100
06/18/07 - 06/24/07	168	4.5	12.6	9.3	99
06/25/07 - 07/01/07	168	4.8	11.1	7.9	99
07/02/07 - 07/08/07	168	1.6	7.7	5.0	44
07/09/07 - 07/15/07	168	1.6	8.6	5.1	48
07/16/07 - 07/22/07	168	3.6	9.3	6.2	88
07/23/07 - 07/29/07	168	4.6	8.0	6.4	97
07/30/07 - 08/05/07	168	3.7	7.7	6.1	87
08/06/07 - 08/12/07	39	1.1	6.3	2.8	5
08/13/07 - 09/02/07			NO DATA		
09/03/07 - 09/09/07	130	0.2	7.0	2.9	6



TABLE A-2: WEEKLY DO SUMMARY STATISTICS AT FOSTER AVENUE  
ON THE NORTH SHORE CHANNEL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
01/01/07 - 01/07/07	168	6.8	9.6	8.3	100
01/08/07 - 01/14/07	168	7.0	11.8	8.7	100
01/15/07 - 01/21/07	168	6.8	10.1	8.9	100
01/22/07 - 01/28/07	168	7.9	10.5	8.6	100
01/29/07 - 02/04/07	168	8.0	9.7	8.8	100
02/05/07 - 02/11/07	168	8.2	9.7	9.0	100
02/12/07 - 02/18/07	168	8.0	9.9	9.1	100
02/19/07 - 02/25/07	168	6.6	9.7	8.7	100
02/26/07 - 03/04/07	168	7.3	10.1	9.0	100
03/05/07 - 03/11/07	168	7.5	10.0	9.0	100
03/12/07 - 03/18/07	167	7.5	10.0	8.7	100
03/19/07 - 03/25/07	168	7.2	9.0	8.3	100
03/26/07 - 04/01/07	167	5.9	10.1	8.4	100
04/02/07 - 04/08/07	168	6.8	8.8	8.1	100
04/09/07 - 04/15/07	168	6.7	9.4	8.1	100
04/16/07 - 04/22/07	168	7.1	10.7	8.4	100
04/23/07 - 04/29/07	168	6.8	9.2	7.8	100
04/30/07 - 05/06/07	168	5.6	9.5	7.7	100
05/07/07 - 05/13/07	168	6.2	8.3	7.1	100
05/14/07 - 05/20/07	168	4.9	9.1	7.1	100
05/21/07 - 05/27/07	168	5.3	8.8	7.4	100
05/28/07 - 06/03/07	168	5.4	8.7	7.1	100
06/04/07 - 06/10/07	168	6.1	8.2	7.0	100
06/11/07 - 06/17/07	168	6.1	8.6	7.3	100
06/18/07 - 06/24/07	167	6.1	9.4	7.7	100
06/25/07 - 07/01/07	168	5.9	8.3	7.1	100
07/02/07 - 07/08/07	168	5.0	7.6	6.5	100
07/09/07 - 07/15/07	168	4.6	7.6	6.5	100
07/16/07 - 07/22/07	167	4.6	7.8	6.8	100
07/23/07 - 07/29/07	167	5.3	7.5	6.6	100
07/30/07 - 08/05/07	167	5.2	7.5	6.5	100
08/06/07 - 08/12/07	168	4.8	7.7	6.3	100
08/13/07 - 08/19/07	37	5.8	7.0	6.5	100
08/20/07 - 08/26/07	130	3.9	7.8	6.4	99



TABLE A-3: WEEKLY DO SUMMARY STATISTICS AT ADDISON STREET



TABLE A-3 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
ADDISON STREET ON THE NORTH BRANCH CHICAGO RIVER DURING 2007

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Number of

Percent DO Values

TABLE A-4: WEEKLY DO SUMMARY STATISTICS AT FULLERTON AVENUE  
ON THE NORTH BRANCH CHICAGO RIVER DURING 2007

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Number of	DO Concentration (mg/L)	Percent DO Values $\geq 4.$
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TABLE A-5: WEEKLY DO SUMMARY STATISTICS AT KINZIE STREET  
ON THE NORTH BRANCH CHICAGO RIVER DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
01/01/07 - 01/07/07	168	6.4	9.1	7.9	100
01/08/07 - 01/14/07	168	7.2	9.3	8.3	100
01/15/07 - 01/21/07	168	6.8	10.1	8.9	100
01/22/07 - 01/28/07	168	7.7	9.0	8.2	100
01/29/07 - 02/04/07	168	7.8	9.5	8.5	100
02/05/07 - 02Ne2/07	168	6.8	9.58		100
01/15/07 - g [Tj 0.51.0				8.2	100
01/29/07 - 02Ne2/07	168				

TABLE A-5 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
KINZIE STREET ON THE NORTH BRANCH CHICAGO RIVER DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
08/27/07 - 09/02/07	168	4.4	6.4	5.6	100
09/03/07 - 09/09/07	168	3.4	6.3	4.9	93
09/10/07 - 09/16/07	168	4.3	6.8	5.7	100
09/17/07 - 09/23/07	35	4.5	6.3	5.4	100
09/24/07 - 09/30/07	132	4.4	6.5	5.5	100
10/01/07 - 10/07/07	168	4.5	6.7	5.7	100
10/08/07 - 10/14/07	168	5.0	7.7	5.9	100
10/15/07 - 10/21/07	168	4.6	6.9	5.7	100
10/22/07 - 10/28/07	168	4.8	7.3	5.8	100
10/29/07 - 11/04/07	168	3.2	7.1	4.8	85
11/05/07 - 11/11/07	168	2.8	6.2	5.0	77
11/12/07 - 11/18/07	168	4.9	7.4	5.9	100
11/19/07 - 11/25/07	35	5.7	6.1	6.0	100
11/26/07 - 12/02/07	133	6.9	8.1	7.6	100
12/03/07 - 12/09/07	168	6.0	11.0	8.5	100
120 Td 0 g (4.4)Tj 4.KB216/07		1686.9			

