

Metropolitan Water Reclamation District of Greater Chicago

RESEARCH AND DEVELOPMENT DEPARTMENT

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

DURING 2005

November 2006

Metropolitan Water Reclamation District of Greater Chicago 100 East Erie Street Chicago, Illinois 60611-2803 312-751-5600

CONTINUOUS DISSOLVED OXYGEN MONITORING IN THE DEEP-DRAFT CHICAGO WATERWAY SYSTEM DURING 2005

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DISCLAIMER

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

SUMMARY AND CONCLUSIONS

Summary

More than 30 years ago, the Metropolitan Water Reclamation District of Greater Chicago (District) determined that applicable dissolved oxygen (DO) standards for deep draft navigable waterways in the Chicago area could not be maintained exclusively by improving the effluent quality from the three major District Water Reclamation Plants (WRPs) and by capturing and treating combined sewer overflows (CSOs).

In order to provide supplemental aeration, the District constructed and operated two diffused air instream aeration stations and five sidestream elevated pool aeration (SEPA) stations in Chicago area waterways. In August 1996, the District began planning a comprehensive DO monitoring study to identify reaches in the Chicago Waterway System where the DO concentration is less than the applicable Illinois Pollution Control Board (IPCB) water quality standards.

Initially, 20 stations were selected for monitoring from Wilmette, Illinois, on the North Shore Channel to the Lockport Powerhouse and Lock on the Chicago Sanitary and Ship Canal, using continuous water quality monitors, Models 6600 and 6920 manufactured by YSI Incorporated (YSI), Yellow Springs, Ohio. This monitoring was extended further downstream to Jefferson Street in Joliet, Illinois, on the Des Plaines River beginning in March 2000. Additional stations were added to the DO monitoring network in August 2001 in order to monitor the Calumet River System.

The present deep-draft waterway report includes hourly DO values at 13 stations in the Chicago River System, 1 station in the Des Plaines River System, and 6 stations in the Calumet River System. DO monitoring at Torrence Avenue on the Grand Calumet River was temporarily suspended in March but reactivated in May.

Conclusions

Chicago River System. The results of the continuous DO monitoring conducted in the Chicago River System during 2005 indicated the following:

- 1. A total of 2,366 incidents of DO supersaturation occurred in the Chicago River System, possibly due to oxygen produced by algae during daylight hours. On the North Shore Channel, 1,459 (17.9 percent) measured DO concentrations were greater than 100 percent of saturation, while only 1 supersaturated measurement (<0.1 percent) occurred at Foster Avenue. On the Chicago River, 52 (0.6 percent) incidents of supersaturation were measured at Clark Street. On Bubbly Creek, a total of 845 (11.0 percent) supersaturated incidents occurred at 36th Street, while only 9 (0.1 percent) occurred at Interstate Highway 55.
- 2. Hourly DO concentrations at or near zero were recorded 1,311 times at five stations; including 201 times (2.5 percent) at Main Street on the North Shore

Channel, 857 times (11.2 percent) at 36th Street and 230 times (2.9 percent) at Interstate Highway 55 on Bubbly Creek, 19 times (0.3 percent) at Cicero Avenue and 4 times (0.1 percent) at Route 83 on the Chicago Sanitary and Ship Canal.

- 3. DO concentrations were above the applicable IPCB standards 100 percent of the time at Clark Street on the Chicago River.
- 4. Three stations were above the applicable IPCB DO Standard at least 99 percent but less than 100 percent of the time. These stations were Foster Avenue on the North Branch of the Chicago River, Loomis Street on the South Branch of the Chicago River and B&O Central Railroad on the Chicago Sanitary and Ship Canal.
- 5. The DO concentrations were above the IPCB DO standard at least 90 percent but less than 99 percent of the time at four stations. These stations were Addison Street, Fullerton Avenue, and Kinzie Street on the North Branch of the Chicago River, and Cicero Avenue on the Chicago Sanitary and Ship Canal.
- 6. Four monitoring stations recorded DO levels above the applicable IPCB DO standards at least 70 percent but less than 90 percent of the time; including Main Street on the North Shore Channel, Interstate Highway 55 on Bubbly Creek, and Route 83 and Lockport Powerhouse on the Chicago Sanitary and Ship Canal.
- 7. DO measurements at 36th Street on Bubbly Creek were above the applicable DO standard less than 70 percent of the time.

Des Plaines River System. The results of the continuous DO monitoring conducted in the Des Plaines River System during 2005 indicated the following:

- 1. A total of 12 (0.1 percent) incidents of DO supersaturation occurred.
- 2. No DO concentrations at or near zero were recorded at this station.
- 3. The DO concentration was above the IPCB DO standard 91 percent of the time.

Calumet River System. The results of the continuous DO monitoring conducted in the Calumet River System during 2005 indicated the following:

1. A total of 1,614 incidents of DO supersaturation occurred in the Calumet River System; possibly due to oxygen produced by algae during daylight hours. These incidents included 800 (12.2 percent) at Torrence Avenue on the Grand Calumet River and 800 (10.2 percent) at the C&W Indiana Railroad.

Only 10 incidents (0.1 percent) occurred at Halsted Street on the Little Calumet River, and 2 (<0.1 percent) occurred at both Cicero Avenue and at 104th Avenue on the Calumet-Sag Channel.

- 2. Hourly DO concentrations at or near zero were recorded 114 times (1.7 percent) at Torrence Avenue on the Grand Calumet River.
- 3. None of the stations in the Calumet River System were in compliance with the applicable IPCB DO standards 100 percent of the time. However, stations at Halsted Street on the Little Calumet River, and at Cicero Avenue and at 104th Avenue on the Calumet-Sag Channel were above the applicable IPCB standard at least 99 percent of the time.
- 4. DO concentrations were above the IPCB DO standard at least 90 percent but less than 99 percent of the time at C&W Indiana Railroad on the Little Calumet River and at Route 83 on the Calumet-Sag Channel.
- 5. DO concentrations at Torrence Avenue on the Grand Calumet River were above the applicable IPCB DO standards at least 70 percent but less than 90 percent of the time.

The database resulting from the operation of the continuous DO monitors has been an important source of information for determining the DO levels in a complex, urbanized waterway system. This information will be useful in the future for determining the need and location for additional supplemental aeration capacity, understanding the temporal and transient impacts of CSOs, assessing the effects of reduced discretionary diversion from Lake Michigan, and calibrating and verifying an unsteady-state water quality model for the Chicago, Calumet, and Des Plaines River Systems.

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 commercial navigation. Approximately 75 percent of the length is composed of man-made canals where no waterway existed previously, and the remainder is composed of natural streams that have been deepened, straightened and/or widened to such an extent that reversion to the natural state is not possible. The flow of water in the CWS is artificially controlled by hydraulic structures. The CWS has two river systems, the Calumet River System and the Chicago River System (Lanyon, 2002).

Over the years, increased pollutant loading from urbanization throughout the Chicago metropolitan area and low stream velocities in Chicago area deep-draft waterways have caused DO concentrations to fall below DO standards established by the IPCB. More than 30 years ago, the District determined that applicable IPCB DO standards for Chicago area waterways could not be met exclusively by advanced wastewater treatment at its three major regional WRPs (Calumet, North Side, and Stickney) and by the capture and treatment of CSOs. In order to increase the DO concentration in the Chicago and Calumet River Systems, the District designed and constructed artificial aeration systems (instream diffuser and SEPA stations) during the late 1970s and early 1990s, respectively.

From October 1994 through May 1996, the Research and Development Department (R&D) conducted weekly DO surveys in the Chicago River System. Water samples were collected manually, chemically fixed in the field, and returned to the laboratory for titration. The results from these surveys showed that DO concentrations in selected waterway reaches were less than IPCB DO standards applicable to these reaches.

In August 1996, R&D began developing a comprehensive field-monitoring program in order to locate and identify reaches in the Chicago River System where the DO concentration is less than the applicable IPCB DO standard. Initially, the program was to focus on the Chicago River System for a two-year period. Subsequently, the scope of the monitoring program was extended to four years, and the study area was expanded to include the Calumet River System for the latter two years. The resulting data have been used for the calibration and verification of a water quality model for the CWS.

Monitoring results for the CWS have been summarized by: (1) Polls (2002) from August 1998 through July 2000, (2) Dennison et al. (2004) from August 2000 through December 2001, (3) Dennison et al. (2004) from January 2002 through December 2002 (Chicago River System) and from August 2001 through December 2002 (Calumet River System), (4) Dennison et al. (2005) from January 2003 through December 2003, and (5) Dennison et al. (2005) from January 2004 through December 2004.

Data in this report are from the 20 deep-draft continuous DO monitoring stations of the District's Continuous Dissolved Oxygen Monitoring Program (CDOM). This report covers the monitoring results for the period January 2005 through December 2005 for the deep-draft waterways of the Chicago River System, Des Plaines River System, and Calumet River System.

MONITORING STATIONS

The CDOM Program and the Ambient Water Quality Monitoring (AWQM) Program supply the District with water quality data throughout the year for both the wadeable and deep-draft waterways within its jurisdiction. All stations for both programs are shown in Figure 1. The deep-draft Chicago River System included two stations on the North Shore Channel, three stations on the North Branch of the Chicago River, one station on the Chicago River, one station on the South Branch of the Chicago River, two stations on Bubbly Creek, and four stations on the Chicago Sanitary and Ship Canal. The deep-draft Des Plaines River System included one station on the Des Plaines River. The deep-draft Calumet River System included one station on the Grand Calumet River, two stations on the Little Calumet River, and three stations on the Calumet-Sag Channel. Descriptions of the locations of all of the deep-draft monitoring stations are listed in Table 1.

Criteria used to select monitoring stations included the following:

- 1. History of low DO,
- 2. above and below confluence of waterways,
- 3. proximity to instream aeration stations or SEPA stations,
- 4. below North Branch and Racine Avenue pumping stations,
- 5. above and below the North Side, Stickney, and Calumet WRPs,
- 6. below discretionary diversion locations, and
- 7. minimal cross-sectional DO variability.

FIGURE 1: CONTINUOUS DISSOLVED OXYGEN MONITORING (CDOM) AND AMBIENT WATER QUALITY MONITORING (AWQM) SAMPLE STATIONS

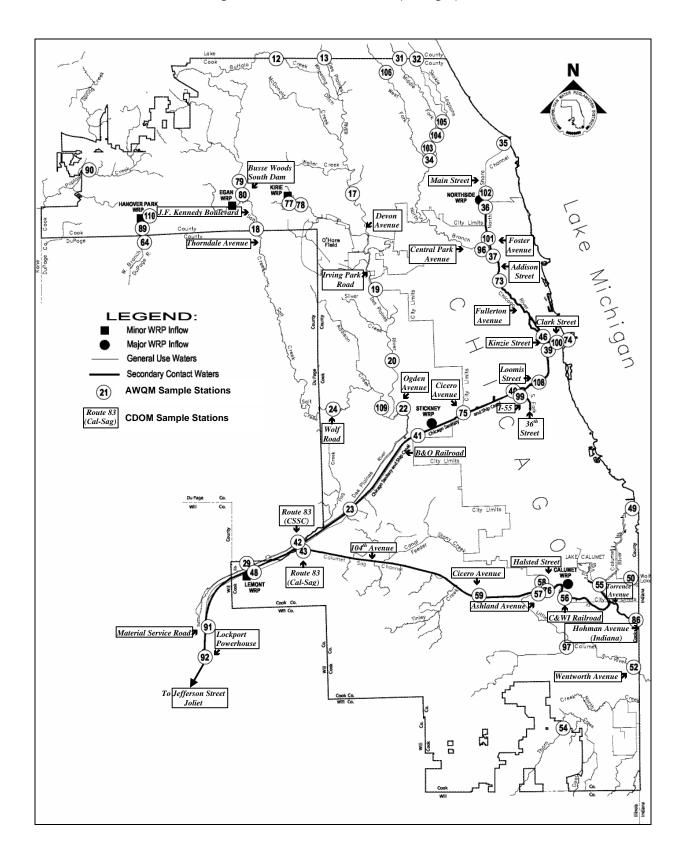


TABLE 1: DEEP-DRAFT CONTINUOUS DISSOLVED OXYGEN MONITORING STATIONS

Monitoring Station	Waterway	Description of Monitoring Station
	Chicago River S	ystem
Main Street	North Shore Channel	3.5 miles below Wilmette Pumping Station; 0.8 mile above North Side WRP outfall; water quality monitor under Main Street bridge, center of channel, 1 foot above bottom.
Foster Avenue	North Shore Channel	3.2 miles below North Side WRP outfall; 1.5 miles below Devon Aeration Station; 0.1 mile above junction with North Branch Chicago River; water quality monitor on northwest side Foster Avenue bridge 3 feet below water surface.
Addison Street	North Branch Chicago River	5.2 miles below North Side WRP outfall; water quality monitor on northwest side Addison Street bridge; 3 feet below water surface.
Fullerton Avenue	North Branch Chicago River	7.2 miles below North Side WRP outfall; 0.4 mile above Webster Aeration Station; water quality monitor on northwest side Fullerton Avenue bridge, 3 feet below water surface.
Kinzie Street	North Branch Chicago River	9.9 miles below North Side WRP outfall; 3.1 miles below Webster Aeration Station; 0.2 mile above junction with Chicago River; water quality monitor on northeast side Kinzie Street bridge, 3 feet below water surface.
Clark Street	Chicago River	1.2 miles below Chicago River Controlling Works; 0.4 mile above junction with South Branch Chicago River; water quality monitor on northeast side Clark Street bridge, 3 feet below water surface.
Loomis Street	South Branch Chicago River	3.6 miles below junction with Chicago River; water quality monitor on northeast side Loomis Street bridge; 3 feet below water surface.
36 th Street	Bubbly Creek	0.2 mile below Racine Avenue Pumping Station; 1.2 miles above junction with South Branch of the Chicago River; water quality monitor attached to concrete wall on west side of river, 3 feet below water surface.

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

Monitoring Station	Waterway	Description of Monitoring Station	
	Chicago River System (C	Continued)	
Interstate Highway 55	Bubbly Creek	1.0 mile below Racine Avenue Pumping Station; 0.4 mile above junction with South Branch of the Chicago River; water quality monitor on northeast side I-55 bridge, 3 feet below water surface.	
Cicero Avenue	Chicago Sanitary and Ship Canal	1.5 miles above Stickney WRP outfall; 1.1 miles below Crawford Generating Station cooling water discharge; water quality monitor on northeast side Cicero Avenue bridge, 3 feet below water surface.	
B&O Central Railroad	Chicago Sanitary and Ship Canal	3.6 miles below Stickney WRP outfall; water quality monitor in center of canal, east side B&O Central RR bridge, 3 feet below water surface.	
Route 83	Chicago Sanitary and Ship Canal	1.2 miles above junction with Calumet-Sag Channel; 1.1 miles above Canal Junction SEPA Station; water quality monitor 0.6 mile above Route 83 bridge, center of canal, 1 foot above bottom.	
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.	
Des Plaines River System			
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.	

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

Monitoring Station	Waterway	Description of Monitoring Station
	Calumet River Sy	<u>ystem</u>
Torrence Avenue	Grand Calumet River	150 feet above junction with Calumet River; 100 feet below Torrence Avenue bridge; water quality monitor attached to bridge abutment on southeast side of river, 2 feet below water surface.
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'Brien Lock and Dam; 1.3 miles above Calumet WRP outfall; water quality monitor attached to northeast side C&W Indiana RR bridge, 3 feet below water surface.
Halsted Street	Little Calumet River	7.7 miles below SEPA 1; 1.0 mile below SEPA 2; 1.2 miles below Calumet WRP; 0.5 mile above junction with Calumet-Sag Channel; water quality monitor attached to southeast side Halsted Street bridge, 3 feet below water surface.
Cicero Avenue	Calumet-Sag Channel	3.1 miles below SEPA 3; 3.3 miles above SEPA 4; water quality monitor attached to northwest side Cicero Avenue bridge 3 feet below water surface.
104 th Avenue	Calumet-Sag Channel	4.6 miles below SEPA 4; 3.2 miles above Canal Junction SEPA Station; water quality monitor in center of channel, 1 foot above bottom.
Route 83	Calumet-Sag Channel	0.4 mile above junction with Chicago Sanitary and Ship Canal; 0.3 mile above Canal Junction SEPA Station; water quality monitor on southwest side Illinois Central-Gulf RR bridge, 3 feet below water surface.

MATERIALS AND METHODS

Water Quality Monitor

In the present study, DO was measured hourly using the YSI Model 6920 or Model 6600 continuous water quality monitor (monitor). In order to protect and safeguard the monitors from marine navigation and vandalism, the monitors were deployed in the field in stainless steel pipes. Two different installation designs were employed: (1) a 3-foot stainless steel pipe was positioned on the bottom of the waterway and oriented downstream such that the water passed through the pipe, and (2) a 12- to 15-foot pipe, with multiple 2-inch circular openings, was vertically mounted on the side of a bridge abutment.

Servicing the monitors followed a weekly schedule. Industrial Waste Division personnel retrieved each monitor from the field following seven days of continuous monitoring. Prior to retrieval, a water sample for DO analysis was collected next to the protective housing. An additional monitor, that had been previously calibrated and serviced in the laboratory, was then deployed to replace the retrieved monitor. The retrieved monitors were returned to the laboratory for data downloading, exterior cleaning, servicing, and calibration of the DO sensors. The monitors were temporarily stored in holding tanks containing tap water for subsequent deployment during the following week.

Data Management and Review

Hourly DO data were directly exported electronically from individual monitors to a specially designed Access® database for data processing and storage. Following data downloading, the weekly DO data were carefully reviewed for accuracy. The review process included the following: (1) Comparing a grab sample DO concentration measured in the field with a DO concentration recorded by a retrieved monitor (DO rejection criteria = difference greater than 2.0 mg/L), (2) Comparing the last hourly DO concentration measured by a retrieved monitor with the first hourly DO concentration recorded by a deployed monitor (DO rejection criteria = difference greater than 2.0 mg/L), and (3) Comparing a DO concentration measured in a laboratory holding tank and a DO concentration recorded by a retrieved monitor (DO rejection criteria = difference greater than 1.0 mg/L). Criterion 3 would entail rejection of all hourly readings; criteria 1 and 2 may or may not reject all readings.

After careful review of the DO data, weekly summary statistics (mean, minimum, maximum, and percent observations above DO standard) and individual line drawings for each monitoring station showing hourly DO concentrations were prepared.

Verification of Representative Data

During the spring, summer, and fall of 2005, cross-sectional DO surveys were conducted in the CWS to determine if a fixed continuous monitoring location represented the DO concentration across the waterway. Verification was achieved by comparing the DO concentrations measured in grab samples at multiple fixed locations and depths across the waterway with the fixed monitor measurements. The results from the cross-sectional surveys clearly showed that the differences across the waterway were minimal and equivalent to the DO concentration measured by the monitor at the fixed locations.

RESULTS AND DISCUSSION

The annual minimum, maximum, and mean DO concentrations measured at all 20 stations during 2005 are shown in $\underline{\text{Table } 2}$.

The number and percent of measured DO concentrations rejected and removed from the Access[®] database following review during 2005 are summarized in <u>Table 3</u>. Based on the data review methodology previously described, 8.8 percent of the data were rejected. The number of DO concentrations rejected ranged from none at Clark Street (Chicago River) to a high of 29.4 percent at Cicero Avenue (Chicago Sanitary and Ship Canal).

The number and percent of DO concentrations above the applicable IPCB DO standard for each waterway during 2005 are presented in <u>Table 4</u>. The DO data shown in <u>Table 4</u> do not include the DO concentrations rejected during the data review.

<u>Table 5</u> shows the percent distribution of DO concentrations from <1.0 mg/L to >5.0 mg/L at the 20 monitoring stations during 2005. The current national one-day minimum DO criterion for adult life stages of fish is 3.0 mg/L (Chapman, 1986).

Weekly DO summary statistics during 2005 are presented for each monitoring station in Appendix A, Tables A-1 through A-20.

The IPCB has assigned water uses for specific water bodies within the state of Illinois. All waters in Illinois are designated for General Use, except those selected as Secondary Contact and Indigenous Aquatic Life Waters (Secondary Contact).

In the Chicago and Calumet River Systems, General Use Waters include the North Shore Channel from Lake Michigan to the North Side WRP, and the Chicago and Calumet Rivers.

Secondary Contact Waters include the North Shore Channel from the North Side WRP to the North Branch of the Chicago River, the North Branch of the Chicago River from the North Shore Channel to the Chicago River, the South Branch of the Chicago River, Bubbly Creek, the Chicago Sanitary and Ship Canal, the Grand Calumet River, the deep-draft portion of the Little Calumet River, the Calumet-Sag Channel, and the Des Plaines River from its confluence with the Chicago Sanitary and Ship Canal to the Interstate Highway 55 bridge southwest of Joliet.

The IPCB has established water quality standards for DO in both General Use and Secondary Contact Waters. In General Use Waters, the DO shall not be less than 6.0 mg/L during 16 hours of any 24-hour period, nor less than 5.0 mg/L at any time. In Secondary Contact Waters, the DO shall not be less than 4.0 mg/L at any time, except in the Calumet-Sag Channel where the DO shall not be less than 3.0 mg/L at any time. For this report, we have selected the 5.0 mg/L DO standard when calculating percent compliance for General Use Waters.

Chicago River System

North Shore Channel. *Main Street.* From January 1 through December 31, the maximum DO was 34.0 mg/L, the minimum was 0.0 mg/L, and the mean was 9.4 mg/L. The IPCB requires that the DO concentration in the portion of the North Shore Channel classified as General

TABLE 2: MINIMUM, MAXIMUM, AND MEAN HOURLY DISSOLVED OXYGEN CONCENTRATIONS $^{\rm 1}$

Monitoring DO Concentr		centration (r	tration (mg/L)	
Station	Waterway	Minimum	Maximum	Mean
	Chicago River System			
Main Street	North Shore Channel	0.0	34.0	9.4
Foster Avenue	North Shore Channel	2.3	11.3	7.3
Addison Street	North Branch Chicago River	2.0	11.4	6.9
Fullerton Avenue	North Branch Chicago River	1.8	11.6	6.3
Kinzie Street	North Branch Chicago River	1.8	11.6	6.5
Clark Street	Chicago River	5.4	13.1	8.7
Loomis Street	South Branch Chicago River	3.4	10.7	7.2
36 th Street	Bubbly Creek	0.0	22.0	6.2
Interstate Highway 55	Bubbly Creek	0.0	14.6	6.1
Cicero Avenue	Chicago Sanitary and Ship Canal	0.1	9.3	5.7
B&O Central Railroad	Chicago Sanitary and Ship Canal	3.3	10.5	6.7
Route 83	Chicago Sanitary and Ship Canal	0.0	9.6	5.5
Lockport Powerhouse	Chicago Sanitary and Ship Canal	1.4	10.2	5.5
	Des Plaines River System			
Jefferson Street	Des Plaines River	1.3	12.5	6.8
	<u>Calumet River System</u>			
Torrence Avenue	Grand Calumet River	0.0	21.6	8.1
C&W Indiana Railroad	Little Calumet River	2.5	16.4	9.7
Halsted Street	Little Calumet River	2.8	12.2	7.1
Cicero Avenue	Calumet-Sag Channel	1.5	11.1	7.1
104 th Avenue	Calumet-Sag Channel	2.2	11.8	7.0
Route 83	Calumet-Sag Channel	1.8	10.8	6.9

¹Dissolved oxygen was measured hourly using a YSI Model 6920 or Model 6600 continuous water quality monitor.

TABLE 3: NUMBER AND PERCENT OF DISSOLVED OXYGEN VALUES NOT MEETING ACCEPTANCE CRITERIA $^{\rm 1}$

Monitoring Station	Waterway	Number of DO Values Rejected	Percent of DO Values Rejected
	Chicago River System		
Main Street Foster Avenue Addison Street Fullerton Avenue Kinzie Street Clark Street Loomis Street 36 th Street Interstate Highway 55 Cicero Avenue B&O Central Railroad Route 83 Lockport Powerhouse	North Shore Channel North Shore Channel North Branch Chicago River North Branch Chicago River North Branch Chicago River Chicago River South Branch Chicago River Bubbly Creek Bubbly Creek Chicago Sanitary and Ship Canal	620 252 314 890 1 0 23 1,006 819 2,584 674 1,565 1,365	7.1 2.9 3.6 10.2 <0.1 0.0 <1.0 11.6 9.3 29.4 7.7 18.2 14.1
Jefferson Street	Des Plaines River System Des Plaines River Calumet River System	675	7.7
Torrence Avenue C&W Indiana Railroad Halsted Street Cicero Avenue 104 th Avenue Route 83	Grand Calumet River Little Calumet River Little Calumet River Calumet-Sag Channel Calumet-Sag Channel Calumet-Sag Channel	840 867 507 1 2,019 361	11.4 9.9 5.8 <0.1 23.1 4.1

^TDissolved 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 problems with monitor.

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

Monitoring Station	Waterway	IPCB DO Standard	Number of DO Values	Number Above Standard	Percent Above Standard						
Chicago River System											
Main Street Foster Avenue Addison Street Fullerton Avenue Kinzie Street Clark Street Loomis Street 36 th Street Interstate Highway 55	North Shore Channel North Shore Channel North Branch Chicago River North Branch Chicago River North Branch Chicago River Chicago River South Branch Chicago River Bubbly Creek Bubbly Creek	5 4 4 4 4 5 4 4	8,139 8,389 8,445 7,870 8,728 8,652 8,757 7,670 7,963	7,104 8,386 8,273 7,353 8,418 8,652 8,741 4,832 7,079	87.3 >99.9 98.0 93.4 96.4 100.0 99.8 63.0 88.9						
Cicero Avenue B&O Central Railroad Route 83 Lockport Powerhouse	Chicago Sanitary and Ship Canal Chicago Sanitary and Ship Canal Chicago Sanitary and Ship Canal Chicago Sanitary and Ship Canal	4 4 4 4	6,209 8,107 7,026 8,313	5,608 8,062 5,831 6,818	90.3 99.4 83.0 82.0						
Jefferson Street	Des Plaines River Sy Des Plaines River Calumet River Syst	4	8,059	7,356	91.3						
Torrence Avenue C&W Indiana Railroad Halsted Street Cicero Avenue 104 th Avenue Route 83	Grand Calumet River Little Calumet River Little Calumet River Calumet-Sag Channel Calumet-Sag Channel Calumet-Sag Channel	4 4 4 3 3 3	6,547 7,866 8,254 8,757 6,738 8,397	5,356 7,779 8,208 8,732 6,714 8,274	81.8 98.9 99.4 99.7 99.6 98.5						

¹Dissolved oxygen was measured hourly using a YSI Model 6920 or Model 6600 continuous water quality monitor.

TABLE 5: PERCENT OF DISSOLVED OXYGEN VALUES IN SELECTED RANGES

Monitoring Percent of DO Values in Range (mg/									
Station	Waterway	<1	1-2	2-3	3-4	4-5	>5		
	Chicago River System	<u>1</u>							
Main Street	North Shore Channel	3	2	2	3	5	88		
Foster Avenue	North Shore Channel	0	0	<1	0	2	99		
Addison Street	North Branch Chicago River	0	0	<1	2	7	92		
Fullerton Avenue	North Branch Chicago River	0	<1	<1	6	13	81		
Kinzie Street	North Branch Chicago River	0	0	<1	3	9	88		
Clark Street	Chicago River	0	0	0	0	0	100		
Loomis Street	South Branch Chicago River	0	0	0	<1	3	97		
36 th Street	Bubbly Creek	11	8	9	9	13	50		
Interstate Highway 55	Bubbly Creek	3	1	2	5	11	78		
Cicero Avenue	Chicago Sanitary and Ship Canal	<1	<1	2	8	19	72		
B&O Central Railroad	Chicago Sanitary and Ship Canal	0	0	0	<1	8	92		
Route 83	Chicago Sanitary and Ship Canal	<1	<1	2	15	21	63		
Lockport Powerhouse	Chicago Sanitary and Ship Canal	0	<1	3	15	25	57		
	Des Plaines River Syste	<u>em</u>							
Jefferson Street	Des Plaines River	0	<1	2	7	15	76		
	Calumet River System	<u>1</u>							
Torrence Avenue	Grand Calumet River	2	4	6	7	7	75		
C&W Indiana Railroad	Little Calumet River	0	0	0	1	3	96		
Halsted Street	Little Calumet River	0	0	0	<1	4	96		
Cicero Avenue	Calumet-Sag Channel	0	<1	<1	2	7	91		
104 th Avenue	Calumet-Sag Channel	0	0	<1	3	10	87		
Route 83	Calumet-Sag Channel	0	<1	1	4	11	83		
	-								

Use Waters shall not be less than 5.0 mg/L at any time. Compliance with the IPCB General Use DO standard was 87.3 percent. DO concentrations below the 5.0 mg/L standard occurred during January, February, April, May, June, July, August, September, November, and December (<u>Figure 2</u>). DO concentrations below 3.0 mg/L at Main Street accounted for 5.7 percent of all measurements. At this station, 7.1 percent of DO measurements were rejected.

Foster Avenue. From January 4 through December 31, the DO ranged from 2.3 to 11.3 mg/L. The mean was 7.3 mg/L. The IPCB requires that the DO concentration in the portion of the North Shore Channel classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 99.9 percent. DO concentrations below the 4.0 mg/L standard occurred during June and September (Figure 3). Only 2 out of 10,733 measurements (<1.0 percent) at Foster Avenue were below 3.0 mg/L. At this station, 2.9 percent of DO measurements were rejected.

North Branch Chicago River. *Addison Street.* From January 1 through December 31, the maximum DO was 11.4 mg/L, the minimum was 2.0 mg/L, and the mean was 6.9 mg/L. The IPCB requires that the DO concentration in the portion of the North Branch Chicago River classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 98 percent. DO concentrations below the 4.0 mg/L standard occurred during June, July, August, and September (<u>Figure 4</u>). Only 26 out of 11,002 measurements (<1.0 percent) at Addison Street were below 3.0 mg/L. At this station, 3.6 percent of DO measurements were rejected.

Fullerton Avenue. From January 1 through December 31, the DO ranged from 1.8 to 11.6 mg/L. The mean was 6.3 mg/L. The IPCB requires that the DO concentration in the portion of the North Branch Chicago River classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 93.4 percent. DO concentrations below the 4.0 mg/L standard occurred during March, April, May, June, July, August, and September (Figure 5). DO concentrations below 3.0 mg/L at Fullerton Avenue accounted for 1.0 percent of all measurements. At this station, 10.2 percent of DO measurements were rejected.

Kinzie Street. From January 1 through December 31, the maximum DO was 11.6 mg/L, the minimum was 1.8 mg/L, and the mean was 6.5 mg/L. The IPCB requires that the DO concentration in the portion of the North Branch Chicago River classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 96.4 percent. DO concentrations below the 4.0 mg/L standard occurred during March, April, June, July, August, September, and October (Figure 6). Only 56 out of 10,894 measurements (<1.0 percent) at Kinzie Street were below 3.0 mg/L. At this station, <0.1 percent of DO measurements were rejected.

Chicago River. Clark Street. From January 1 through December 31, the DO ranged from 5.4 to 13.1 mg/L. The mean was 8.7 mg/L. The IPCB requires that the DO concentration in the portion of the Chicago River classified as General Use Waters shall not be less than 5.0 mg/L at any time. Compliance with the IPCB General Use DO standard was 100 percent. There was no DO concentration below the 5.0 mg/L standard during the period (<u>Figure 7</u>). No DO measurement at Clark Street was below 3.0 mg/L. No DO measurements were rejected.

FIGURE 2: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT MAIN STREET ON THE NORTH SHORE CHANNEL FROM JANUARY 2005 THROUGH DECEMBER 2005

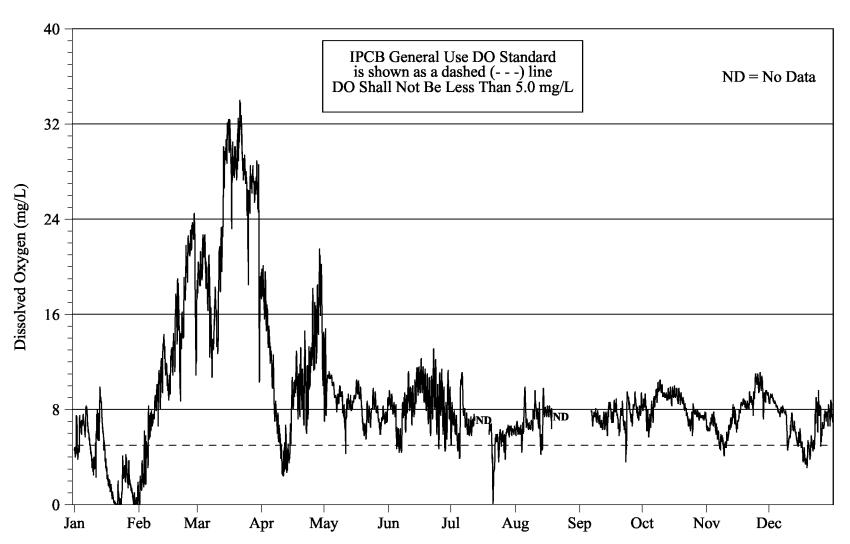


FIGURE 3: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT FOSTER AVENUE ON THE NORTH SHORE CHANNEL FROM JANUARY 2005 THROUGH DECEMBER 2005

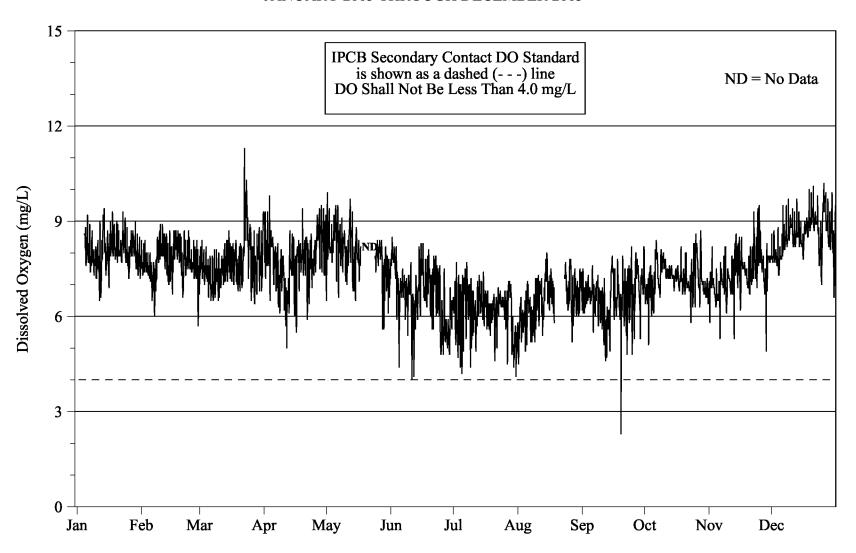


FIGURE 4: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT ADDISON STREET ON THE NORTH BRANCH CHICAGO RIVER FROM JANUARY 2005 THROUGH DECEMBER 2005

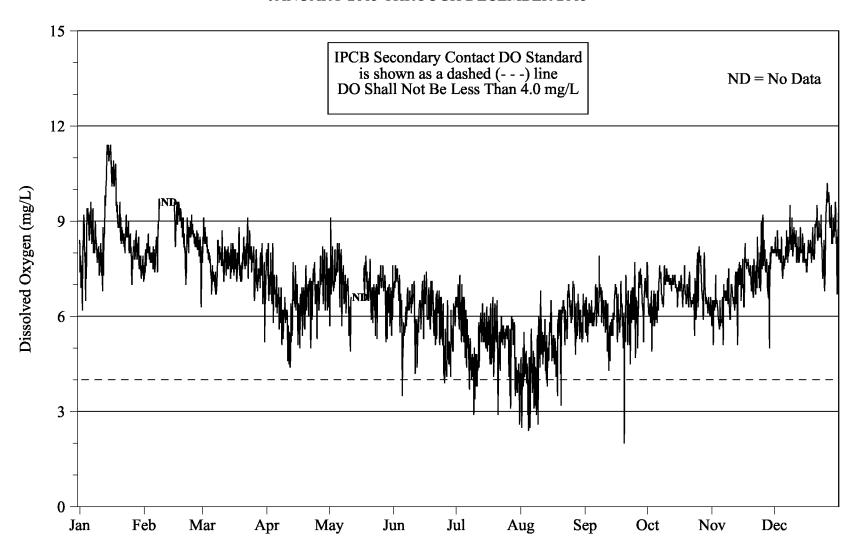


FIGURE 5: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT FULLERTON AVENUE ON THE NORTH BRANCH CHICAGO RIVER FROM JANUARY 2005 THROUGH DECEMBER 2005