TABLE A-6: WEEKLY DO SUMMARY STATISTICS AT CLARK STREET  
ON THE CHICAGO RIVER DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 5.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
01/01/07 - 01/07/07	168	8.6	12.1	9.3	100
01/08/07 - 01/14/07	168	9.7	12.4	11.0	100
01/15/07 - 01/21/07	168	10.2	12.0	11.1	100
01/22/07 - 01/28/07	168	8.3	12.0	10.4	100
01/29/07 - 02/04/07	168	11.5	13.6	12.5	100
02/05/07 - 02/11/07	168	12.5	14.2	13.5	100
02/12/07 - 02/18/07	168	11.0	14.1	12.7	100
02/19/07 - 02/25/07	168	8.8	13.0	10.8	100
02/26/07 - 03/04/07	168	8.4	12.5	10.1	100
03/05/07 - 03/11/07	168	7.5	13.2	10.4	100
03/12/07 - 03/18/07	167	7.8	9.5	8.8	100
03/19/07 - 03/25/07	168	6.6	9.1	8.2	100
03/26/07 - 04/01/07	168	5.7	8.1	7.2	100
04/02/07 - 04/08/07	168	6.2	8.5	7.3	100
04/09/07 - 04/15/07	168	7.0	9.5	8.1	100
04/16/07 - 04/22/07	168	6.2	8.7	7.5	100
04/23/07 - 04/29/07	168	6.2	10.3	8.1	100
04/30/07 - 05/06/07	168	5.9	8.7	7.0	100
05/07/07 - 05/13/07	168	5.4	8.9	7.3	100
05/14/07 - 05/20/07	168	5.3	8.8	7.1	100
05/21/07 - 05/27/07	168	5.8	9.6	7.8	100
05/28/07 - 06/03/07	168	7.4	9.8	8.8	100
06/04/07 - 06/10/07	168	8.4	10.8	9.6	100
06/11/07 - 06/17/07	168	8.6	10.1	9.4	100
06/18/07 - 06/24/07	168	7.6	11.6	10.1	100
06/25/07 - 07/01/07	35	8.8	9.8	9.4	100
07/02/07 - 07/08/07			NO DATA		
07/09/07 - 07/15/07	133	7.8	9.3	8.5	100
07/16/07 - 07/22/07	168	6.9	9.3	8.4	100
07/23/07 - 07/29/07	168	7.3	8.4	7.9	100
07/30/07 - 08/05/07	168	6.9	8.5	7.8	100
08/06/07 - 08/12/07	168	5.3	8.0	7.3	100
08/13/07 - 08/19/07	168	5.6	7.1	6.5	100
08/20/07 - 08/26/07	168	2.5	7.5	5.1	55

TABLE A-6 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
CLARK STREET ON THE CHICAGO RIVER DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 5.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
08/27/07 - 09/02/07	168	4.0	10.4	8.5	93
09/03/07 - 09/09/07	168	8.8	10.0	9.5	100
09/10/07 - 09/16/07	168	8.2	10.0	8.9	100
09/17/07 - 09/23/07	168	7.8	8.8	8.5	100
09/24/07 - 09/30/07	168	6.1	8.4	7.2	100
10/01/07 - 10/07/07	168	5.1	7.9	6.3	100
10/08/07 - 10/14/07	167	7.3	9.2	8.5	100
10/15/07 - 10/21/07	163	7.1	9.1	8.2	100
10/22/07 - 10/28/07	168	7.1	8.4	7.9	100
10/29/07 - 11/04/07	168	7.0	9.0	8.0	100
11/05/07 - 11/11/07	168	7.6	9.7	8.7	100
11/12/07 - 11/18/07	168	7.1	10.5	9.5	100
11/19/07 - 11/25/07	168	6.8	10.3	9.4	100
11/26/07 - 12/02/07	168	8.7	10.8	9.7	100
12/03/07 - 12/09/07	35	10.2	11.7	10.8	100
12/10/07 - 12/16/07	133	7.8	9.5	8.7	100
12/17/07 - 12/23/07	168	7.8	11.4	9.3	100
12/24/07 - 12/30/07	168	8.2	10.4	9.3	100
12/31/07 - 12/31/07	24	8.9	10.0	9.3	100

TABLE A-7: WEEKLY DO SUMMARY STATISTICS AT LOOMIS STREET  
ON THE SOUTH BRANCH CHICAGO RIVER DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
01/01/07 - 01/07/07	168	7.0	9.1	8.3	100
01/08/07 - 01/14/07	168	7.8	9.5	8.7	100
01/15/07 - 01/21/07	168	7.8	10.4	9.0	100
01/22/07 - 01/28/07	168	8.3	9.7	9.0	100
01/29/07 - 02/04/07	168	8.8	11.0	10.0	100
02/05/07 - 02/11/07	168	10.8	11.8	11.4	100
02/12/07 - 02/18/07	168	9.9	12.5	11.1	100
02/19/07 - 02/25/07	168	8.0	11.8	10.0	100
02/26/07 - 03/04/07	168	7.9	11.3	9.5	100
03/05/07 - 03/11/07	168	8.0	11.7	10.3	100
03/12/07 - 03/18/07	167	8.1	10.1	9.1	100
03/19/07 - 03/25/07	168	6.9	9.1	7.9	100
03/26/07 - 04/01/07	168	5.2	7.4	6.5	100
04/02/07 - 04/08/07	168	5.1	7.4	6.3	100
04/09/07 - 04/15/07	168	5.4	8.9	7.2	100
04/16/07 - 04/22/07	168	6.4	8.9	7.4	100
04/23/07 - 04/29/07	168	5.4	8.3	7.0	100
04/30/07 - 05/06/07	167	4.6	7.5	6.1	100
05/07/07 - 05/13/07	168	4.6	6.3	5.5	100
05/14/07 - 05/20/07	168	5.0	6.2	5.6	100
05/21/07 - 05/27/07	162	5.0	7.8	6.0	100
05/28/07 - 06/03/07	168	4.6	8.0	6.1	100
06/04/07 - 06/10/07	86	4.2	6.2	5.4	100
06/11/07 - 06/17/07	85	6.9	7.5	7.2	100
06/18/07 - 06/24/07	168	5.3	9.2	7.1	100
06/25/07 - 07/01/07	82	3.4	7.7	6.5	95
07/02/07 - 07/08/07			NO DATA		
07/09/07 - 07/15/07	85	5.9	7.2	6.4	100
07/16/07 - 07/22/07	168	5.1	6.9	6.2	100
07/23/07 - 07/29/07	168	5.3	8.2	6.4	100
07/30/07 - 08/05/07	168	5.5	8.5	6.5	100
08/06/07 - 08/12/07	168	3.7	6.3	5.5	99
08/13/07 - 08/19/07	168	4.7	6.0	5.5	100
08/20/07 - 08/26/07	168	2.0	6.2	4.5	74