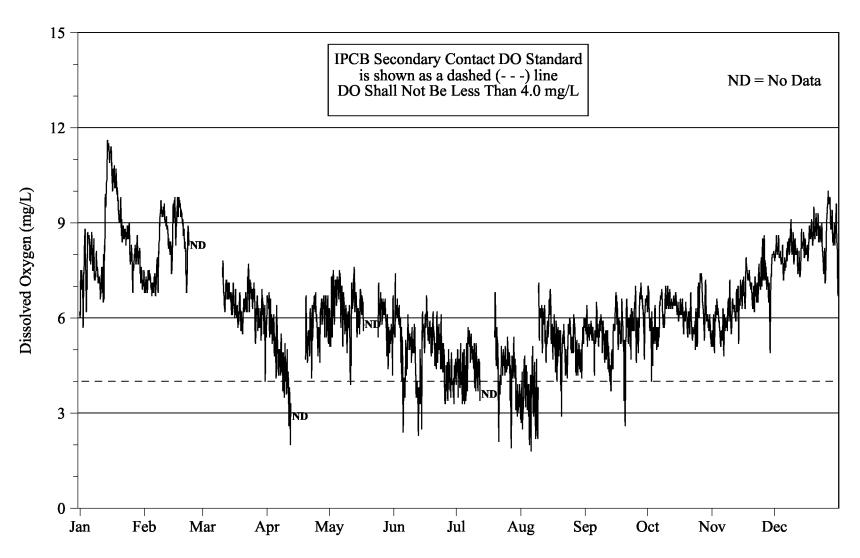


FIGURE 6: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT KINZIE STREET ON THE NORTH BRANCH CHICAGO RIVER FROM JANUARY 2005 THROUGH DECEMBER 2005

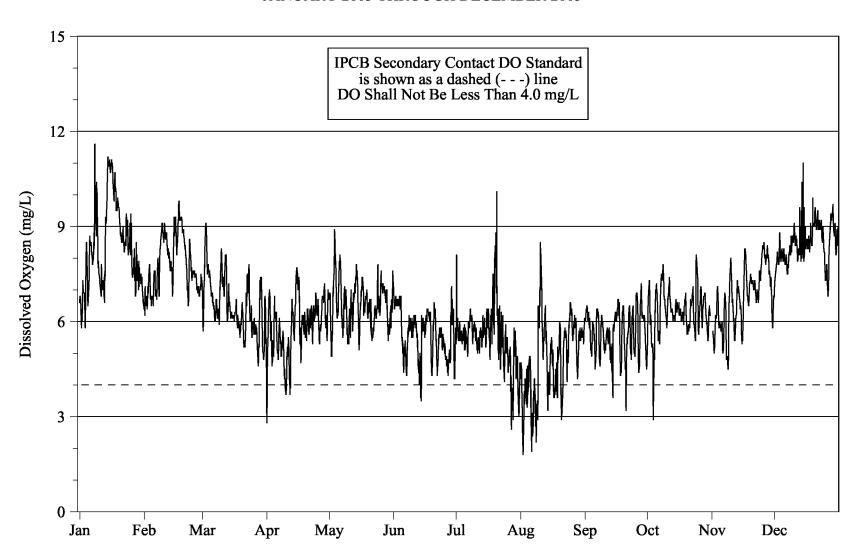
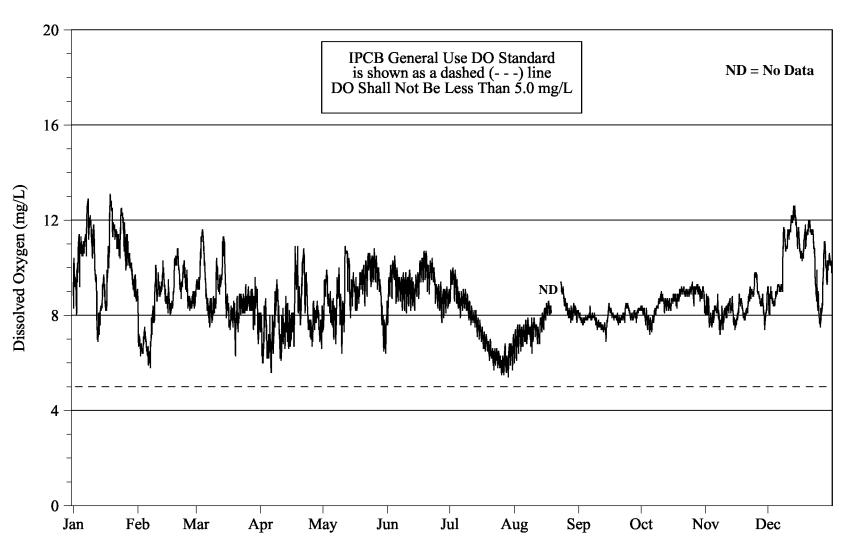


FIGURE 7: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT CLARK STREET ON THE CHICAGO RIVER FROM JANUARY 2005 THROUGH DECEMBER 2005



South Branch Chicago River. *Loomis Street.* From January 1 through December 31, the maximum DO was 10.7 mg/L, the minimum was 3.4 mg/L, and the mean was 7.2 mg/L. The IPCB requires that the DO concentration in the portion of the South Branch Chicago River classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 99.8 percent. DO concentrations below the 4.0 mg/L standard occurred during April (<u>Figure 8</u>). No DO measurement at Loomis Street was below 3.0 mg/L. At this station, <1 percent of DO measurements were rejected.

Bubbly Creek. 36th Street. From January 1 through December 31, the DO ranged from 0.0 to 22.0 mg/L. The mean was 6.2 mg/L. The IPCB requires that the DO concentration in the portion of Bubbly Creek classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 63 percent. DO concentrations below the 4.0 mg/L standard occurred during January, February, March, April, May, June, July, August, September, and November (Figure 9). DO concentrations below 3.0 mg/L at 36th Street accounted for 28.3 percent of all measurements. At this station, 11.6 percent of DO measurements were rejected.

Interstate Highway 55 (I-55). From January 1 through December 31, the maximum DO was 14.6 mg/L, the minimum was 0.0 mg/L, and the mean was 6.1 mg/L. The IPCB requires that the DO concentration in the portion of Bubbly Creek classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 88.9 percent. DO concentrations below the 4.0 mg/L standard occurred during January, February, March, April, May, June, July, August, and September (Figure 10). DO concentrations below 3.0 mg/L at I-55 accounted for 6.1 percent of all measurements. At this station, 9.3 percent of DO measurements were rejected.

Chicago Sanitary and Ship Canal. Cicero Avenue. From January 1 through December 31, the DO ranged from 0.1 to 9.3 mg/L. The mean was 5.7 mg/L. The IPCB requires that the DO concentration in the portion of the Chicago Sanitary and Ship Canal classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 90.3 percent. DO concentrations below the 4.0 mg/L standard occurred during April, May, June, July, and August (Figure 11). DO concentrations below 3.0 mg/L at Cicero Avenue accounted for 2.1 percent of all measurements. At this station, 29.4 percent of DO measurements were rejected.

B&O Central Railroad. From January 1 through December 31, the maximum DO was 10.5 mg/L, the minimum was 3.3 mg/L, and the mean was 6.7 mg/L. The IPCB requires that the DO concentration in the portion of the Chicago Sanitary and Ship Canal classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 99.4 percent. DO concentrations below the 4.0 mg/L standard occurred during May, June, July, and August (Figure 12). No DO measurement at B&O Central Railroad was below 3.0 mg/L. At this station, 7.7 percent of DO measurements were rejected.

FIGURE 8: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT LOOMIS STREET ON THE SOUTH BRANCH CHICAGO RIVER FROM JANUARY 2005 THROUGH DECEMBER 2005

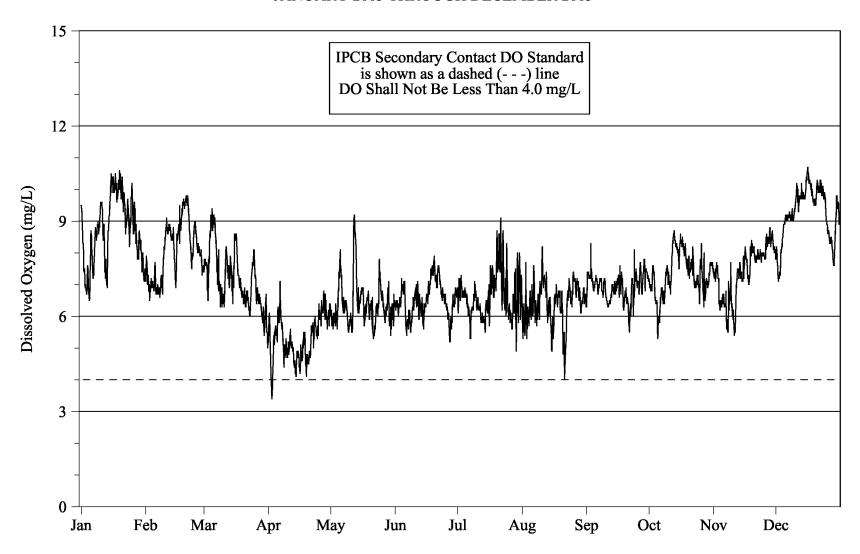


FIGURE 9: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT 36TH STREET ON BUBBLY CREEK FROM JANUARY 2005 THROUGH DECEMBER 2005

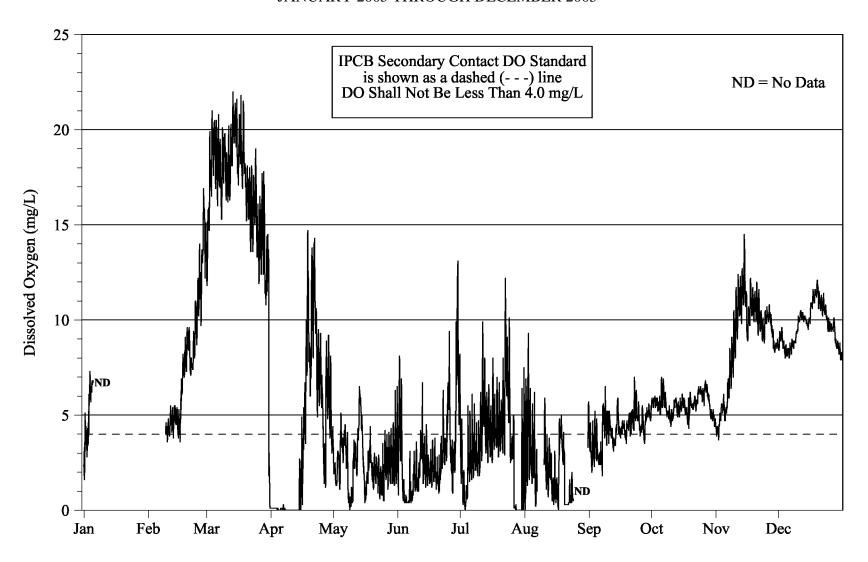


FIGURE 10: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT INTERSTATE HIGHWAY 55 ON BUBBLY CREEK FROM JANUARY 2005 THROUGH DECEMBER 2005

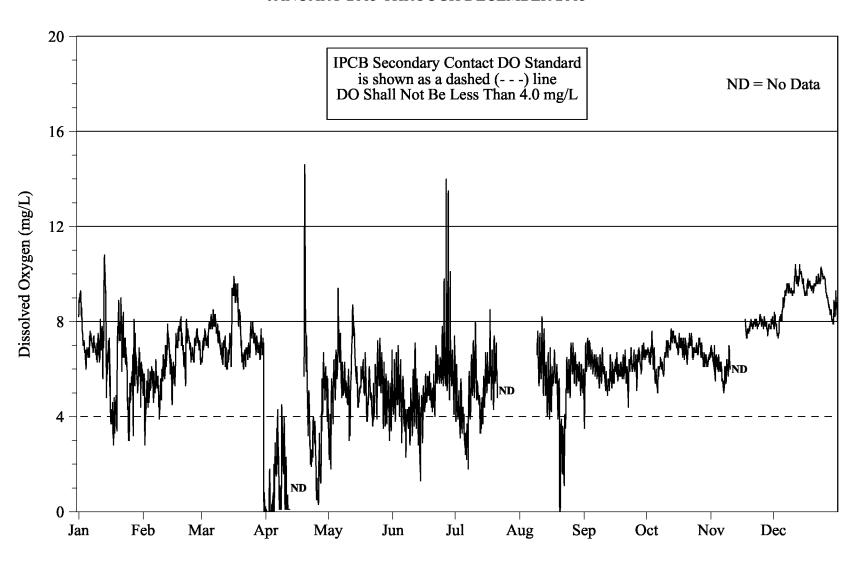


FIGURE 11: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT CICERO AVENUE ON THE CHICAGO SANITARY AND SHIP CANAL FROM JANUARY 2005 THROUGH DECEMBER 2005

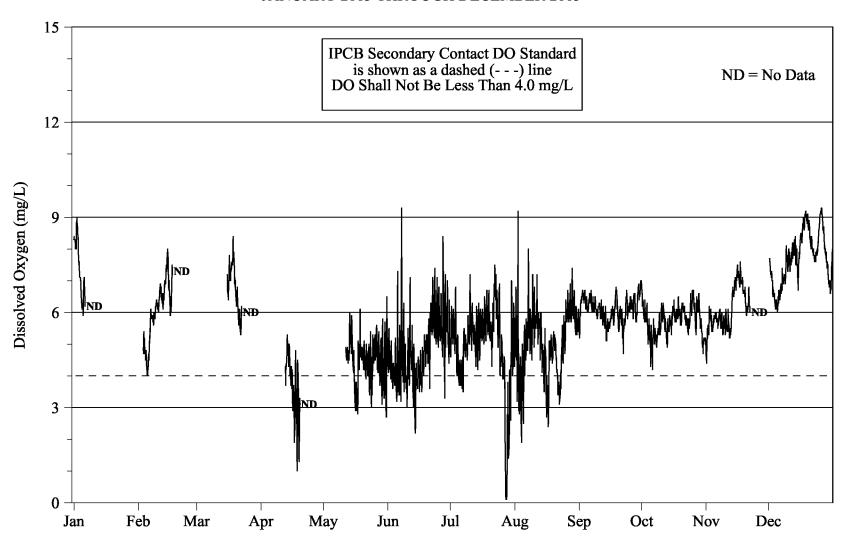
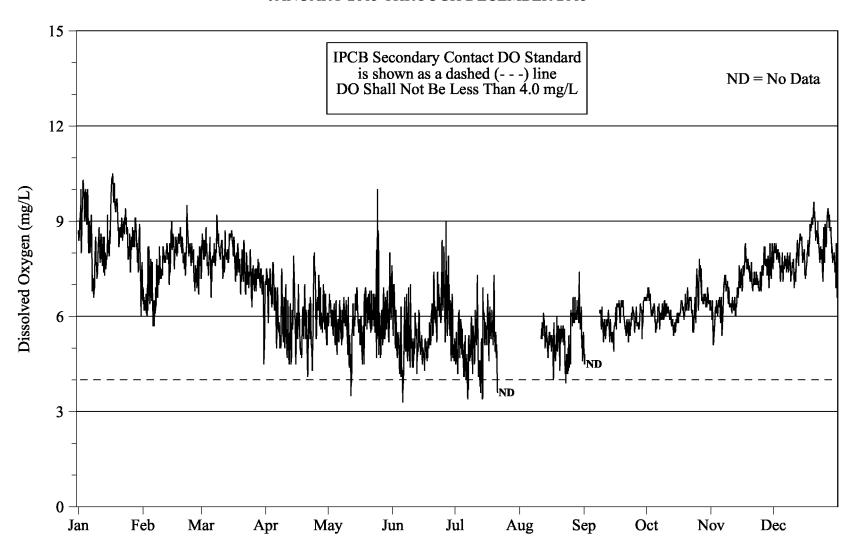


FIGURE 12: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT B&O CENTRAL RAILROAD ON THE CHICAGO SANITARY AND SHIP CANAL FROM JANUARY 2005 THROUGH DECEMBER 2005



Route 83. From January 1 through December 31, the DO ranged from 0.0 to 9.6 mg/L. The mean was 5.5 mg/L. The IPCB requires that the DO concentration in the portion of the Chicago Sanitary and Ship Canal classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 83 percent. DO concentrations below the 4.0 mg/L standard occurred during January, April, May, June, July, August, September, November, and December (Figure 13). DO concentrations below 3.0 mg/L at Route 83 accounted for 2.4 percent of all measurements. At this station, 18.2 percent of DO measurements were rejected.

Lockport Powerhouse. From January 1 through December 31, the maximum DO was 10.2 mg/L, the minimum was 1.4 mg/L, and the mean was 5.5 mg/L. The IPCB requires that the DO concentration in the portion of the Chicago Sanitary and Ship Canal classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 82 percent. DO concentrations below the 4.0 mg/L standard occurred during April, May, June, July, August, September, and November (Figure 14). DO concentrations below 3.0 mg/L at Lockport Powerhouse accounted for 3.2 percent of all measurements. At this station, 14.1 percent of DO measurements were rejected.

Des Plaines River System

Des Plaines River. *Jefferson Street.* From January 1 through December 31, the DO ranged from 1.3 to 12.5 mg/L. The mean was 6.8 mg/L. The IPCB requires that the DO concentration in the portion of the Des Plaines River classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 91.3 percent. DO concentrations below the 4.0 mg/L standard occurred during May, June, July, and August (<u>Figure 15</u>). DO concentrations below 3.0 mg/L at Jefferson Street accounted for 1.9 percent of all measurements. At this station, 7.7 percent of DO measurements were rejected.