TABLE A-7 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
LOOMIS STREET ON THE SOUTH BRANCH CHICAGO RIVER DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
08/27/07 - 09/02/07	168	4.1	8.8	6.3	100
09/03/07 - 09/09/07	168	5.7	7.7	7.0	100
09/10/07 - 09/16/07	168	5.5	8.2	7.3	100
09/17/07 - 09/23/07	168	5.9	7.7	6.9	100
09/24/07 - 09/30/07	168	4.4	6.6	5.8	100
10/01/07 - 10/07/07	168	4.6	5.9	5.3	100
10/08/07 - 10/14/07	168	5.6	7.6	6.5	100
10/15/07 - 10/21/07	82	5.8	7.2	6.5	100
10/22/07 - 11/04/07			NO DATA		
11/05/07 - 11/11/07	85	7.3	7.9	7.5	100
11/12/07 - 11/18/07	168	6.8	8.0	7.2	100
11/19/07 - 11/25/07	168	6.5	8.2	7.3	100
11/26/07 - 12/02/07	168	7.1	9.3	8.3	100
12/03/07 - 12/09/07	168	6.9	10.2	9.0	100
12/10/07 - 12/16/07	168	7.6	9.9	8.8	100
12/17/07 - 12/23/07	167	8.2	9.7	9.1	100
12/24/07 - 12/30/07	168	8.3	10.0	9.4	100
12/31/07 - 12/31/07	24	8.4	8.9	8.7	100



TABLE A-8 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
36TH STREET ON BUBBLY CREEK DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
08/27/07 - 09/02/07	110	0.0	4.7	1.9	17
09/03/07 - 09/09/07	168	1.6	4.6	3.2	9
09/10/07 - 09/16/07	168	1.8	4.8	3.3	20
09/17/07 - 09/23/07	168	3.6	6.1	4.7	95
09/24/07 - 09/30/07	168	2.7	4.3	3.4	8
10/01/07 - 10/07/07	168	1.7	3.9	2.6	0
10/08/07 - 10/14/07	168	1.9	5.2	3.9	53
10/15/07 - 10/21/07	168	4.6	5.6	5.1	100
10/22/07 - 10/28/07	168	3.6	5.6	4.6	93
10/29/07 - 11/04/07	168	4.0	9.4	5.3	100
11/05/07 - 11/11/07	168	7.3	14.8	11.3	100
11/12/07 - 11/18/07	168	7.4	12.8	9.4	100
11/19/07 - 11/25/07	33	7.2	8.6	8.0	100
11/26/07 - 12/02/07	111	7.5	9.7	8.7	100
12/03/07 - 12/09/07	166	8.1	10.5	9.5	100
12/10/07 - 12/16/07	158	7.1	8.7	7.9	100
12/17/07 - 12/23/07	168	7.2	9.7	8.0	100
12/24/07 - 12/30/07	168	9.3	10.6	9.9	100
12/31/07 - 12/31/07	24	9.7	10.9	10.1	100

TABLE A-9: WEEKLY DO SUMMARY STATISTICS AT INTERSTATE HIGHWAY 55  
ON BUBBLY CREEK DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
01/01/07 - 01/07/07	168	0.6	9.7	4.8	51
01/08/07 - 01/14/07	168	3.6	7.9	6.1	98
01/15/07 - 01/21/07	168	4.5	8.7	6.4	100
01/22/07 - 01/28/07	168	5.4	8.7	7.3	100
01/29/07 - 02/04/07	168	5.2	10.2	7.7	100
02/05/07 - 02/11/07	168	8.9	11.5	10.4	100
02/12/07 - 02/18/07	168	5.8	10.8	8.9	100
02/19/07 - 02/25/07	168	6.0	9.1	8.1	100
02/26/07 - 03/04/07	168	4.4	9.5	7.5	100
03/05/07 - 03/11/07	168	4.6	9.1	6.8	100
03/12/07 - 03/18/07	167	6.4	9.4	7.7	100
03/19/07 - 03/25/07	168	0.2	12.1	5.3	58
03/26/07 - 04/01/07	167	0.0	5.0	1.6	13
04/02/07 - 04/08/07	168	0.0	8.2	2.7	36
04/09/07 - 04/15/07	168	4.7	8.5	6.6	100
04/16/07 - 04/22/07	168	4.4	13.3	7.1	100
04/23/07 - 04/29/07	168	0.2	8.4	4.1	55
04/30/07 - 05/06/07	168	0.1	6.1	2.2	13
05/07/07 - 05/13/07	168	0.3	6.3	3.1	26
05/14/07 - 05/20/07	168	0.0	5.5	2.7	32
05/21/07 - 05/27/07	168	0.4	5.4	3.2	32
05/28/07 - 06/03/07	168	2.7	7.1	5.1	88
06/04/07 - 06/10/07	168	3.0	7.8	5.1	74
06/11/07 - 06/17/07	168	4.2	7.3	6.0	100
06/18/07 - 06/24/07	168	2.7	7.6	5.8	95
06/25/07 - 07/01/07	168	2.8	7.7	5.9	93
07/02/07 - 07/08/07	168	0.2	7.5	5.0	79
07/09/07 - 07/15/07	168	2.8	6.9	5.0	92
07/16/07 - 07/22/07	168	0.0	5.6	3.3	38
07/23/07 - 07/29/07	168	2.8	7.0	4.9	88
07/30/07 - 08/05/07	168	0.2	6.1	4.3	73
08/06/07 - 08/12/07	168	0.1	5.0	2.6	26
08/13/07 - 08/19/07	168	0.2	5.5	3.7	46
08/20/07 - 08/26/07	168	0.0	5.8	1.0	8