Calumet River System

Grand Calumet River. *Torrence Avenue*. From January 1 through December 31, the maximum DO was 21.6 mg/L, the minimum was 0.0 mg/L, and the mean was 8.1 mg/L. The IPCB requires that the DO concentration in the portion of the Grand Calumet River classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 81.8 percent. DO concentrations below the 4.0 mg/L standard occurred during January, May, June, July, August, September, and October (<u>Figure 16</u>). DO concentrations below 3.0 mg/L at Torrence Avenue accounted for 11.2 percent of all measurements. At this station, 11.4 percent of DO measurements were rejected.

Little Calumet River. *C&W Indiana Railroad.* From January 1 through December 31, the DO ranged from 2.5 to 16.4 mg/L. The mean was 9.7 mg/L. The IPCB requires that the DO concentration in the portion of the Little Calumet River classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 98.9 percent. DO concentrations below the 4.0 mg/L standard occurred during June and July (Figure 17). Only 3 out of 10,536 measurements (<1.0 percent) at C&W Indiana Railroad were below 3.0 mg/L. At this station, 9.9 percent of DO measurements were rejected.

FIGURE 13: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT ROUTE 83 ON THE CHICAGO SANITARY AND SHIP CANAL FROM JANUARY 2005 THROUGH DECEMBER 2005

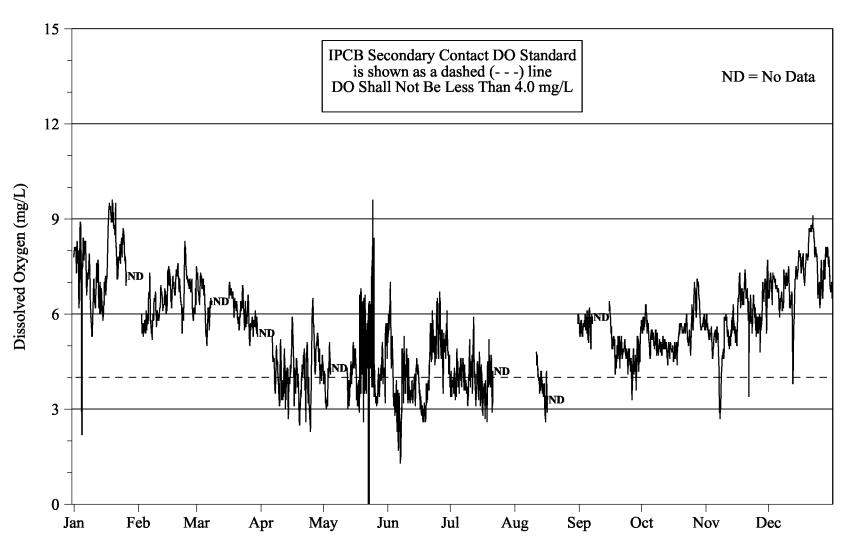


FIGURE 14: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT LOCKPORT POWERHOUSE ON THE CHICAGO SANITARY AND SHIP CANAL FROM JANUARY 2005 THROUGH DECEMBER 2005

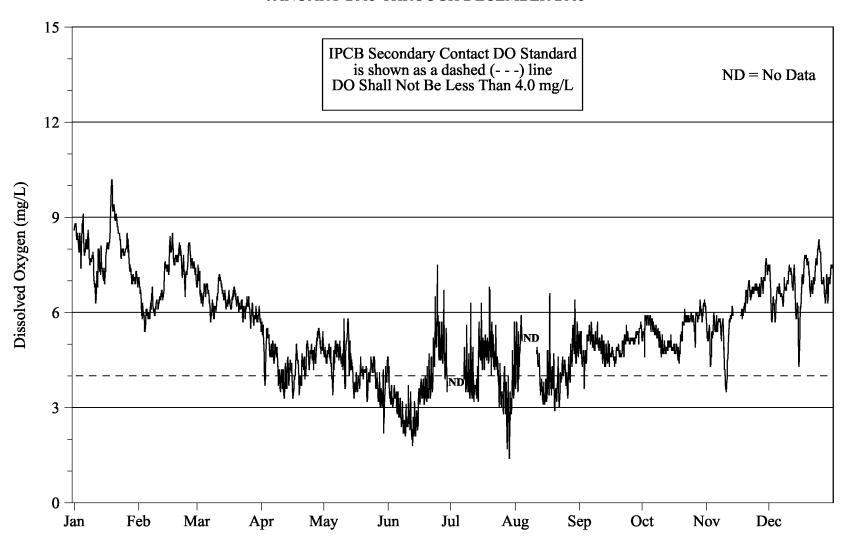


FIGURE 15: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT JEFFERSON STREET ON THE DES PLAINES RIVER FROM JANUARY 2005 THROUGH DECEMBER 2005

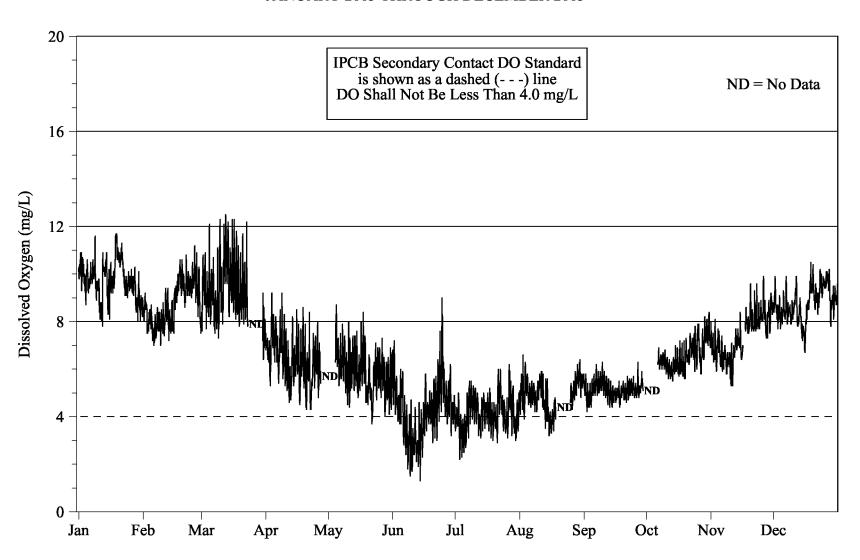


FIGURE 16: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT TORRENCE AVENUE ON THE GRAND CALUMET RIVER FROM JANUARY 2005 THROUGH DECEMBER 2005

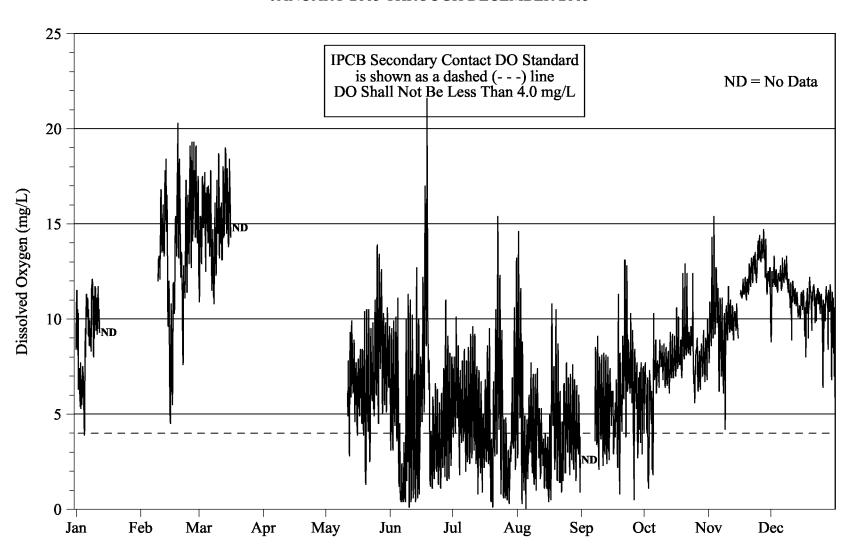
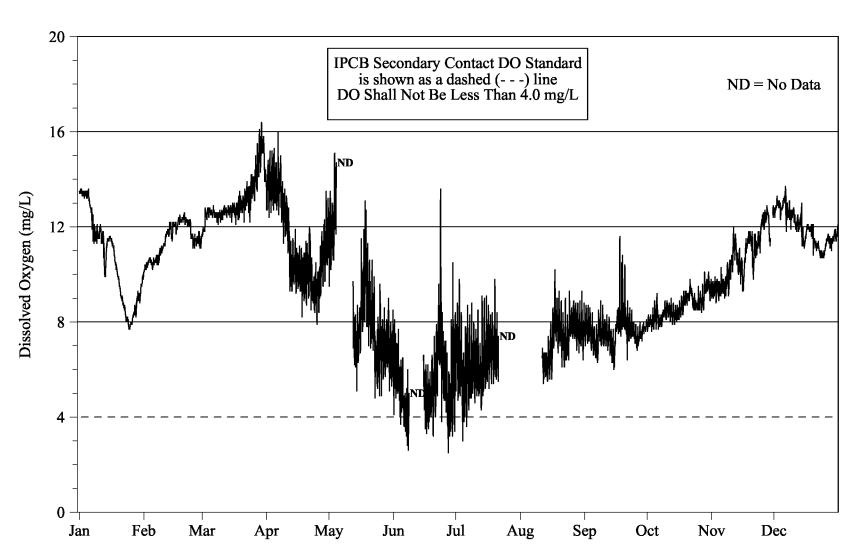


FIGURE 17: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT C&W INDIANA RAILROAD ON THE LITTLE CALUMET RIVER FROM JANUARY 2005 THROUGH DECEMBER 2005



Halsted Street. From January 1 through December 31, the maximum DO was 12.2 mg/L, the minimum was 2.8 mg/L, and the mean was 7.1 mg/L. The IPCB requires that the DO concentration in the portion of the Little Calumet River classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 99.4 percent. DO concentrations below the 4.0 mg/L standard occurred during June and July (Figure 18). Only 1 out of 10,878 measurements (<1.0 percent) at Halsted Street were below 3.0 mg/L. At this station, 5.8 percent of DO measurements were rejected.

Calumet-Sag Channel. *Cicero Avenue.* From January 1 through December 31, the DO ranged from 1.5 to 11.1 mg/L. The mean was 7.1 mg/L. The IPCB requires that the DO concentration in the portion of the Calumet-Sag Channel classified as Secondary Contact Waters shall not be less than 3.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 99.7 percent. DO concentrations below the 3.0 mg/L standard occurred during June and November (<u>Figure 19</u>). At this station, <0.1 percent of DO measurements were rejected.

104th Avenue. From January 1 through December 31, the maximum DO was 11.8 mg/L, the minimum was 2.2 mg/L, and the mean was 7.0 mg/L. The IPCB requires that the DO concentration in the portion of the Calumet-Sag Channel classified as Secondary Contact Waters shall not be less than 3.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 99.6 percent. DO concentrations below the 3.0 mg/L standard occurred during June and August (Figure 20). At this station, 23.1 percent of DO measurements were rejected.

Route 83. From January 1 through December 31, the DO ranged from 1.8 to 10.8 mg/L. The mean was 6.9 mg/L. The IPCB requires that the DO concentration in the portion of the Calumet-Sag Channel classified as Secondary Contact Waters shall not be less than 3.0 mg/L at any time. Compliance with the IPCB Secondary Contact DO standard was 98.5 percent. DO concentrations below the 3.0 mg/L standard occurred during June and August (Figure 21). At this station, 4.1 percent of DO measurements were rejected.

FIGURE 18: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT HALSTED STREET ON THE LITTLE CALUMET RIVER FROM JANUARY 2005 THROUGH DECEMBER 2005

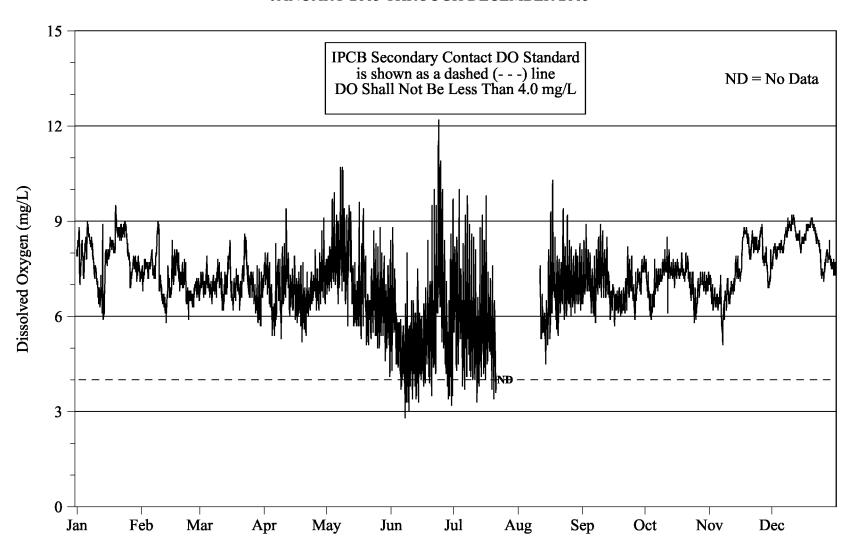


FIGURE 19: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT CICERO AVENUE ON THE CALUMET-SAG CHANNEL FROM JANUARY 2005 THROUGH DECEMBER 2005

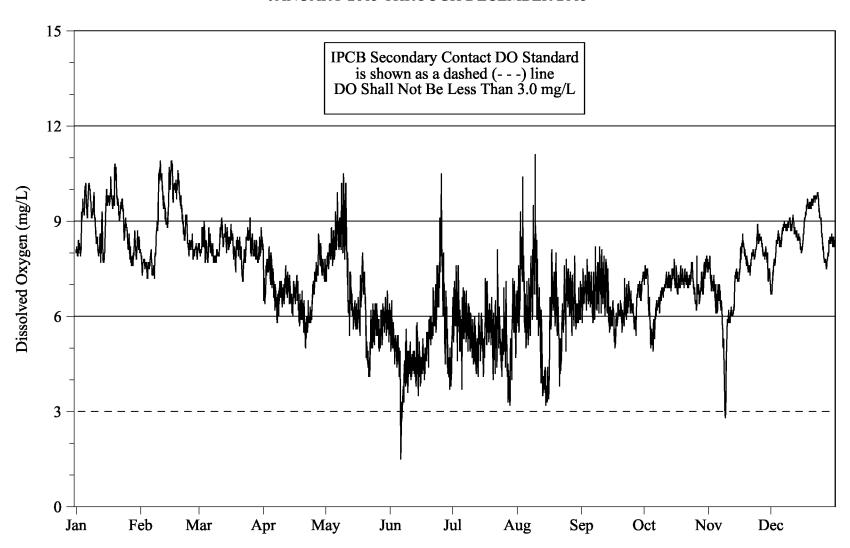


FIGURE 20: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT 104TH AVENUE ON THE CALUMET-SAG CHANNEL FROM JANUARY 2005 THROUGH DECEMBER 2005

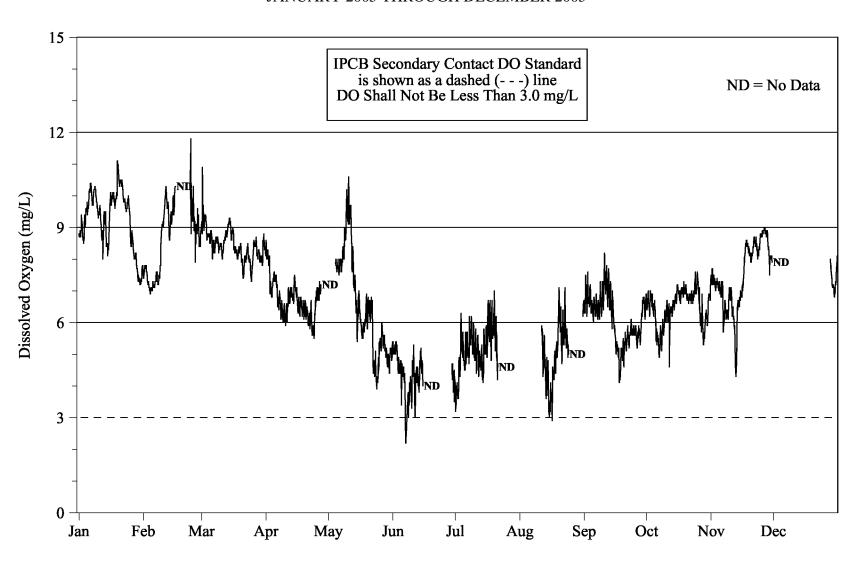
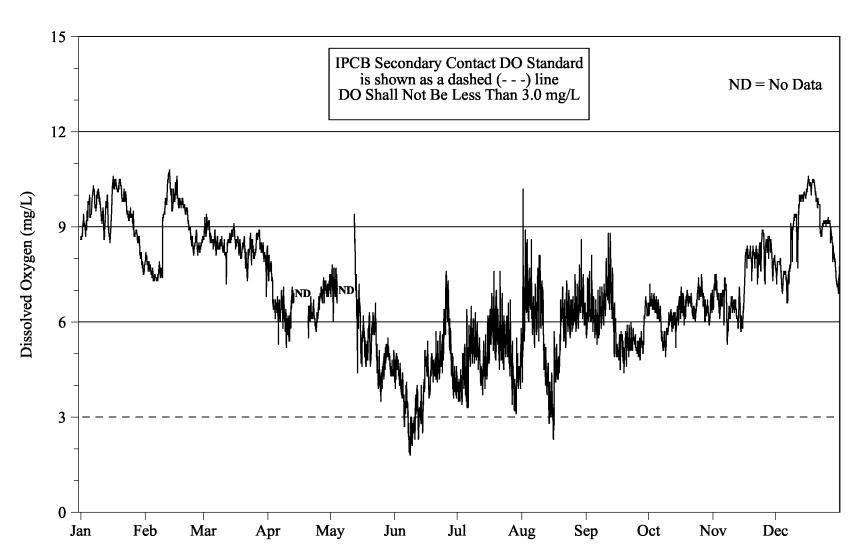


FIGURE 21: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT ROUTE 83 ON THE CALUMET-SAG CHANNEL FROM JANUARY 2005 THROUGH DECEMBER 2005