TABLE A-9 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
INTERSTATE HIGHWAY 55 ON BUBBLY CREEK DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
08/27/07 - 09/02/07	168	0.0	6.7	2.8	40
09/03/07 - 09/09/07	168	3.2	6.5	4.9	80
09/10/07 - 09/16/07	168	4.2	7.1	6.0	100
09/17/07 - 09/23/07	168	4.9	7.2	6.3	100
09/24/07 - 09/30/07	168	3.7	6.2	5.2	98
10/01/07 - 10/07/07	167	3.0	5.3	4.2	63
10/08/07 - 10/14/07	168	3.5	6.3	5.3	93
10/15/07 - 10/21/07	168	5.1	6.7	5.9	100
10/22/07 - 10/28/07	168	4.5	6.3	5.4	100
10/29/07 - 11/04/07	168	3.3	6.1	4.7	88
11/05/07 - 11/11/07	168	5.2	7.2	6.3	100
11/12/07 - 11/18/07	168	5.8	7.3	6.6	100
11/19/07 - 11/25/07	168	6.2	7.6	6.8	100
11/26/07 - 12/02/07	168	6.8	8.4	7.6	100
12/03/07 - 12/09/07	168	7.8	9.5	8.6	100
12/10/07 - 12/16/07	168	7.2	9.4	8.2	100
12/17/07 - 12/23/07	168	8.0	9.5	8.8	100
12/24/07 - 12/30/07	168	8.2	9.8	9.0	100
12/31/07 - 12/31/07	24	8.7	8.9	8.8	100

TABLE A-10: WEEKLY DO SUMMARY STATISTICS AT CICERO AVENUE  
ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
01/01/07 - 01/07/07	168	4.4	7.9	6.2	100
01/08/07 - 01/14/07	168	4.9	7.2	6.0	100
01/15/07 - 01/21/07	168	5.4	8.1	6.7	100
01/22/07 - 01/28/07	168	6.5	8.0	7.3	100
01/29/07 - 02/04/07	168	7.7	10.1	8.8	100
02/05/07 - 02/11/07	168	9.5	11.3	10.3	100
02/12/07 - 02/18/07	168	7.3	10.1	9.2	100
02/19/07 - 02/25/07	168	7.1	9.2	8.1	100
02/26/07 - 03/04/07	168	7.3	9.6	8.3	100
03/05/07 - 03/11/07	168	8.2	10.4	9.6	100
03/12/07 - 03/18/07	167	6.2	8.7	7.7	100
03/19/07 - 03/25/07	83	5.7	7.6	6.6	100
03/26/07 - 04/01/07	87	4.9	6.4	5.6	100
04/02/07 - 04/08/07	168	5.3	8.2	6.2	100
04/09/07 - 04/15/07	168	5.8	9.1	7.2	100
04/16/07 - 04/22/07	168	5.8	9.4	7.5	100
04/23/07 - 04/29/07	168	1.1	9.1	5.8	92
04/30/07 - 05/06/07	168	3.1	7.5	5.1	84
05/07/07 - 05/13/07	168	2.1	6.2	3.5	24
05/14/07 - 05/20/07	168	0.7	5.6	2.9	5
05/21/07 - 05/27/07	168	0.3	5.7	2.7	15
05/28/07 - 06/03/07	168	2.5	7.4	4.4	55
06/04/07 - 06/10/07	168	2.3	7.3	4.3	54
06/11/07 - 06/17/07	168	3.6	7.1	5.4	98
06/18/07 - 06/24/07	168	3.8	7.0	5.3	95
06/25/07 - 07/01/07	168	3.6	7.4	5.9	96
07/02/07 - 07/08/07	168	3.7	7.4	5.9	98
07/09/07 - 07/15/07	168	4.0	6.8	5.3	100
07/16/07 - 07/22/07	168	0.4	5.8	4.7	89
07/23/07 - 07/29/07	168	3.2	6.1	5.0	89
07/30/07 - 08/05/07	168	3.4	6.0	4.7	85
08/06/07 - 08/12/07	168	2.3	5.2	4.2	65
08/13/07 - 08/19/07	168	2.8	5.1	4.0	46
08/20/07 - 08/26/07	168	0.6	4.9	2.8	15

TABLE A-10 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
CICERO AVENUE ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
08/27/07 - 09/02/07	168	1.6	7.1	4.5	52
09/03/07 - 09/09/07	168	4.5	6.6	5.5	100
09/10/07 - 09/16/07	168	4.9	7.1	6.0	100
09/17/07 - 09/23/07	168	5.2	6.9	6.1	100
09/24/07 - 09/30/07	168	3.0	5.6	4.4	76
10/01/07 - 10/07/07	168	1.5	5.1	3.6	33
10/08/07 - 10/14/07	168	2.9	5.3	4.3	75
10/15/07 - 10/21/07	168	4.7	6.2	5.6	100
10/22/07 - 10/28/07	168	4.8	5.8	5.3	100
10/29/07 - 11/04/07	168	1.8	5.4	3.5	30
11/05/07 - 11/11/07	168	2.6	6.7	4.8	67
11/12/07 - 11/18/07	168	5.5	6.6	6.0	100
11/19/07 - 11/25/07	168	5.3	7.3	6.4	100
11/26/07 - 12/02/07	168	4.0	8.6	6.5	100
12/03/07 - 12/09/07	168	7.4	9.5	8.4	100
12/10/07 - 12/16/07	168	7.1	9.3	8.2	100
12/17/07 - 12/23/07	168	7.2	9.7	8.3	100
12/24/07 - 12/30/07	168	8.0	9.6	8.6	100
12/31/07 - 12/31/07	24	8.2	8.8	8.4	100

TABLE A-11: WEEKLY DO SUMMARY STATISTICS AT B&O CENTRAL RAILROAD  
ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard	
		Minimum	Maximum	Mean		
01/01/07 - 01/07/07	168	5.8	9.2	8.3	100	
01/08/07 - 01/14/07	168	7.1	9.2	8.1	100	
01/15/07 - 01/21/07	168	7.1	10.0	8.5	100	
01/22s					7.1	8.5
				01/22s		

10001/2



TABLE A-11 (Continued): WEEKLY DO SUMMARY STATISTICS AT B&O CENTRAL RAILROAD ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values $\geq$ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
08/27/07 - 09/02/07	168	3.6	7.0	5.7	96
09/03/07 - 09/09/07	168	4.9	7.0	5.9	100
09/10/07 - 09/16/07	168	4.4	7.4	6.0	100
09/17/07 - 09/23/07	168	5.4	7.1	6.2	100
09/24/07 - 09/30/07	168	3.4	6.2	5.1	93
10/01/07 - 10/07/07	168	4.1	7.2	5.4	100
10/08/07 - 10/14/07	168	4.9	6.3	5.7	100
10/15/07 - 10/21/07	168	5.2	7.0	6.2	100
10/22/07 - 10/28/07	168	5.2	7.5	6.5	100
10/29/07 - 11/04/07	168	4.9	7.4	6.2	100
11/05/07 - 11/11/07	168	4.9	7.6	6.6	100
11/12/07 - 11/18/07	168	5.5	8.0	6.6	100
11/19/07 - 11/25/07	168	6.2	8.8	7.6	100
11/26/07 - 12/02/07	167	6.9	8.5	7.7	100
12/03/07 - 12/09/07	168	7.7	9.5	8.6	100
12/10/07 - 12/16/07	168	7.2	9.3	8.2	100
12/17/07 - 12/23/07	168	7.3	9.9	8.2	100
12/24/07 - 12/30/07	168	8.1	10.1	9.1	100
12/31/07 - 12/31/07	24	8.7	9.7	9.1	100

TABLE A-12: WEEKLY DO SUMMARY STATISTICS AT ROUTE 83  
ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2007

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TABLE A-12 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
ROUTE 83 ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
10/22/07 - 10/28/07	135	5.2	6.4	5.8	100
10/29/07 - 11/04/07	168	4.7	6.9	6.0	100
11/05/07 - 11/11/07	168	5.3	6.9	6.1	100
11/12/07 - 11/18/07	36	6.4	7.0	6.7	100
11/19/07 - 11/25/07			NO DATA		
11/26/07 - 12/02/07	110	6.8	7.7	7.2	100
12/03/07 - 12/09/07	168	6.3	9.0	7.9	100
12/10/07 - 12/16/07	168	6.7	8.7	7.5	100
12/17/07 - 12/23/07	59	6.9	8.1	7.5	100
12/24/07 - 12/31/07			NO DATA		

TABLE A-13: WEEKLY DO SUMMARY STATISTICS AT LOCKPORT POWERHOUSE  
ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
01/01/07 - 01/07/07	168	6.5	8.5	7.3	100
01/08/07 - 01/14/07	168	7.0	9.3	8.4	100
01/15/07 - 01/21/07	168	7.0	9.5	8.6	100
01/22/07 - 01/28/07	168	7.3	9.1	8.0	100
01/29/07 - 02/04/07	168	6.9	9.4	8.0	100
02/05/07 - 02/11/07	168	8.4	10.1	9.5	100
02/12/07 - 02/18/07	168	8.1	9.6	9.0	100
02/19/07 - 02/25/07	168	6.2	8.5	7.6	100
02/26/07 - 03/04/07	168	7.5	9.2	8.3	100
03/05/07 - 03/11/07	168	8.0	9.6	8.5	100
03/12/07 - 03/18/07	167	7.0	8.2	7.5	100
03/19/07 - 03/25/07	168	5.5	7.7	6.9	100
03/26/07 - 04/01/07	168	5.2	6.3	5.8	100
04/02/07 - 04/08/07	168	5.0	6.7	5.9	100
04/09/07 - 04/15/07	168	5.7	8.2	6.9	100
04/16/07 - 04/22/07	168	6.0	7.7	6.8	100
04/23/07 - 04/29/07	168	3.1	7.4	5.7	94
04/30/07 - 05/06/07	168	4.6	6.3	5.6	100
05/07/07 - 05/13/07	82	4.0	5.9	5.1	99
05/14/07 - 05/20/07			NO DATA		
05/21/07 - 05/27/07	85	2.8	4.2	3.5	7
05/28/07 - 06/03/07	168	1.2	4.7	3.0	11
06/04/07 - 06/10/07	168	2.0	4.3	3.0	4
06/11/07 - 06/17/07	82	2.0	5.2	3.4	27
06/18/07 - 06/24/07	86	3.2	4.5	3.7	8
06/25/07 - 07/01/07	168	3.1	4.5	3.7	24
07/02/07 - 07/08/07	168	2.0	5.4	4.1	62
07/09/07 - 07/15/07	83	2.5	5.1	3.6	24
07/16/07 - 07/22/07	85	2.6	5.2	3.8	46
07/23/07 - 07/29/07	168	3.3	5.2	4.2	49
07/30/07 - 08/05/07	168	4.0	6.0	4.9	100
08/06/07 - 08/12/07	168	2.0	4.7	3.6	30
08/13/07 - 08/19/07	168	3.4	6.0	4.5	89
08/20/07 - 08/26/07	168	0.9	5.0	3.0	22