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APPENDIX A

WEEKLY DO SUMMARY STATISTICS AT ALL DEEP-DRAFT MONITORING STATIONS DURING 2005

TABLE A-1: WEEKLY DO SUMMARY STATISTICS AT MAIN STREET ON THE NORTH SHORE CHANNEL DURING 2005

	Number of	DO Co	oncentration	(mg/L)	Percent DO Values Above
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	3.8	7.5	5.0	25
01/03/05 - 01/09/05	168	2.8	8.3	6.0	73
01/10/05 - 01/16/05	168	2.1	9.9	5.4	57
01/17/05 - 01/23/05	168	0.0	2.5	0.7	0
01/24/05 - 01/30/05	168	0.0	4.2	1.8	0
01/31/05 - 02/06/05	168	0.0	8.3	3.2	25
02/07/05 - 02/13/05	168	6.6	14.3	9.9	100
02/14/05 - 02/20/05	168	8.8	19.0	13.0	100
02/21/05 - 02/27/05	168	8.7	24.5	19.5	100
02/28/05 - 03/06/05	168	10.9	22.7	19.1	100
03/07/05 - 03/13/05	168	10.7	30.1	17.6	100
03/14/05 - 03/20/05	167	23.2	32.5	29.4	100
03/21/05 - 03/27/05	168	18.5	34.0	28.2	100
03/28/05 - 04/03/05	168	10.3	28.9	20.9	100
04/04/05 - 04/10/05	168	2.6	15.0	9.1	89
04/11/05 - 04/17/05	167	2.4	12.9	6.4	53
04/18/05 - 04/24/05	168	6.0	14.6	9.9	100
04/25/05 - 05/01/05	168	7.0	21.5	14.6	100
05/02/05 - 05/08/05	168	7.5	11.2	9.7	100
05/09/05 - 05/15/05	168	4.3	9.5	8.3	98
05/16/05 - 05/22/05	168	5.5	10.5	8.1	100
05/23/05 - 05/29/05	168	5.9	9.8	7.7	100
05/30/05 - 06/05/05	168	4.7	9.6	7.7	98
06/06/05 - 06/12/05	168	4.4	11.2	7.7	88
06/13/05 - 06/19/05	168	7.4	12.3	9.9	100
06/20/05 - 06/26/05	168	4.7	13.1	8.8	98
06/27/05 - 07/03/05	168	4.5	11.3	7.3	95
07/04/05 - 07/10/05	168	3.9	11.1	7.1	89
07/11/05 - 07/17/05	38	5.8	7.6	6.9	100
07/18/05 - 07/24/05	131	0.1	6.8	4.9	60
07/25/05 - 07/31/05	168	3.8	6.7	5.9	91

TABLE A-1 (Continued): WEEKLY DO SUMMARY STATISTICS AT MAIN STREET ON THE NORTH SHORE CHANNEL DURING 2005

	Number of	Number of DO Concentration (mg/L)					
Monitoring Dates	DO Values	Min	Max	Mean	Values Above IPCB Standard		
08/01/05 - 08/07/05	168	4.4	9.9	6.7	96		
08/08/05 - 08/14/05	168	4.2	9.8	7.1	88		
08/15/05 - 08/21/05	89	6.4	8.3	7.8	100		
08/22/05 - 08/28/05 08/29/05 - 09/04/05			NO DATA NO DATA				
09/05/05 - 09/11/05	130	6.4	8.1	7.2	100		
09/12/05 - 09/18/05	168	5.8	8.9	7.5	100		
09/19/05 - 09/25/05	168	3.6	9.5	7.4	98		
09/26/05 - 10/02/05	168	6.6	9.5	8.2	100		
10/03/05 - 10/09/05	168	5.7	10.5	8.3	100		
10/10/05 - 10/16/05	168	8.3	10.1	9.3	100		
10/17/05 - 10/23/05	168	6.6	9.8	8.4	100		
10/24/05 - 10/30/05	169	5.8	8.5	7.4	100		
10/31/05 - 11/06/05	168	5.5	7.8	6.7	100		
11/07/05 - 11/13/05	168	4.1	8.4	5.8	81		
11/14/05 - 11/20/05	168	6.1	8.9	7.9	100		
11/21/05 - 11/27/05	168	7.5	11.1	9.6	100		
11/28/05 - 12/04/05	168	7.2	10.2	8.9	100		
12/05/05 - 12/11/05	168	4.6	8.3	7.2	94		
12/12/05 - 12/18/05	168	3.4	7.7	5.4	67		
12/19/05 - 12/25/05	168	3.1	9.6	6.0	60		
12/26/05 - 12/31/05	144	4.9	8.8	7.3	99		

TABLE A-2: WEEKLY DO SUMMARY STATISTICS AT FOSTER AVENUE ON THE NORTH SHORE CHANNEL DURING 2005

	Number of	DO Co	oncentration	(mg/L)	Percent DO Values Above
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
01/01/05 - 01/02/05			NO DATA		
01/03/05 - 01/09/05	131	7.3	9.2	8.1	100
01/10/05 - 01/16/05	168	6.5	9.4	7.9	100
01/17/05 - 01/23/05	168	7.7	9.3	8.2	100
01/24/05 - 01/30/05	168	7.2	9.1	8.0	100
01/31/05 - 02/06/05	168	6.5	8.5	7.5	100
02/07/05 - 02/13/05	168	6.0	8.9	7.8	100
02/14/05 - 02/20/05	168	6.7	8.7	7.9	100
02/21/05 - 02/27/05	168	6.6	8.7	7.7	100
02/28/05 - 03/06/05	168	5.7	8.4	7.3	100
03/07/05 - 03/13/05	168	6.5	8.3	7.3	100
03/14/05 - 03/20/05	168	6.8	8.7	7.6	100
03/21/05 - 03/27/05	168	6.4	11.3	8.1	100
03/28/05 - 04/03/05	168	6.5	9.8	8.1	100
04/04/05 - 04/10/05	167	6.1	8.7	7.6	100
04/11/05 - 04/17/05	168	5.0	8.7	7.3	100
04/18/05 - 04/24/05	168	5.9	9.4	7.8	100
04/25/05 - 05/01/05	168	6.5	9.9	8.3	100
05/02/05 - 05/08/05	168	6.6	9.5	8.4	100
05/09/05 - 05/15/05	168	6.5	9.7	8.1	100
05/16/05 - 05/22/05	37	7.1	8.4	7.8	100
05/23/05 - 05/29/05	132	5.6	8.4	7.6	100
05/30/05 - 06/05/05	168	4.4	8.5	7.3	100
06/06/05 - 06/12/05	168	4.0	7.7	6.6	99
06/13/05 - 06/19/05	168	5.9	8.3	7.1	100
06/20/05 - 06/26/05	168	4.8	7.9	6.5	100
06/27/05 - 07/03/05	168	4.7	7.7	5.9	100
07/04/05 - 07/10/05	168	4.2	7.7	6.3	100
07/11/05 - 07/17/05	168	4.9	7.4	6.4	100
07/18/05 - 07/24/05	168	4.6	6.9	6.2	100
07/25/05 - 07/31/05	168	4.1	7.1	5.9	100

TABLE A-2 (Continued): WEEKLY DO SUMMARY STATISTICS AT FOSTER AVENUE ON THE NORTH SHORE CHANNEL DURING 2005

	Number of	Percent DO Values Above			
Monitoring Dates	DO Values	Min	oncentration Max	Mean	IPCB Standard
08/01/05 - 08/07/05	168	4.5	7.1	6.0	100
08/08/05 - 08/14/05	168	5.2	7.8	6.5	100
08/15/05 - 08/21/05	90	5.8	8.0	6.9	100
08/22/05 - 08/28/05	129	5.2	7.8	6.8	100
08/29/05 - 09/04/05	168	6.0	7.5	6.7	100
09/05/05 - 09/11/05	167	5.1	7.6	6.5	100
09/12/05 - 09/18/05	167	4.6	7.9	6.4	100
09/19/05 - 09/25/05	168	2.3	8.2	6.5	99
09/26/05 - 10/02/05	168	5.3	8.2	7.0	100
10/03/05 - 10/09/05	168	5.1	8.4	7.2	100
10/10/05 - 10/16/05	168	6.8	8.0	7.4	100
10/17/05 - 10/23/05	168	5.8	8.2	7.1	100
10/24/05 - 10/30/05	168	6.3	8.7	7.3	100
10/31/05 - 11/06/05	169	5.3	8.2	6.8	100
11/07/05 - 11/13/05	168	5.3	8.4	7.2	100
11/14/05 - 11/20/05	168	6.2	8.6	7.5	100
11/21/05 - 11/27/05	168	6.7	9.5	7.8	100
11/28/05 - 12/04/05	168	4.9	8.8	7.7	100
12/05/05 - 12/11/05	168	7.8	9.7	8.4	100
12/12/05 - 12/18/05	168	7.8	9.7	8.6	100
12/19/05 - 12/25/05	168	7.0	10.1	8.8	100
12/26/05 - 12/31/05	144	6.6	10.2	8.8	100

TABLE A-3: WEEKLY DO SUMMARY STATISTICS AT ADDISON STREET ON THE NORTH BRANCH OF THE CHICAGO RIVER DURING 2005

	Number of	DO C	an contration	(ma/L)	Percent DO Values Above
Monitoring Dates	DO Values	Min	oncentration Max	Mean	IPCB Standard
	DO varaco	14111	TVIU/	Wicum	n eb standard
01/01/05 - 01/02/05	48	6.2	9.1	7.6	100
01/03/05 - 01/09/05	168	6.5	9.6	8.5	100
01/10/05 - 01/16/05	168	6.8	11.4	9.4	100
01/17/05 - 01/23/05	167	8.0	10.9	9.1	100
01/24/05 - 01/30/05	168	7.0	9.0	8.0	100
01/24/03 - 01/30/03	168	7.0	9.0 8.6	7.8	100
02/07/05 - 02/13/05	37	7.1 7.4	9.7	7.8 8.7	100
02/07/03 - 02/13/03	131	7.4	9.7 9.6	8.9	100
02/21/05 - 02/27/05	169	7.4	9.0	8.4	100
02/28/05 - 03/06/05	168	6.3	9.2 9.1	7.8	100
03/07/05 - 03/13/05	168	6.7	8.7	7.8 7.7	100
03/07/05 - 03/13/05	168	7.1	8.8	7.7 7.7	100
03/21/05 - 03/27/05	168	6.5	9.1	7.7 7.7	100
03/28/05 - 04/03/05	168	5.2	9.1 8.3	7.7	100
04/04/05 - 04/10/05	167	5.1	7.3	6.3	100
04/11/05 - 04/17/05	167	4.4	7.7	6.1	100
04/18/05 - 04/24/05	168	5.0	7.7	6.6	100
04/25/05 - 05/01/05	168	5.3	9.1	7.1	100
05/02/05 - 05/08/05	168	5.7	8.3	7.4	100
05/09/05 - 05/15/05	60	4.9	7.2	6.3	100
05/16/05 - 05/22/05	131	5.8	7.9	6.9	100
05/23/05 - 05/29/05	168	5.2	7.6	6.8	100
05/30/05 - 06/05/05	168	3.5	7.6	6.5	98
06/06/05 - 06/12/05	168	4.2	7.1	6.1	100
06/13/05 - 06/19/05	168	5.3	7.4	6.4	100
06/20/05 - 06/26/05	168	3.9	6.8	5.6	98
06/27/05 - 07/03/05	168	4.1	7.3	5.8	100
07/04/05 - 07/10/05	168	2.9	6.6	4.9	90
07/11/05 - 07/17/05	168	3.8	6.4	5.4	97
07/18/05 - 07/24/05	168	2.9	6.6	5.3	96
07/25/05 - 07/31/05	168	2.6	6.0	4.8	77

TABLE A-3 (Continued): WEEKLY DO SUMMARY STATISTICS AT ADDISON STREET ON THE NORTH BRANCH OF THE CHICAGO RIVER DURING 2005

	Number of	DO Co	Percent DO Values Above		
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05	168	2.4	5.6	4.1	62
08/08/05 - 08/14/05	168	2.6	6.8	4.8	84
08/15/05 - 08/21/05	168	3.2	6.5	5.4	98
08/22/05 - 08/28/05	168	4.8	7.1	6.1	100
08/29/05 - 09/04/05	168	5.2	6.7	5.9	100
09/05/05 - 09/11/05	168	4.9	7.9	6.3	100
09/12/05 - 09/18/05	168	4.3	7.1	5.9	100
09/19/05 - 09/25/05	168	2.0	7.7	6.0	98
09/26/05 - 10/02/05	168	5.0	7.7	6.6	100
10/03/05 - 10/09/05	168	4.9	7.6	6.6	100
10/10/05 - 10/16/05	168	6.3	7.5	7.0	100
10/17/05 - 10/23/05	168	5.4	7.6	6.7	100
10/24/05 - 10/30/05	168	5.9	8.2	6.9	100
10/31/05 - 11/06/05	169	5.1	7.3	6.1	100
11/07/05 - 11/13/05	168	5.1	7.5	6.6	100
11/14/05 - 11/20/05	168	6.3	8.3	7.3	100
11/21/05 - 11/27/05	168	6.6	9.2	7.6	100
11/28/05 - 12/04/05	168	5.0	8.7	7.8	100
12/05/05 - 12/11/05	168	7.2	9.5	8.2	100
12/12/05 - 12/18/05	168	7.4	8.8	8.0	100
12/19/05 - 12/25/05	167	6.8	9.5	8.3	100
12/26/05 - 12/31/05	144	6.7	10.2	8.9	100

TABLE A-4: WEEKLY DO SUMMARY STATISTICS AT FULLERTON AVENUE ON THE NORTH BRANCH OF THE CHICAGO RIVER DURING 2005

	Number of	DO Co	oncentration	(mo/L.)	Percent DO Values Above
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	5.7	7.5	6.8	100
01/03/05 - 01/09/05	168	6.2	8.8	7.8	100
01/10/05 - 01/16/05	168	6.5	11.6	9.2	100
01/17/05 - 01/23/05	168	8.3	10.8	9.3	100
01/24/05 - 01/30/05	168	6.8	9.0	8.0	100
01/31/05 - 02/06/05	168	6.7	7.6	7.1	100
02/07/05 - 02/13/05	168	6.8	9.7	8.7	100
02/14/05 - 02/20/05	168	7.4	9.8	9.0	100
02/21/05 - 02/27/05	36	6.8	8.9	7.9	100
02/28/05 - 03/06/05			NO DATA		
03/07/05 - 03/13/05	82	6.2	7.8	6.9	100
03/14/05 - 03/20/05	168	5.5	7.1	6.3	100
03/21/05 - 03/27/05	168	5.2	7.7	6.5	100
03/28/05 - 04/03/05	168	4.0	6.9	6.0	99
04/04/05 - 04/10/05	167	3.5	6.4	4.7	89
04/11/05 - 04/17/05	36	2.0	4.3	3.4	19
04/18/05 - 04/24/05	132	4.1	6.8	5.7	100
04/25/05 - 05/01/05	169	4.6	6.7	5.9	100
05/02/05 - 05/08/05	168	5.1	7.5	6.6	100
05/09/05 - 05/15/05	168	3.9	7.6	6.1	99
05/16/05 - 05/22/05	36	5.6	6.9	6.4	100
05/23/05 - 05/29/05	133	4.4	7.1	6.0	100
05/30/05 - 06/05/05	168	2.4	7.4	5.5	91
06/06/05 - 06/12/05	168	2.3	6.1	4.7	77
06/13/05 - 06/19/05	168	2.5	6.7	5.2	85
06/20/05 - 06/26/05	168	3.3	6.2	4.8	85
06/27/05 - 07/03/05	168	3.3	5.2	4.2	67
07/04/05 - 07/10/05	168	3.3	5.7	4.7	80
07/11/05 - 07/17/05	36	3.4	4.7	4.3	75
07/18/05 - 07/24/05	133	2.1	6.8	4.6	82
07/25/05 - 07/31/05	168	1.9	5.4	4.1	59

TABLE A-4 (Continued): WEEKLY DO SUMMARY STATISTICS AT FULLERTON AVENUE ON THE NORTH BRANCH OF THE CHICAGO RIVER DURING 2005

	Number of	DO Co	Percent DO Values Above		
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05	168	1.8	5.1	3.6	30
08/08/05 - 08/14/05	165	2.2	7.1	5.2	81
08/15/05 - 08/21/05	168	2.9	6.9	5.3	96
08/22/05 - 08/28/05	168	4.1	6.1	5.1	100
08/29/05 - 09/04/05	168	4.1	6.4	5.4	100
09/05/05 - 09/11/05	168	4.2	6.5	5.5	100
09/12/05 - 09/18/05	168	3.7	6.8	5.4	96
09/19/05 - 09/25/05	168	2.6	7.0	5.6	95
09/26/05 - 10/02/05	168	4.0	7.1	6.2	100
10/03/05 - 10/09/05	168	4.5	7.0	5.9	100
10/10/05 - 10/16/05	168	5.9	7.0	6.4	100
10/17/05 - 10/23/05	168	5.3	6.8	5.9	100
10/24/05 - 10/30/05	168	5.0	7.4	6.3	100
10/31/05 - 11/06/05	169	4.8	6.6	5.7	100
11/07/05 - 11/13/05	168	5.2	7.2	6.2	100
11/14/05 - 11/20/05	168	5.9	7.9	6.9	100
11/21/05 - 11/27/05	168	6.2	8.6	7.2	100
11/28/05 - 12/04/05	168	4.9	8.6	7.7	100
12/05/05 - 12/11/05	168	7.2	9.1	8.1	100
12/12/05 - 12/18/05	168	7.3	9.1	8.2	100
12/19/05 - 12/25/05	168	7.1	9.5	8.5	100
12/26/05 - 12/31/05	144	6.7	10.0	8.9	100