TABLE A-13 (Continued): WEEKLY DO SUMMARY STATISTICS AT LOCKPORT POWERHOUSE ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values $\geq$ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
08/27/07 - 09/02/07	168	2.6	5.6	4.1	48
09/03/07 - 09/09/07	168	3.6	5.6	4.9	94
09/10/07 - 09/16/07	168	3.6	5.2	4.4	86
09/17/07 - 09/23/07	168	4.7	6.0	5.3	100
09/24/07 - 09/30/07	168	3.7	5.2	4.4	88
10/01/07 - 10/07/07	168	3.6	5.6	4.3	68
10/08/07 - 10/14/07	83	3.2	5.5	4.6	92
10/15/07 - 10/21/07	83	5.4	6.8	5.9	100
10/22/07 - 10/28/07	168	5.1	6.9	6.2	100
10/29/07 - 11/04/07	168	5.4	6.7	6.2	100
11/05/07 - 11/11/07	168	5.8	6.4	6.0	100
11/12/07 - 11/18/07	168	5.8	6.6	6.2	100
11/19/07 - 11/25/07	168	5.3	7.5	6.4	100
11/26/07 - 12/02/07	168	6.6	7.7	7.1	100
12/03/07 - 12/09/07	168	6.5	8.6	7.8	100
12/10/07 - 12/16/07	168	7.1	8.5	7.8	100
12/17/07 - 12/23/07	168	7.0	8.5	7.8	100
12/24/07 - 12/30/07	168	8.0	8.7	8.4	100
12/31/07 - 12/31/07	24	7.5	8.1	7.8	100

TABLE A-14: WEEKLY DO SUMMARY STATISTICS AT JEFFERSON STREET  
ON THE DES PLAINES RIVER DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
01/01/07 - 01/07/07	168	8.9	11.1	9.8	100
01/08/07 - 01/14/07	168	8.5	12.0	10.2	100
01/15/07 - 01/21/07	168	8.9	12.7	10.6	100
01/22/07 - 01/28/07	168	8.3	10.5	9.3	100
01/29/07 - 02/04/07	168	8.2	11.1	9.3	100
02/05/07 - 02/11/07	168	9.2	10.9	10.1	100
02/12/07 - 02/18/07	168	8.9	10.3	9.5	100
02/19/07 - 02/25/07	84	7.7	10.2	8.7	100
02/26/07 - 03/04/07	84	9.5	11.7	11.0	100
03/05/07 - 03/11/07	168	9.0	11.9	10.4	100
03/12/07 - 03/18/07	168	8.2	11.9	9.5	100
03/19/07 - 03/25/07	168	6.2	11.6	8.5	100
03/26/07 - 04/01/07	168	6.0	8.2	6.9	100
04/02/07 - 04/08/07	168	6.4	11.1	8.5	100
04/09/07 - 04/15/07	168	7.1	11.6	8.9	100
04/16/07 - 04/22/07	168	7.2	11.6	9.3	100
04/23/07 - 04/29/07	168	5.5	11.4	7.5	100
04/30/07 - 05/06/07	168	5.5	10.1	7.1	100
05/07/07 - 05/13/07	168	3.5	9.8	7.2	99
05/14/07 - 05/20/07	168	3.5	8.6	5.8	96
05/21/07 - 05/27/07	168	2.9	7.7	4.8	76
05/28/07 - 06/03/07	168	2.2	6.7	4.0	52
06/04/07 - 06/10/07	168	2.5	6.4	4.1	49
06/11/07 - 06/17/07	168	2.4	6.4	4.7	82
06/18/07 - 06/24/07	168	3.5	7.5	4.5	79
06/25/07 - 07/01/07	168	3.4	6.2	4.6	83
07/02/07 - 07/08/07	168	2.0	6.8	4.5	77
07/09/07 - 07/15/07	168	3.2	7.0	4.8	84
07/16/07 - 07/22/07	168	3.3	7.1	5.1	88
07/23/07 - 07/29/07	168	3.4	7.1	5.1	93
07/30/07 - 08/05/07	168	3.8	6.6	5.1	95
08/06/07 - 08/12/07	168	3.9	6.9	5.0	98
08/13/07 - 08/19/07	168	4.2	6.4	5.0	100
08/20/07 - 08/26/07	168	3.7	7.5	5.6	99

TABLE A-14 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
JEFFERSON STREET ON THE DES PLAINES RIVER DURING 2007

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Number of	<u>DO Concentration (mg/L)</u>	Percent DO Values ≥ 4.0 mg/L
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TABLE A-15: WEEKLY DO SUMMARY STATISTICS AT C&W INDIANA RAILROAD  
ON THE LITTLE CALUMET RIVER DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
01/01/07 - 01/07/07	168	9.9	11.2	10.7	100
01/08/07 - 01/14/07	168	10.5	11.9	11.3	100
01/15/07 - 01/21/07	168	11.1	12.4	11.7	100
01/22/07 - 01/28/07	168	11.2	12.3	11.6	100
01/29/07 - 02/04/07	168	11.1	11.7	11.5	100
02/05/07 - 02/11/07	168	10.4	11.5	11.0	100
02/12/07 - 02/18/07	168	9.4	11.8	11.0	100
02/19/07 - 02/25/07	168	7.5	10.9	9.2	100
02/26/07 - 03/04/07	168	6.6	10.1	8.7	100
03/05/07 - 03/11/07	168	9.4	10.1	9.9	100