TABLE A-5: WEEKLY DO SUMMARY STATISTICS AT KINZIE STREET ON THE NORTH BRANCH OF THE CHICAGO RIVER DURING 2005

	Number of	DO Co	oncentration	(mg/L)	Percent DO Values Above
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	5.8	7.3	6.6	100
01/03/05 - 01/09/05	168	5.8	11.6	8.2	100
01/10/05 - 01/16/05	168	6.6	11.2	9.0	100
01/17/05 - 01/23/05	168	8.2	10.7	9.2	100
01/24/05 - 01/30/05	168	6.8	9.4	7.8	100
01/31/05 - 02/06/05	168	6.2	7.8	6.9	100
02/07/05 - 02/13/05	168	6.7	9.1	8.2	100
02/14/05 - 02/20/05	168	6.8	9.8	8.7	100
02/21/05 - 02/27/05	168	6.5	8.6	7.4	100
02/28/05 - 03/06/05	168	5.7	9.1	7.3	100
03/07/05 - 03/13/05	168	5.9	8.3	6.9	100
03/14/05 - 03/20/05	168	5.2	6.7	6.1	100
03/21/05 - 03/27/05	168	4.6	7.8	6.0	100
03/28/05 - 04/03/05	168	2.8	7.4	5.8	96
04/04/05 - 04/10/05	167	3.7	6.8	5.2	95
04/11/05 - 04/17/05	168	3.7	7.7	6.0	98
04/18/05 - 04/24/05	168	5.3	6.9	6.1	100
04/25/05 - 05/01/05	168	5.2	7.2	6.3	100
05/02/05 - 05/08/05	168	4.9	8.9	6.8	100
05/09/05 - 05/15/05	168	5.1	7.8	6.4	100
05/16/05 - 05/22/05	169	5.4	7.4	6.4	100
05/23/05 - 05/29/05	168	5.4	7.8	6.6	100
05/30/05 - 06/05/05	167	4.4	7.6	6.3	100
06/06/05 - 06/12/05	168	4.3	6.2	5.6	100
06/13/05 - 06/19/05	168	3.5	6.4	5.5	95
06/20/05 - 06/26/05	168	4.3	6.6	5.4	100
06/27/05 - 07/03/05	168	4.2	8.1	5.5	100
07/04/05 - 07/10/05	168	4.9	6.4	5.7	100
07/11/05 - 07/17/05	168	4.8	6.4	5.6	100
07/18/05 - 07/24/05	167	4.1	10.1	6.1	100
07/25/05 - 07/31/05	168	2.6	5.8	4.5	70

TABLE A-5 (Continued): WEEKLY DO SUMMARY STATISTICS AT KINZIE STREET ON THE NORTH BRANCH OF THE CHICAGO RIVER DURING 2005

	Number of	DO Co	Percent DO Values Above		
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05	168	1.8	4.9	3.6	32
08/08/05 - 08/14/05	168	2.2	8.5	5.2	71
08/15/05 - 08/21/05	168	2.9	6.0	4.5	67
08/22/05 - 08/28/05	168	4.1	6.6	5.6	100
08/29/05 - 09/04/05	168	4.9	6.5	5.8	100
09/05/05 - 09/11/05	168	4.5	6.4	5.5	100
09/12/05 - 09/18/05	168	3.6	6.7	5.6	99
09/19/05 - 09/25/05	168	3.2	6.9	5.6	97
09/26/05 - 10/02/05	168	4.4	7.3	5.9	100
10/03/05 - 10/09/05	168	2.9	7.8	6.2	95
10/10/05 - 10/16/05	168	5.8	7.4	6.4	100
10/17/05 - 10/23/05	168	5.5	7.1	6.2	100
10/24/05 - 10/30/05	168	5.4	8.1	6.5	100
10/31/05 - 11/06/05	138	5.0	7.1	5.9	100
11/07/05 - 11/13/05	168	4.5	8.0	6.3	100
11/14/05 - 11/20/05	168	5.3	8.3	6.9	100
11/21/05 - 11/27/05	168	6.6	8.5	7.6	100
11/28/05 - 12/04/05	168	5.8	8.8	7.5	100
12/05/05 - 12/11/05	168	7.5	9.1	8.2	100
12/12/05 - 12/18/05	168	7.9	11.0	8.5	100
12/19/05 - 12/25/05	168	7.3	9.9	8.8	100
12/26/05 - 12/31/05	144	6.8	9.7	8.5	100

TABLE A-6: WEEKLY DO SUMMARY STATISTICS AT CLARK STREET ON THE CHICAGO RIVER DURING 2005

	Number of	DO Co	oncentration	(mg/L)	Percent DO Values Above
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	8.0	10.4	9.3	100
01/03/05 - 01/09/05	168	9.2	12.9	11.3	100
01/10/05 - 01/16/05	168	6.9	11.8	9.0	100
01/17/05 - 01/23/05	168	8.2	13.1	11.4	100
01/24/05 - 01/30/05	168	8.8	12.5	10.6	100
01/31/05 - 02/06/05	168	5.9	9.2	7.1	100
02/07/05 - 02/13/05	168	5.8	10.3	8.8	100
02/14/05 - 02/20/05	168	8.0	10.8	9.2	100
02/21/05 - 02/27/05	168	8.2	10.3	9.1	100
02/28/05 - 03/06/05	168	8.0	11.6	9.6	100
03/07/05 - 03/13/05	168	7.5	11.1	8.9	100
03/14/05 - 03/20/05	168	6.3	11.3	8.5	100
03/21/05 - 03/27/05	168	7.3	9.3	8.5	100
03/28/05 - 04/03/05	168	6.0	9.6	7.8	100
04/04/05 - 04/10/05	167	5.6	9.5	7.4	100
04/11/05 - 04/17/05	168	6.2	10.9	7.7	100
04/18/05 - 04/24/05	168	7.1	10.9	8.9	100
04/25/05 - 05/01/05	168	6.6	9.5	7.8	100
05/02/05 - 05/08/05	168	6.8	10.0	8.6	100
05/09/05 - 05/15/05	168	6.4	10.9	9.1	100
05/16/05 - 05/22/05	168	8.2	10.6	9.3	100
05/23/05 - 05/29/05	168	7.6	10.8	9.6	100
05/30/05 - 06/05/05	168	6.4	10.5	8.9	100
06/06/05 - 06/12/05	168	8.1	9.9	9.1	100
06/13/05 - 06/19/05	168	8.2	10.7	9.6	100
06/20/05 - 06/26/05	168	8.2	10.4	9.4	100
06/27/05 - 07/03/05	168	7.7	10.0	9.0	100
07/04/05 - 07/10/05	168	7.8	9.5	8.6	100
07/11/05 - 07/17/05	168	6.6	8.4	7.6	100
07/18/05 - 07/24/05	168	5.7	7.2	6.4	100
07/25/05 - 07/31/05	168	5.4	7.2	6.2	100

TABLE A-6 (Continued): WEEKLY DO SUMMARY STATISTICS AT CLARK STREET ON THE CHICAGO RIVER DURING 2005

	Number of	DO Co	Percent DO Values Above		
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05	168	6.0	7.9	7.2	100
08/08/05 - 08/14/05	172	6.4	8.1	7.4	100
08/15/05 - 08/21/05	92	7.4	8.6	8.2	100
08/22/05 - 08/28/05	133	7.7	9.4	8.5	100
08/29/05 - 09/04/05	168	7.6	8.5	8.0	100
09/05/05 - 09/11/05	168	7.4	8.4	7.8	100
09/12/05 - 09/18/05	168	6.9	8.5	7.8	100
09/19/05 - 09/25/05	168	7.6	8.5	8.0	100
09/26/05 - 10/02/05	167	7.7	8.4	8.1	100
10/03/05 - 10/09/05	168	7.2	8.7	8.0	100
10/10/05 - 10/16/05	168	8.1	9.0	8.6	100
10/17/05 - 10/23/05	168	8.3	9.2	8.9	100
10/24/05 - 10/30/05	168	8.4	9.4	9.0	100
10/31/05 - 11/06/05	169	7.5	9.1	8.2	100
11/07/05 - 11/13/05	168	7.2	8.8	8.1	100
11/14/05 - 11/20/05	168	7.4	8.9	8.1	100
11/21/05 - 11/27/05	168	8.1	9.8	9.0	100
11/28/05 - 12/04/05	168	7.4	9.2	8.5	100
12/05/05 - 12/11/05	168	8.8	11.7	10.3	100
12/12/05 - 12/18/05	168	10.3	12.6	11.4	100
12/19/05 - 12/25/05	168	7.7	12.0	10.5	100
12/26/05 - 12/31/05	144	7.5	11.1	9.7	100

TABLE A-7: WEEKLY DO SUMMARY STATISTICS AT LOOMIS STREET ON THE SOUTH BRANCH OF THE CHICAGO RIVER DURING 2005

	Number of	DO C	ongontrotion	Percent DO Values Above	
Manitoring Dates	DO Values	Min	oncentration Max	Mean	IPCB Standard
Monitoring Dates	DO values	WIIII	Max	Mean	IFCD Standard
01/01/05 - 01/02/05	48	6.9	9.5	8.3	100
01/03/05 - 01/09/05	168	6.5	9.1	7.8	100
01/10/05 - 01/16/05	168	6.9	10.5	9.0	100
01/17/05 - 01/23/05	168	8.6	10.6	9.7	100
01/24/05 - 01/30/05	168	7.4	10.2	8.6	100
01/31/05 - 02/06/05	168	6.5	7.9	7.1	100
02/07/05 - 02/13/05	168	6.6	9.1	8.0	100
02/14/05 - 02/20/05	168	6.9	9.8	8.8	100
02/21/05 - 02/27/05	168	7.5	9.8	8.4	100
02/28/05 - 03/06/05	168	6.5	9.4	8.1	100
03/07/05 - 03/13/05	168	6.3	8.2	7.2	100
03/14/05 - 03/20/05	168	6.4	8.6	7.3	100
03/21/05 - 03/27/05	168	6.0	8.1	6.8	100
03/28/05 - 04/03/05	168	3.4	6.7	5.4	91
04/04/05 - 04/10/05	167	4.4	7.1	5.5	100
04/11/05 - 04/17/05	168	4.1	5.6	4.8	100
04/18/05 - 04/24/05	168	4.1	6.0	5.2	100
04/25/05 - 05/01/05	168	5.4	6.8	6.1	100
05/02/05 - 05/08/05	168	5.6	8.1	6.5	100
05/09/05 - 05/15/05	168	5.5	9.2	6.7	100
05/16/05 - 05/22/05	168	5.3	6.9	6.2	100
05/23/05 - 05/29/05	168	5.4	7.8	6.4	100
05/30/05 - 06/05/05	168	5.6	7.2	6.4	100
06/06/05 - 06/12/05	168	5.4	7.1	6.2	100
06/13/05 - 06/19/05	168	5.6	7.9	6.7	100
06/20/05 - 06/26/05	168	5.6	7.6	6.8	100
06/27/05 - 07/03/05	168	5.2	7.3	6.5	100
07/04/05 - 07/10/05	168	5.3	7.1	6.4	100
07/11/05 - 07/17/05	168	5.5	7.6	6.3	100
07/18/05 - 07/24/05	168	6.0	9.1	7.4	100
07/25/05 - 07/31/05	168	4.9	8.0	6.4	100
3., 22, 32 3,721,33	200	,		0	100

TABLE A-7 (Continued): WEEKLY DO SUMMARY STATISTICS AT LOOMIS STREET ON THE SOUTH BRANCH OF THE CHICAGO RIVER DURING 2005

	Number of	DO C	Percent DO Values Above		
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05	168	5.3	7.7	6.2	100
08/08/05 - 08/14/05	168	5.7	8.2	6.7	100
08/15/05 - 08/21/05	168	4.0	7.0	6.0	100
08/22/05 - 08/28/05	168	5.0	7.4	6.7	100
08/29/05 - 09/04/05	168	6.1	8.3	6.9	100
09/05/05 - 09/11/05	168	6.3	7.3	6.9	100
09/12/05 - 09/18/05	168	6.2	7.6	6.9	100
09/19/05 - 09/25/05	168	5.5	8.1	6.7	100
09/26/05 - 10/02/05	168	6.7	7.8	7.2	100
10/03/05 - 10/09/05	168	5.3	7.6	6.6	100
10/10/05 - 10/16/05	168	6.7	8.7	7.9	100
10/17/05 - 10/23/05	167	6.9	8.5	7.6	100
10/24/05 - 10/30/05	166	6.3	8.3	7.2	100
10/31/05 - 11/06/05	169	6.2	7.7	6.9	100
11/07/05 - 11/13/05	168	5.4	7.7	6.5	100
11/14/05 - 11/20/05	168	7.0	8.4	7.7	100
11/21/05 - 11/27/05	168	7.7	8.6	8.0	100
11/28/05 - 12/04/05	168	7.1	8.9	8.1	100
12/05/05 - 12/11/05	168	8.9	10.2	9.3	100
12/12/05 - 12/18/05	168	9.3	10.7	10.0	100
12/19/05 - 12/25/05	168	8.7	10.3	9.7	100
12/26/05 - 12/31/05	144	7.6	9.8	8.7	100

TABLE A-8: WEEKLY DO SUMMARY STATISTICS AT 36^{TH} STREET ON BUBBLY CREEK DURING 2005

	Number of	DO C	Concentration	(mg/L)	Percent DO Values Above
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	1.6	5.1	3.6	44
01/03/05 - 01/09/05	60	3.4	7.3	6.0	93
01/10/05 - 01/16/05			NO DATA		
01/17/05 - 01/23/05			NO DATA		
01/24/05 - 01/30/05			NO DATA		
01/31/05 - 02/06/05			NO DATA	L	
02/07/05 - 02/13/05	111	3.6	5.5	4.6	89
02/14/05 - 02/20/05	168	3.6	9.6	6.7	96
02/21/05 - 02/27/05	168	7.1	16.9	10.5	100
02/28/05 - 03/06/05	168	11.8	21.0	17.1	100
03/07/05 - 03/13/05	168	15.3	22.0	18.2	100
03/14/05 - 03/20/05	168	15.2	21.8	18.7	100
03/21/05 - 03/27/05	168	11.9	19.0	15.4	100
03/28/05 - 04/03/05	168	0.1	17.8	5.8	42
04/04/05 - 04/10/05	167	0.0	0.3	0.0	0
04/11/05 - 04/17/05	168	0.0	10.0	1.5	17
04/18/05 - 04/24/05	168	4.9	14.7	9.4	100
04/25/05 - 05/01/05	168	1.2	9.2	4.7	58
05/02/05 - 05/08/05	168	0.0	5.1	2.6	12
05/09/05 - 05/15/05	167	0.2	6.5	3.0	30
05/16/05 - 05/22/05	168	0.4	4.4	2.0	1
05/23/05 - 05/29/05	168	0.5	4.6	2.2	6
05/30/05 - 06/05/05	168	0.4	8.1	2.5	23
06/06/05 - 06/12/05	168	0.4	6.7	1.8	4
06/13/05 - 06/19/05	168	1.1	4.5	2.2	2
06/20/05 - 06/26/05	168	0.9	9.4	3.4	26
06/27/05 - 07/03/05	168	0.0	13.1	3.8	35
07/04/05 - 07/10/05	168	0.6	6.2	2.9	18
07/11/05 - 07/17/05	168	2.5	9.9	4.6	60
07/18/05 - 07/24/05	168	2.8	12.2	5.6	74
07/25/05 - 07/31/05	167	0.0	7.5	1.5	13

TABLE A-8 (Continued): WEEKLY DO SUMMARY STATISTICS AT 36^{TH} STREET ON BUBBLY CREEK DURING 2005

	Number of	DO C	Percent DO Values Above		
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05	143	0.0	9.3	3.2	30
08/08/05 - 08/14/05	111	0.3	5.9	2.2	8
08/15/05 - 08/21/05	168	0.0	5.0	1.8	13
08/22/05 - 08/28/05	57	0.3	2.0	0.8	0
08/29/05 - 09/04/05	111	2.0	5.7	3.6	25
09/05/05 - 09/11/05	168	1.8	6.5	3.9	58
09/12/05 - 09/18/05	168	3.1	5.9	4.2	63
09/19/05 - 09/25/05	168	3.9	7.0	4.8	97
09/26/05 - 10/02/05	168	3.5	6.0	5.1	92
10/03/05 - 10/09/05	168	4.7	7.0	5.6	100
10/10/05 - 10/16/05	166	4.4	6.1	5.4	100
10/17/05 - 10/23/05	169	4.3	6.5	5.5	100
10/24/05 - 10/30/05	168	4.7	6.8	5.9	100
10/31/05 - 11/06/05	169	3.7	6.9	5.0	97
11/07/05 - 11/13/05	168	5.9	12.7	9.4	100
11/14/05 - 11/20/05	168	8.9	14.5	10.9	100
11/21/05 - 11/27/05	168	8.8	11.6	10.0	100
11/28/05 - 12/04/05	168	8.0	9.6	8.8	100
12/05/05 - 12/11/05	168	8.0	10.5	9.0	100
12/12/05 - 12/18/05	168	9.5	11.6	10.4	100
12/19/05 - 12/25/05	168	9.4	12.1	10.7	100
12/26/05 - 12/31/05	144	7.9	10.1	8.9	100

TABLE A-9: WEEKLY DO SUMMARY STATISTICS AT INTERSTATE HIGHWAY 55 ON BUBBLY CREEK DURING 2005

	Number of	DO C	oncentration	n (mg/L)	Percent DO Values Above
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	7.4	9.3	8.6	100
01/03/05 - 01/09/05	168	6.0	7.6	6.9	100
01/10/05 - 01/16/05	168	3.7	10.8	6.9	94
01/17/05 - 01/23/05	168	2.8	9.0	6.1	79
01/24/05 - 01/30/05	168	3.0	8.1	5.5	91
01/31/05 - 02/06/05	168	2.8	6.3	5.2	95
02/07/05 - 02/13/05	168	3.9	7.9	5.9	99
02/14/05 - 02/20/05	168	4.5	8.2	6.7	100
02/21/05 - 02/27/05	168	5.3	8.1	7.0	100
02/28/05 - 03/06/05	168	6.2	8.5	7.3	100
03/07/05 - 03/13/05	168	6.0	8.3	7.1	100
03/14/05 - 03/20/05	168	6.1	9.9	8.1	100
03/21/05 - 03/27/05	168	6.0	8.0	7.0	100
03/28/05 - 04/03/05	168	0.0	7.7	3.1	43
04/04/05 - 04/10/05	167	0.0	4.5	1.5	4
04/11/05 - 04/17/05	34	0.1	0.7	0.1	0
04/18/05 - 04/24/05	134	1.9	14.6	4.7	44
04/25/05 - 05/01/05	168	0.3	6.7	3.4	45
05/02/05 - 05/08/05	168	1.8	9.4	5.7	93
05/09/05 - 05/15/05	167	3.0	8.7	5.8	97
05/16/05 - 05/22/05	168	3.6	6.7	5.1	90
05/23/05 - 05/29/05	168	3.5	7.3	5.3	91
05/30/05 - 06/05/05	168	2.9	7.0	4.9	87
06/06/05 - 06/12/05	168	2.3	7.1	4.3	60
06/13/05 - 06/19/05	168	1.3	5.9	4.5	80
06/20/05 - 06/26/05	168	4.0	14.0	6.0	99
06/27/05 - 07/03/05	168	3.1	13.5	5.5	91
07/04/05 - 07/10/05	168	1.8	8.0	4.5	60
07/11/05 - 07/17/05	168	3.3	8.5	5.1	89
07/18/05 - 07/24/05	82	4.3	7.4	5.9	100
07/25/05 - 07/31/05			NO DATA	A	