TABLE A-15 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
C&W INDIANA RAILROAD ON THE LITTLE CALUMET RIVER DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 4.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
09/03/07 - 09/09/07	168	5.8	8.2	7.2	100
09/10/07 - 09/16/07	168	6.5	7.9	7.3	100
09/17/07 - 09/23/07	168	7.2	9.0	7.9	100
09/24/07 - 09/30/07	168	6.9	8.9	7.8	100
10/01/07 - 10/07/07	168	6.1	8.4	7.1	100
10/08/07 - 10/14/07	168	6.3	8.5	7.4	100
10/15/07 - 10/21/07	168	7.0	8.3	7.6	100
10/22/07 - 10/28/07	168	7.2	8.9	8.1	100
10/29/07 - 11/04/07	168	8.0	9.5	8.6	100
11/05/07 - 11/11/07	168	8.3	10.5	9.4	100
11/12/07 - 11/18/07	168	7.1	10.1	8.7	100
11/19/07 - 11/25/07	168	9.1	10.0	9.5	100
11/26/07 - 12/02/07	168	9.1	12.1	10.8	100
12/03/07 - 12/09/07	168	11.3	12.5	12.0	100
12/10/07 - 12/16/07	168	10.3	12.6	11.7	100
12/17/07 - 12/23/07	168	11.2	12.9	12.2	100
12/24/07 - 12/30/07	168	12.4	13.4	12.9	100
12/31/07 - 12/31/07	24	12.0	12.8	12.4	100

TABLE A-16: WEEKLY DO SUMMARY STATISTICS AT HALSTED STREET  
ON THE LITTLE CALUMET RIVER DURING 2007

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Number of	DO Concentration (mg/L)	Percent DO Values
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TABLE A-16 (Continued): WEEKLY DO SUMMARY STATISTICS AT

TABLE A-17: WEEKLY DO SUMMARY STATISTICS AT CICERO AVENUE  
ON THE CALUMET-SAG CHANNEL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 3.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
01/01/07 - 01/07/07	168	7.4	9.6	8.4	100
01/08/07 - 01/14/07	168	4.8	15.0	8.1	100
01/15/07 - 01/21/07	167	7.2	10.5	8.9	100
01/22/07 - 01/28/07	168	7.8	9.6	8.4	100
01/29/07 - 02/04/07	168	8.7	11.0	9.6	100
02/05/07 - 02/11/07	168	8.6	10.4	9.3	100
02/12/07 - 02/18/07	168	8.5	9.6	9.2	100
02/19/07 - 02/25/07	168	8.1	10.5	9.0	100
02/26/07 - 03/04/07	168	8.0	11.3	9.9	100
03/05/07 - 03/11/07	168	8.0	10.0	8.9	100
03/12/07 - 03/18/07	167	7.0	9.6	8.3	100
03/19/07 - 03/25/07	60	7.8	9.3	8.4	100
03/26/07 - 04/01/07	109	6.0	7.6	6.8	100
04/02/07 - 04/08/07	168	6.9	8.6	7.8	100
04/09/07 - 04/15/07	168	8.0	9.4	8.6	100
04/16/07 - 04/22/07	168	7.0	9.8	8.4	100
04/23/07 - 04/29/07	168	5.0	10.3	7.2	100
04/30/07 - 05/06/07	168	5.1	8.6	6.7	100
05/07/07 - 05/13/07	168	4.4	9.5	6.5	100
05/14/07 - 05/20/07	168	1.7	7.4	4.4	76
05/21/07 - 05/27/07	168	4.1	9.1	5.9	100
05/28/07 - 06/03/07	168	2.1	5.3	3.7	90
06/04/07 - 06/10/07	168	2.6	6.7	4.2	92
06/11/07 - 06/17/07	60	2.5	5.3	3.9	93
06/18/07 - 06/24/07	109	2.8	5.3	4.1	99
06/25/07 - 07/01/07	59	3.5	5.7	4.5	100
07/02/07 - 07/08/07			NO DATA		
07/09/07 - 07/15/07	109	3.9	9.9	6.1	100
07/16/07 - 07/22/07	168	4.1	9.0	6.0	100
07/23/07 - 07/29/07	168	3.0	6.5	5.0	100
07/30/07 - 08/05/07	168	4.1	11.2	6.6	100
08/06/07 - 08/12/07	168	3.1	7.9	5.3	100
08/13/07 - 08/19/07	168	3.7	6.2	5.2	100
08/20/07 - 08/26/07	168	1.8	6.4	4.9	92

TABLE A-17 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
CICERO AVENUE ON THE CALUMET-SAG CHANNEL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 3.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
08/27/07 - 09/02/07	168	4.7	6.5	5.4	100
09/03/07 - 09/09/07	168	4.7	6.1	5.5	100
09/10/07 - 09/16/07	168	5.4	7.2	6.2	100
09/17/07 - 09/23/07	168	5.6	7.3	6.4	100
09/24/07 - 09/30/07	168	4.1	6.5	5.4	100
10/01/07 - 10/07/07	168	4.5	6.3	5.5	100
10/08/07 - 10/14/07	168	5.3	7.1	6.3	100
10/15/07 - 10/21/07	60	6.4	7.3	6.9	100
10/22/07 - 11/04/07			NO DATA		
11/05/07 - 11/11/07	108	7.1	10.3	8.0	100
11/12/07 - 11/18/07	168	5.9	7.4	6.7	100
11/19/07 - 11/25/07	168	5.5	7.9	6.8	100
11/26/07 - 12/02/07	168	7.2	8.8	8.0	100
12/03/07 - 12/09/07	168	7.5	9.4	8.2	100
12/10/07 - 12/16/07	168	7.8	9.6	8.5	100
12/17/07 - 12/23/07	168	7.7	9.5	8.6	100
12/24/07 - 12/30/07	168	7.9	10.3	9.0	100
12/31/07 - 12/31/07	24	7.8	8.2	8.0	100