TABLE A-9 (Continued): WEEKLY DO SUMMARY STATISTICS AT INTERSTATE HIGHWAY 55 ON BUBBLY CREEK DURING 2005

	Number of	DO Co	oncentration	Percent DO Values Above	
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05			NO DATA	A	
08/08/05 - 08/14/05	134	4.0	8.2	6.1	100
08/15/05 - 08/21/05	168	0.0	6.9	4.6	73
08/22/05 - 08/28/05	168	1.1	7.1	5.4	83
08/29/05 - 09/04/05	168	3.5	7.3	6.0	97
09/05/05 - 09/11/05	168	5.1	6.9	6.0	100
09/12/05 - 09/18/05	168	4.9	6.7	5.8	100
09/19/05 - 09/25/05	168	4.4	6.9	6.1	100
09/26/05 - 10/02/05	168	5.1	7.1	6.5	100
10/03/05 - 10/09/05	168	5.0	7.6	6.2	100
10/10/05 - 10/16/05	168	6.5	7.7	7.1	100
10/17/05 - 10/23/05	168	6.2	7.5	6.9	100
10/24/05 - 10/30/05	168	6.1	7.3	6.6	100
10/31/05 - 11/06/05	169	5.2	7.0	6.3	100
11/07/05 - 11/13/05	81	5.0	7.0	5.9	100
11/14/05 - 11/20/05	83	7.3	8.1	7.7	100
11/21/05 - 11/27/05	168	7.7	8.3	8.0	100
11/28/05 - 12/04/05	168	7.3	8.4	7.9	100
12/05/05 - 12/11/05	168	8.0	10.4	9.3	100
12/12/05 - 12/18/05	168	9.1	10.4	9.6	100
12/19/05 - 12/25/05	168	9.2	10.3	9.7	100
12/26/05 - 12/31/05	144	7.9	9.6	8.6	100

TABLE A-10: WEEKLY DO SUMMARY STATISTICS AT CICERO AVENUE ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2005

	Number of	D0 C	Concentration	n (mg/L)	Percent DO Values Above
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	8.0	9.0	8.4	100
01/03/05 - 01/09/05	83	5.9	8.4	6.9	100
01/10/05 - 01/16/05			NO DATA	Λ	
01/17/05 - 01/23/05			NO DATA	Λ	
01/24/05 - 01/30/05			NO DATA	Λ	
01/31/05 - 02/06/05	87	4.0	6.1	4.8	100
02/07/05 - 02/13/05	168	5.6	7.0	6.3	100
02/14/05 - 02/20/05	83	5.9	8.0	7.0	100
02/21/05 - 02/27/05			NO DATA	Α	
02/28/05 - 03/06/05			NO DATA	Α	
03/07/05 - 03/13/05			NO DATA	Λ	
03/14/05 - 03/20/05	126	6.1	8.4	7.1	100
03/21/05 - 03/27/05	42	5.3	6.2	5.8	100
03/28/05 - 04/03/05			NO DATA	Λ	
04/04/05 - 04/10/05			NO DATA	Λ	
04/11/05 - 04/17/05	126	1.9	5.3	4.0	55
04/18/05 - 04/24/05	43	1.0	4.5	2.8	9
04/25/05 - 05/01/05			NO DATA	Λ	
05/02/05 - 05/08/05			NO DATA	Λ	
05/09/05 - 05/15/05	101	3.7	6.0	4.8	98
05/16/05 - 05/22/05	168	2.8	6.1	4.3	74
05/23/05 - 05/29/05	168	3.0	5.8	4.4	74
05/30/05 - 06/05/05	168	2.7	7.3	4.4	68
06/06/05 - 06/12/05	168	3.0	9.3	4.5	69
06/13/05 - 06/19/05	168	2.2	5.3	4.1	57
06/20/05 - 06/26/05	168	3.6	7.4	5.6	99
06/27/05 - 07/03/05	168	3.3	8.4	5.5	97
07/04/05 - 07/10/05	168	3.5	7.2	4.7	82
07/11/05 - 07/17/05	168	4.2	6.5	5.4	100
07/18/05 - 07/24/05	168	4.0	7.5	5.9	100
07/25/05 - 07/31/05	168	0.1	7.0	3.7	55

TABLE A-10 (Continued): WEEKLY DO SUMMARY STATISTICS AT CICERO AVENUE ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2005

	Number of	DO Co	Percent DO Values Above		
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05	168	1.9	9.2	4.7	74
08/08/05 - 08/14/05	168	4.1	7.2	5.5	100
08/15/05 - 08/21/05	168	2.4	5.5	4.3	70
08/22/05 - 08/28/05	168	3.1	7.4	5.3	82
08/29/05 - 09/04/05	168	5.2	6.7	6.1	100
09/05/05 - 09/11/05	168	5.8	6.7	6.2	100
09/12/05 - 09/18/05	168	5.1	6.8	5.8	100
09/19/05 - 09/25/05	168	4.7	6.7	6.0	100
09/26/05 - 10/02/05	168	5.7	7.0	6.3	100
10/03/05 - 10/09/05	168	4.2	6.3	5.3	100
10/10/05 - 10/16/05	168	4.9	6.4	5.7	100
10/17/05 - 10/23/05	168	5.3	6.5	5.9	100
10/24/05 - 10/30/05	168	4.7	6.7	5.9	100
10/31/05 - 11/06/05	169	4.4	6.2	5.6	100
11/07/05 - 11/13/05	168	5.2	6.7	5.7	100
11/14/05 - 11/20/05	168	5.9	7.6	6.8	100
11/21/05 - 11/27/05	34	6.0	6.8	6.2	100
11/28/05 - 12/04/05	83	6.1	7.7	6.8	100
12/05/05 - 12/11/05	168	6.0	8.1	7.1	100
12/12/05 - 12/18/05	168	6.7	9.2	8.1	100
12/19/05 - 12/25/05	168	7.6	9.2	8.3	100
12/26/05 - 12/31/05	144	6.6	9.3	7.9	100

TABLE A-11: WEEKLY DO SUMMARY STATISTICS AT B&O CENTRAL RAILROAD ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2005

	Number of	DO Co	n (mg/L)	Percent DO Values Above			
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard		
01/01/05 - 01/02/05	48	8.0	10.0	8.8	100		
01/03/05 - 01/09/05	168	6.6	10.3	8.5	100		
01/10/05 - 01/16/05	168	7.3	10.3	8.2	100		
01/17/05 - 01/23/05	168	8.2	10.5	9.2	100		
01/24/05 - 01/30/05	168	6.7	9.1	8.3	100		
01/31/05 - 02/06/05	168	5.7	8.2	6.7	100		
02/07/05 - 02/13/05	168	6.2	8.3	7.5	100		
02/14/05 - 02/20/05	168	7.4	9.0	8.2	100		
02/21/05 - 02/27/05	168	6.7	9.5	7.8	100		
02/28/05 - 03/06/05	168	6.6	8.8	7.8	100		
03/07/05 - 03/13/05	167	7.2	9.2	8.0	100		
03/14/05 - 03/20/05	168	6.7	8.7	7.9	100		
03/21/05 - 03/27/05	168	6.3	8.4	7.3	100		
03/28/05 - 04/03/05	168	4.5	7.8	6.9	100		
04/04/05 - 04/10/05	167	5.0	7.7	6.2	100		
04/11/05 - 04/17/05	168	4.5	7.9	5.7	100		
04/18/05 - 04/24/05	168	4.1	8.0	5.8	100		
04/25/05 - 05/01/05	168	5.1	7.3	6.1	100		
05/02/05 - 05/08/05	168	4.8	6.6	5.8	100		
05/09/05 - 05/15/05	168	3.5	6.9	5.7	96		
05/16/05 - 05/22/05	180	4.5	6.9	5.9	100		
05/23/05 - 05/29/05	179	4.7	10.0	6.3	100		
05/30/05 - 06/05/05	168	3.3	8.0	5.6	98		
06/06/05 - 06/12/05	168	3.7	7.0	5.2	97		
06/13/05 - 06/19/05	168	4.3	6.2	5.2	100		
06/20/05 - 06/26/05	168	5.2	9.0	6.5	100		
06/27/05 - 07/03/05	168	4.2	7.9	5.5	100		
07/04/05 - 07/10/05	168	3.4	6.2	4.9	94		
07/11/05 - 07/17/05	168	3.4	7.3	5.2	91		
07/18/05 - 07/24/05	83	3.6	7.3	5.5	98		
07/25/05 - 07/31/05	NO DATA						

TABLE A-11 (Continued): WEEKLY DO SUMMARY STATISTICS AT B&O CENTRAL RAILROAD ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2005

	Number of	DO Co	oncentration	Percent DO Values Above	
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05			NO DATA		
08/08/05 - 08/14/05	86	4.7	6.1	5.4	100
08/15/05 - 08/21/05	168	4.0	6.0	5.2	100
08/22/05 - 08/28/05	168	3.9	6.6	5.4	99
08/29/05 - 09/04/05	83	4.5	7.4	5.6	100
09/05/05 - 09/11/05	82	5.2	6.3	5.8	100
09/12/05 - 09/18/05	168	4.9	6.5	5.8	100
09/19/05 - 09/25/05	168	5.2	6.5	5.9	100
09/26/05 - 10/02/05	167	5.3	6.9	6.3	100
10/03/05 - 10/09/05	168	5.5	6.5	6.1	100
10/10/05 - 10/16/05	168	5.4	6.4	5.9	100
10/17/05 - 10/23/05	168	5.5	6.9	6.3	100
10/24/05 - 10/30/05	168	5.8	7.8	6.7	100
10/31/05 - 11/06/05	169	5.1	6.6	6.1	100
11/07/05 - 11/13/05	168	6.0	7.3	6.6	100
11/14/05 - 11/20/05	168	6.6	8.3	7.4	100
11/21/05 - 11/27/05	168	6.8	8.2	7.3	100
11/28/05 - 12/04/05	168	6.9	8.3	7.8	100
12/05/05 - 12/11/05	168	6.9	8.0	7.6	100
12/12/05 - 12/18/05	168	7.2	8.9	8.0	100
12/19/05 - 12/25/05	168	7.1	9.6	8.5	100
12/26/05 - 12/31/05	144	6.6	9.4	8.3	100

TABLE A-12: WEEKLY DO SUMMARY STATISTICS AT ROUTE 83 ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2005

	Number of	DO C	an contration	n (mg/L)	Percent DO Values Above
Monitoring Dates	DO Values	Min	oncentration Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	7.3	8.3	8.0	100
01/03/05 - 01/09/05	168	2.2	8.9	7.1	97
01/10/05 - 01/16/05	168	5.7	7.7	6.7	100
01/17/05 - 01/23/05	168	7.1	9.6	8.5	100
01/24/05 - 01/30/05	58	6.9	8.7	8.0	100
01/31/05 - 02/06/05	109	5.3	7.3	5.9	100
02/07/05 - 02/13/05	168	5.2	6.9	6.2	100
02/14/05 - 02/20/05	168	6.0	7.6	6.9	100
02/21/05 - 02/27/05	168	5.4	8.3	6.7	100
02/28/05 - 03/06/05	168	5.0	7.5	6.5	100
03/07/05 - 03/13/05	36	5.5	6.5	6.2	100
03/14/05 - 03/20/05	109	5.7	7.0	6.4	100
03/21/05 - 03/27/05	168	5.0	6.9	6.0	100
03/28/05 - 04/03/05	58	5.3	6.1	5.7	100
04/04/05 - 04/10/05	109	3.1	5.3	4.2	62
04/11/05 - 04/17/05	168	2.7	5.9	4.1	54
04/18/05 - 04/24/05	168	2.3	5.1	3.8	43
04/25/05 - 05/01/05	168	3.2	6.5	4.7	86
05/02/05 - 05/08/05	59	3.0	5.1	3.9	49
05/09/05 - 05/15/05	85	3.0	5.1	4.0	53
05/16/05 - 05/22/05	189	0.0	6.8	5.1	75
05/23/05 - 05/29/05	179	0.0	9.6	4.9	62
05/30/05 - 06/05/05	168	2.3	7.0	4.4	62
06/06/05 - 06/12/05	168	1.3	5.3	3.5	31
06/13/05 - 06/19/05	168	2.6	4.6	3.5	21
06/20/05 - 06/26/05	168	3.3	6.7	5.0	87
06/27/05 - 07/03/05	168	3.3	6.1	4.4	60
07/04/05 - 07/10/05	168	3.1	5.2	4.1	55
07/11/05 - 07/17/05	168	2.7	5.9	3.9	45
07/18/05 - 07/24/05	84	2.6	5.2	3.9	41
07/25/05 - 07/31/05			NO DATA	L	

TABLE A-12 (Continued): WEEKLY DO SUMMARY STATISTICS AT ROUTE 83 ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2005

	Number of	DO Co	ncentration	Percent DO Values Above	
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05			NO DATA		
08/08/05 - 08/14/05	84	3.4	4.8	4.0	36
08/15/05 - 08/21/05	44	2.6	4.2	3.4	5
08/22/05 - 08/28/05]	NO DATA	L	
08/29/05 - 09/04/05	110	5.3	6.1	5.7	100
09/05/05 - 09/11/05	58	4.9	6.2	5.7	100
09/12/05 - 09/18/05	86	4.1	6.4	5.2	100
09/19/05 - 09/25/05	168	4.1	5.3	4.8	100
09/26/05 - 10/02/05	168	3.3	6.3	4.9	89
10/03/05 - 10/09/05	168	4.6	6.3	5.3	100
10/10/05 - 10/16/05	168	4.4	5.3	4.9	100
10/17/05 - 10/23/05	168	4.4	6.0	5.4	100
10/24/05 - 10/30/05	168	4.7	7.1	6.0	100
10/31/05 - 11/06/05	169	4.6	6.0	5.4	100
11/07/05 - 11/13/05	168	2.7	6.0	5.0	85
11/14/05 - 11/20/05	168	5.0	7.4	6.3	100
11/21/05 - 11/27/05	168	3.4	6.6	5.8	99
11/28/05 - 12/04/05	168	5.4	7.7	6.8	100
12/05/05 - 12/11/05	168	5.9	7.5	6.7	100
12/12/05 - 12/18/05	168	3.8	8.0	7.0	98
12/19/05 - 12/25/05	168	6.2	9.1	8.0	100
12/26/05 - 12/31/05	144	6.3	8.1	7.3	100

TABLE A-13: WEEKLY DO SUMMARY STATISTICS AT LOCKPORT POWERHOUSE ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2005

		Number of	DO C	oncentration	2 (mg/L)	Percent DO Values Above
	Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
_						
	01/01/05 - 01/02/05	48	8.3	8.8	8.6	100
	01/03/05 - 01/09/05	168	7.4	9.1	8.1	100
	01/10/05 - 01/16/05	168	6.3	8.2	7.3	100
	01/17/05 - 01/23/05	168	7.7	10.2	8.8	100
	01/24/05 - 01/30/05	168	6.9	8.5	7.6	100
	01/31/05 - 02/06/05	168	5.4	7.3	6.2	100
	02/07/05 - 02/13/05	168	5.9	7.6	6.5	100
	02/14/05 - 02/20/05	168	7.2	8.5	7.8	100
	02/21/05 - 02/27/05	168	6.5	8.2	7.5	100
	02/28/05 - 03/06/05	168	6.2	7.5	6.8	100
	03/07/05 - 03/13/05	168	5.7	7.2	6.4	100
	03/14/05 - 03/20/05	168	6.1	6.8	6.4	100
	03/21/05 - 03/27/05	168	5.5	6.5	6.1	100
	03/28/05 - 04/03/05	168	3.7	6.2	5.5	94
	04/04/05 - 04/10/05	167	3.5	5.5	4.6	84
	04/11/05 - 04/17/05	168	3.3	5.0	4.0	48
	04/18/05 - 04/24/05	168	3.4	5.1	4.4	79
	04/25/05 - 05/01/05	168	4.2	5.5	4.9	100
	05/02/05 - 05/08/05	169	3.4	5.1	4.6	92
	05/09/05 - 05/15/05	168	3.3	5.8	4.5	82
	05/16/05 - 05/22/05	168	3.2	4.6	3.9	47
	05/23/05 - 05/29/05	168	2.2	4.6	3.8	39
	05/30/05 - 06/05/05	168	2.7	4.6	3.5	17
	06/06/05 - 06/12/05	168	1.8	3.7	2.6	0
	06/13/05 - 06/19/05	168	2.1	4.3	3.1	1
	06/20/05 - 06/26/05	168	3.3	7.5	4.7	73
	06/27/05 - 07/03/05	59	3.5	6.7	4.7	86
	07/04/05 - 07/10/05	86	3.3	6.3	4.1	51
	07/11/05 - 07/17/05	168	3.2	6.3	4.3	56
	07/18/05 - 07/24/05	168	3.0	6.8	4.6	88
	07/25/05 - 07/31/05	168	1.4	5.7	3.3	14

TABLE A-13 (Continued): WEEKLY DO SUMMARY STATISTICS AT LOCKPORT POWERHOUSE ON THE CHICAGO SANITARY AND SHIP CANAL DURING 2005