TABLE A-18: WEEKLY DO SUMMARY STATISTICS AT 104TH AVENUE  
ON THE CALUMET-SAG CHANNEL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 3.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
01/01/07 - 01/07/07	168	7.2	10.2	8.6	100
01/08/07 - 01/14/07	168	8.3	10.4	9.3	100
01/15/07 - 01/21/07	168	8.7	11.0	10.1	100
01/22/07 - 01/28/07	166	8.8	10.4	9.4	100
01/29/07 - 02/04/07	168	9.6	11.2	10.3	100
02/05/07 - 02/11/07	168	8.0	10.9	9.5	100
02/12/07 - 02/18/07	168	7.8	8.7	8.3	100
02/19/07 - 02/25/07	168	7.8	9.8	8.6	100
02/26/07 - 03/04/07	168	9.2	11.4	10.3	100
03/05/07 - 03/11/07	167	7.9	11.3	9.5	100
03/12/07 - 03/18/07	167	7.4	8.8	8.2	100
03/19/07 - 03/25/07	168	7.0	9.1	7.9	100
03/26/07 - 04/01/07	168	5.8	7.4	6.6	100
04/02/07 - 04/08/07	168	6.7	9.5	8.3	100
04/09/07 - 04/15/07	168	8.4	10.0	9.2	100
04/16/07 - 04/22/07	61	8.2	9.4	8.8	100
04/23/07 - 04/29/07			NO DATA		
04/30/07 - 05/06/07	109	5.8	7.9	6.8	100
05/07/07 - 05/13/07	168	6.8	10.5	8.1	100
05/14/07 - 05/20/07	61	4.8	8.1	7.1	100
05/21/07 - 06/03/07			NO DATA		
06/04/07 - 06/10/07	157	3.1	5.3	4.5	100
06/11/07 - 06/17/07	168	3.5	9.9	6.1	100
06/18/07 - 06/24/07	168	3.8	8.5	5.0	100
06/25/07 - 07/01/07	59	3.9	5.3	4.5	100
07/02/07 - 07/08/07			NO DATA		
07/09/07 - 07/15/07	109	4.8	6.9	5.6	100
07/16/07 - 07/22/07	168	4.0	9.0	5.8	100
07/23/07 - 07/29/07	168	2.9	6.3	4.5	97
07/30/07 - 08/05/07	60	3.4	5.4	4.2	100
08/06/07 - 08/12/07			NO DATA		
08/13/07 - 08/19/07	107	4.2	5.8	4.9	100
08/20/07 - 08/26/07	58	4.1	5.5	5.0	100
08/27/07 - 10/07/07			NO DATA		

TABLE A-18 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
104TH AVENUE ON THE CALUMET-SAG CHANNEL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 3.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
10/08/07 - 10/14/07	107	5.4	6.3	5.9	100
10/15/07 - 10/21/07	59	5.1	6.7	6.2	100
10/22/07 - 11/04/07		NO DATA			
11/05/07 - 11/11/07	106	7.0	8.8	8.3	100
11/12/07 - 11/18/07	168	5.2	7.7	6.9	100
11/19/07 - 11/25/07	56	5.9	7.3	6.7	100
11/26/07 - 12/02/07	110	6.5	9.5	8.5	100
12/03/07 - 12/09/07	168	7.7	10.2	8.7	100
12/10/07 - 12/16/07	168	8.2	9.6	8.8	100
12/17/07 - 12/23/07	60	9.0	9.8	9.3	100
12/24/07 - 12/31/07		NO DATA			

TABLE A-19: WEEKLY DO SUMMARY STATISTICS AT ROUTE 83  
ON THE CALUMET-SAG CHANNEL DURING 2007

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values ≥ 3.0 mg/L IPCB Standard
		Minimum	Maximum	Mean	
01/01/07 - 01/07/07	168	7.3	10.2	8.5	100
01/08/07 - 01/14/07	168	8.8	10.5	9.6	100
01/15/07 - 01/21/07	168	9.3	11.1	10.0	100
01/22/07 - 01/28/07	168	8.1	9.9	9.0	100
01/29/07 - 02/04/07	167	7.4	11.0	9.8	100
02/05/07 - 02/11/07	168	8.7	11.2	10.0	100
02/12/07 - 02/18/07	168	8.0	8.7	8.3	100
02/19/07 - 02/25/07	168	7.8	9.4	8.6	100
02/26/07 - 03/04/07	168	9.0	11.1	10.0	100
03/05/07 - 03/11/07	168	8.3	11.1	9.6	100
03/12/07 - 03/18/07	58	7.9	8.5	8.1	100
03/19/07 - 03/25/07	109	6.8	8.8	7.5	100
03/26/07 - 04/01/07	168	5.8	7.4	6.6	100
04/02/07 - 04/08/07	168	6.8	9.2	8.1	100
04/09/07 - 04/15/07	168	8.0	9.7	9.1	100
04/16/07 - 04/22/07	168	7.0	10.7	8.9	100
04/23/07 - 04/29/07	168	5.1	11.1	7.5	100
04/30/07 - 05/06/07	168	5.4	7.9	6.3	100
05/07/07 - 05/13/07	168	6.0	10.3	8.3	100
05/14/07 - 05/20/07	167	3.2	9.0	5.8	100
05/21/07 - 05/27/07	168	3.1	7.7	4.9	100
05/28/07 - 06/03/07	168	2.3	5.0	3.2	57
06/04/07 - 06/10/07	168	2.2	4.9	3.6	79
06/11/07 - 06/17/07	168	3.8	9.7	5.8	100
06/18/07 - 06/24/07	168	2.9	8.6	4.8	98
06/25/07 - 07/01/07	168	2.8	6.1	4.1	96
07/02/07 - 07/08/07	168	3.8	7.2	5.7	100
07/09/07 - 07/15/07	168	2.5	9.9	5.3	97
07/16/07 - 07/22/07	59	4.1	6.6	5.2	100
07/23/07 - 07/29/07	109	3.3	6.0	4.5	100
07/30/07 - 08/05/07	168	4.0	9.0	5.7	100
08/06/07 - 08/12/07	168	3.2	6.3	4.5	100
08/13/07 - 08/19/07	168	4.0	6.6	5.0	100
08/20/07 - 08/26/07	168	2.5	5.4	4.2	90



TABLE A-19 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
ROUTE 83 ON THE CALUMET-SAG CHANNEL DURING 2007

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Monitoring Dates	Number of values	<u>DO Concentration (mg/L)</u>	Percent DO Values $\geq 3.0$ mg/L
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