	Number of	DO Co	Percent DO Values Above		
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
00/01/05 00/07/05	02	2.5		4.7	7.4
08/01/05 - 08/07/05	82	3.5	5.9	4.7	74
08/08/05 - 08/14/05	85	3.1	4.9	3.9	41
08/15/05 - 08/21/05	168	2.9	6.6	3.8	29
08/22/05 - 08/28/05	168	3.0	5.6	4.1	58
08/29/05 - 09/04/05	168	3.6	6.4	4.9	98
09/05/05 - 09/11/05	168	4.7	5.7	5.1	100
09/12/05 - 09/18/05	168	4.3	5.1	4.6	100
09/19/05 - 09/25/05	168	4.6	5.6	5.0	100
09/26/05 - 10/02/05	168	4.6	5.9	5.3	100
10/03/05 - 10/09/05	168	4.9	5.9	5.5	100
10/10/05 - 10/16/05	168	4.6	5.3	4.9	100
10/17/05 - 10/23/05	168	4.4	6.1	5.3	100
10/24/05 - 10/30/05	167	4.9	6.4	5.9	100
10/31/05 - 11/06/05	170	4.3	6.4	5.5	100
11/07/05 - 11/13/05	163	3.5	6.2	5.2	85
11/14/05 - 11/20/05	85	5.8	6.7	6.2	100
11/21/05 - 11/27/05	168	6.4	7.1	6.7	100
11/28/05 - 12/04/05	168	5.7	7.7	6.8	100
12/05/05 - 12/11/05	168	6.2	7.5	6.8	100
12/12/05 - 12/18/05	168	4.3	7.8	6.6	100
12/19/05 - 12/25/05	168	6.5	8.3	7.4	100
12/26/05 - 12/31/05	144	6.3	7.7	7.0	100

TABLE A-14: WEEKLY DO SUMMARY STATISTICS AT JEFFERSON STREET ON THE DES PLAINES RIVER DURING 2005

	Number of	DO C	oncentratio	n (mg/L)	Percent DO Values Above
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	9.3	10.9	10.2	100
01/03/05 - 01/09/05	168	8.7	11.6	9.8	100
01/10/05 - 01/16/05	168	7.8	10.9	9.5	100
01/17/05 - 01/23/05	168	9.1	11.7	10.3	100
01/24/05 - 01/30/05	168	8.0	10.3	9.3	100
01/31/05 - 02/06/05	168	7.0	9.2	8.2	100
02/07/05 - 02/13/05	168	7.0	9.4	8.1	100
02/14/05 - 02/20/05	168	7.5	10.6	9.2	100
02/21/05 - 02/27/05	168	8.2	11.2	9.6	100
02/28/05 - 03/06/05	168	7.5	12.1	9.1	100
03/07/05 - 03/13/05	168	7.3	12.5	9.6	100
03/14/05 - 03/20/05	168	7.8	12.3	9.6	100
03/21/05 - 03/27/05	58	7.8	12.2	9.1	100
03/28/05 - 04/03/05	110	5.3	9.2	7.2	100
04/04/05 - 04/10/05	167	5.3	9.2	7.0	100
04/11/05 - 04/17/05	168	4.5	8.5	6.1	100
04/18/05 - 04/24/05	168	4.3	8.6	6.0	100
04/25/05 - 05/01/05	59	4.8	8.0	6.2	100
05/02/05 - 05/08/05	109	5.3	8.7	6.6	100
05/09/05 - 05/15/05	168	4.4	8.0	6.0	100
05/16/05 - 05/22/05	168	3.7	8.4	5.6	98
05/23/05 - 05/29/05	168	4.0	7.3	5.7	100
05/30/05 - 06/05/05	168	3.7	7.2	5.2	96
06/06/05 - 06/12/05	168	1.5	4.9	3.0	14
06/13/05 - 06/19/05	168	1.3	5.8	3.9	48
06/20/05 - 06/26/05	168	2.9	9.0	5.1	82
06/27/05 - 07/03/05	167	2.2	6.2	4.2	56
07/04/05 - 07/10/05	168	2.3	5.5	4.1	54
07/11/05 - 07/17/05	168	3.1	5.2	4.2	60
07/18/05 - 07/24/05	168	2.9	6.0	4.2	60
07/25/05 - 07/31/05	168	3.0	6.2	4.2	48

TABLE A-14 (Continued): WEEKLY DO SUMMARY STATISTICS AT JEFFERSON STREET ON THE DES PLAINES RIVER DURING 2005

	Number of	Number of DO Concentration (mg/L)					
Monitoring Dates	DO Values	Min	Max	Mean	Values Above IPCB Standard		
08/01/05 - 08/07/05	168	3.9	6.6	5.1	99		
08/08/05 - 08/14/05	168	3.5	5.9	4.9	94		
08/15/05 - 08/21/05	83	3.2	4.8	4.0	45		
08/22/05 - 08/28/05	85	4.3	6.2	5.2	100		
08/29/05 - 09/04/05	168	4.2	6.4	5.2	100		
09/05/05 - 09/11/05	168	4.8	6.3	5.4	100		
09/12/05 - 09/18/05	168	4.4	5.6	4.9	100		
09/19/05 - 09/25/05	168	4.6	5.7	5.1	100		
09/26/05 - 10/02/05	82	4.8	6.3	5.2	100		
10/03/05 - 10/09/05	84	6.0	6.9	6.4	100		
10/10/05 - 10/16/05	168	5.5	7.0	6.1	100		
10/17/05 - 10/23/05	168	5.6	7.5	6.5	100		
10/24/05 - 10/30/05	168	5.8	8.3	7.0	100		
10/31/05 - 11/06/05	169	5.9	8.4	6.9	100		
11/07/05 - 11/13/05	168	5.3	7.7	6.5	100		
11/14/05 - 11/20/05	143	6.4	9.6	7.7	100		
11/21/05 - 11/27/05	168	7.3	9.9	8.2	100		
11/28/05 - 12/04/05	168	7.3	9.9	8.4	100		
12/05/05 - 12/11/05	168	7.9	9.9	8.5	100		
12/12/05 - 12/18/05	167	6.7	10.0	8.2	100		
12/19/05 - 12/25/05	168	8.3	10.5	9.3	100		
12/26/05 - 12/31/05	144	7.8	10.2	9.2	100		

TABLE A-15: WEEKLY DO SUMMARY STATISTICS AT TORRENCE AVENUE ON THE GRAND CALUMET RIVER DURING 2005

	Number of	DO C	oncentratio	on (mg/L)	Percent DO Values Above
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	5.4	11.5	8.4	100
01/03/05 - 01/09/05	168	3.9	12.1	8.7	98
01/10/05 - 01/16/05	57	9.2	11.7	10.3	100
01/17/05 - 01/23/05			NO DATA	A	
01/24/05 - 01/30/05			NO DATA	A	
01/31/05 - 02/06/05			NO DATA	A	
02/07/05 - 02/13/05	110	12.0	18.4	14.6	100
02/14/05 - 02/20/05	168	4.5	20.3	12.0	100
02/21/05 - 02/27/05	168	7.6	19.3	14.7	100
02/28/05 - 03/06/05	168	10.9	17.8	15.2	100
03/07/05 - 03/13/05	168	10.8	19.0	14.6	100
03/14/05 - 03/20/05	58	13.8	18.4	15.9	100
03/21/05 - 03/27/05			NO DATA	A	
03/28/05 - 04/03/05			NO DATA	A	
04/04/05 - 04/10/05			NO DATA	A	
04/11/05 - 04/17/05			NO DATA	A	
04/18/05 - 04/24/05			NO DATA	A	
04/25/05 - 05/01/05			NO DATA	A	
05/02/05 - 05/08/05			NO DATA	A	
05/09/05 - 05/15/05	109	2.8	9.9	6.8	96
05/16/05 - 05/22/05	168	1.3	10.5	6.1	86
05/23/05 - 05/29/05	168	4.5	13.9	8.3	100
05/30/05 - 06/05/05	168	0.6	11.1	6.1	77
06/06/05 - 06/12/05	168	0.1	11.3	3.5	35
06/13/05 - 06/19/05	168	0.4	21.6	7.8	83
06/20/05 - 06/26/05	168	1.1	7.4	3.6	38
06/27/05 - 07/03/05	168	1.5	11.0	5.6	75
07/04/05 - 07/10/05	168	1.8	9.6	5.3	70
07/11/05 - 07/17/05	168	0.8	9.2	4.5	55
07/18/05 - 07/24/05	168	0.1	15.4	5.5	61
07/25/05 - 07/31/05	167	0.3	13.2	3.7	29

TABLE A-15 (Continued): WEEKLY DO SUMMARY STATISTICS AT TORRENCE AVENUE ON THE GRAND CALUMET RIVER DURING 2005

	Number of	DO Co	Percent DO Values Above		
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05	168	0.0	14.6	4.9	54
08/08/05 - 08/14/05	168	1.0	7.4	3.6	34
08/15/05 - 08/21/05	168	0.4	10.8	4.2	45
08/22/05 - 08/28/05	168	0.9	7.7	4.3	57
08/29/05 - 09/04/05	58	0.9	6.5	3.7	35
09/05/05 - 09/11/05	109	2.1	9.1	5.5	75
09/12/05 - 09/18/05	168	2.2	11.3	5.1	71
09/19/05 - 09/25/05	168	0.8	13.1	7.2	93
09/26/05 - 10/02/05	168	0.5	8.4	5.7	86
10/03/05 - 10/09/05	168	1.1	10.3	6.4	86
10/10/05 - 10/16/05	168	6.1	10.6	7.7	100
10/17/05 - 10/23/05	168	6.9	12.9	8.8	100
10/24/05 - 10/30/05	168	5.6	12.4	7.9	100
10/31/05 - 11/06/05	169	6.2	15.4	9.9	100
11/07/05 - 11/13/05	168	4.2	11.7	9.4	100
11/14/05 - 11/20/05	142	9.0	12.9	11.2	100
11/21/05 - 11/27/05	168	11.7	14.7	13.1	100
11/28/05 - 12/04/05	168	8.8	14.2	12.0	100
12/05/05 - 12/11/05	168	8.9	13.3	11.9	100
12/12/05 - 12/18/05	168	8.0	11.6	10.7	100
12/19/05 - 12/25/05	168	7.8	12.2	11.0	100
12/26/05 - 12/31/05	144	5.9	11.8	10.1	100

TABLE A-16: WEEKLY DO SUMMARY STATISTICS AT C&W INDIANA RAILROAD ON THE LITTLE CALUMET RIVER DURING 2005

	Number of	DO (Concentratio	n (mg/L)	Percent DO Values Above
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	13.3	13.6	13.5	100
01/03/05 - 01/09/05	168	11.3	13.6	12.6	100
01/10/05 - 01/16/05	168	9.9	12.1	11.4	100
01/17/05 - 01/23/05	168	8.0	11.3	9.5	100
01/24/05 - 01/30/05	168	7.7	9.6	8.5	100
01/31/05 - 02/06/05	168	9.6	10.7	10.4	100
02/07/05 - 02/13/05	168	10.4	12.2	11.3	100
02/14/05 - 02/20/05	168	11.4	12.6	12.1	100
02/21/05 - 02/27/05	168	11.1	12.4	11.8	100
02/28/05 - 03/06/05	168	11.1	12.9	12.3	100
03/07/05 - 03/13/05	168	12.1	12.9	12.6	100
03/14/05 - 03/20/05	168	12.1	13.5	12.8	100
03/21/05 - 03/27/05	168	12.2	15.5	13.6	100
03/28/05 - 04/03/05	168	12.4	16.4	14.5	100
04/04/05 - 04/10/05	167	11.3	16.0	13.4	100
04/11/05 - 04/17/05	168	9.2	12.8	10.5	100
04/18/05 - 04/24/05	168	8.2	12.0	9.9	100
04/25/05 - 05/01/05	168	7.9	13.5	10.7	100
05/02/05 - 05/08/05	62	10.4	15.1	12.2	100
05/09/05 - 05/15/05	80	5.1	9.7	7.2	100
05/16/05 - 05/22/05	168	6.7	13.1	9.0	100
05/23/05 - 05/29/05	168	4.8	9.6	6.8	100
05/30/05 - 06/05/05	168	3.7	8.5	5.8	99
06/06/05 - 06/12/05	61	2.6	6.0	4.0	39
06/13/05 - 06/19/05	107	3.3	6.6	5.0	88
06/20/05 - 06/26/05	168	3.2	13.6	6.4	96
06/27/05 - 07/03/05	168	2.5	10.5	5.8	86
07/04/05 - 07/10/05	168	3.0	8.8	5.9	96
07/11/05 - 07/17/05	168	4.3	9.1	6.5	100
07/18/05 - 07/24/05	86	5.4	9.8	6.9	100
07/25/05 - 07/31/05			NO DATA	Λ	

TABLE A-16 (Continued): WEEKLY DO SUMMARY STATISTICS AT C&W INDIANA RAILROAD ON THE LITTLE CALUMET RIVER DURING 2005

	Number of	DO Co	Percent DO Values Above		
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05			NO DATA		
08/08/05 - 08/14/05	81	5.4	7.4	6.3	100
08/15/05 - 08/21/05	168	5.6	10.2	7.5	100
08/22/05 - 08/28/05	168	6.1	9.3	7.7	100
08/29/05 - 09/04/05	168	6.4	9.3	7.7	100
09/05/05 - 09/11/05	168	6.3	8.9	7.4	100
09/12/05 - 09/18/05	168	6.0	11.6	7.5	100
09/19/05 - 09/25/05	167	6.4	10.8	7.8	100
09/26/05 - 10/02/05	168	6.8	8.3	7.7	100
10/03/05 - 10/09/05	168	7.6	9.2	8.2	100
10/10/05 - 10/16/05	168	7.9	9.0	8.4	100
10/17/05 - 10/23/05	168	8.2	9.8	9.0	100
10/24/05 - 10/30/05	168	8.4	10.1	9.1	100
10/31/05 - 11/06/05	169	8.8	10.3	9.4	100
11/07/05 - 11/13/05	168	9.0	12.0	10.4	100
11/14/05 - 11/20/05	168	9.3	11.8	10.8	100
11/21/05 - 11/27/05	168	9.8	12.9	11.7	100
11/28/05 - 12/04/05	142	11.2	13.3	12.6	100
12/05/05 - 12/11/05	168	11.8	13.7	12.6	100
12/12/05 - 12/18/05	168	11.1	13.0	11.9	100
12/19/05 - 12/25/05	168	10.7	12.1	11.2	100
12/26/05 - 12/31/05	144	11.0	12.1	11.5	100

TABLE A-17: WEEKLY DO SUMMARY STATISTICS AT HALSTED STREET ON THE LITTLE CALUMET RIVER DURING 2005

	Number of	DO C	mber of DO Concentration (mg/L)					
Monitoring Dates	DO Values	Min	Max	Mean	Values Above IPCB Standard			
01/01/05 - 01/02/05	48	7.0	8.8	7.9	100			
01/03/05 - 01/09/05	168	7.2	9.0	8.1	100			
01/10/05 - 01/16/05	168	5.9	8.9	7.2	100			
01/17/05 - 01/23/05	168	8.0	9.5	8.6	100			
01/24/05 - 01/30/05	168	6.9	9.0	7.8	100			
01/31/05 - 02/06/05	168	6.8	8.1	7.5	100			
02/07/05 - 02/13/05	168	5.8	9.0	7.2	100			
02/14/05 - 02/20/05	168	6.6	8.4	7.3	100			
02/21/05 - 02/27/05	168	5.9	7.8	6.8	100			
02/28/05 - 03/06/05	168	6.4	7.9	7.0	100			
03/07/05 - 03/13/05	168	6.2	7.8	7.0	100			
03/14/05 - 03/20/05	168	6.2	8.4	7.1	100			
03/21/05 - 03/27/05	168	6.1	8.6	7.3	100			
03/28/05 - 04/03/05	168	5.7	8.0	6.9	100			
04/04/05 - 04/10/05	168	5.3	8.3	6.7	100			
04/11/05 - 04/17/05	168	5.8	9.4	7.0	100			
04/18/05 - 04/24/05	167	5.2	7.7	6.6	100			
04/25/05 - 05/01/05	168	6.2	9.1	7.2	100			
05/02/05 - 05/08/05	168	6.4	10.7	8.1	100			
05/09/05 - 05/15/05	168	5.7	9.5	7.4	100			
05/16/05 - 05/22/05	168	5.1	9.6	6.6	100			
05/23/05 - 05/29/05	168	4.6	8.8	6.5	100			
05/30/05 - 06/05/05	168	3.7	8.8	5.8	99			
06/06/05 - 06/12/05	168	2.8	8.0	4.8	91			
06/13/05 - 06/19/05	168	3.3	8.4	5.3	95			
06/20/05 - 06/26/05	168	3.5	12.2	7.0	99			
06/27/05 - 07/03/05	168	3.2	10.0	5.9	96			
07/04/05 - 07/10/05	168	3.7	9.8	6.1	98			
07/11/05 - 07/17/05	168	3.3	9.8	5.7	97			
07/18/05 - 07/24/05	85	3.4	7.6	5.3	94			
07/25/05 - 07/31/05			NO DATA	L				

TABLE A-17 (Continued): WEEKLY DO SUMMARY STATISTICS AT HALSTED STREET ON THE LITTLE CALUMET RIVER DURING 2005

Monitoring Dates	Number of	Percent DO Values Above					
	DO Values	Min	oncentration Max	Mean	IPCB Standard		
08/01/05 - 08/07/05	NO DATA						
08/08/05 - 08/14/05	81	4.5	7.6	5.8	100		
08/15/05 - 08/21/05	168	5.1	10.3	6.9	100		
08/22/05 - 08/28/05	168	5.9	9.4	7.1	100		
08/29/05 - 09/04/05	168	6.2	8.9	7.2	100		
09/05/05 - 09/11/05	168	5.8	8.9	7.2	100		
09/12/05 - 09/18/05	168	5.7	8.5	6.7	100		
09/19/05 - 09/25/05	168	6.0	8.2	6.8	100		
09/26/05 - 10/02/05	168	5.9	7.9	7.1	100		
10/03/05 - 10/09/05	168	5.9	7.8	6.9	100		
10/10/05 - 10/16/05	168	6.1	8.5	7.5	100		
10/17/05 - 10/23/05	168	6.5	8.0	7.4	100		
10/24/05 - 10/30/05	168	5.8	7.4	6.8	100		
10/31/05 - 11/06/05	169	5.7	7.4	6.7	100		
11/07/05 - 11/13/05	168	5.1	7.9	6.7	100		
11/14/05 - 11/20/05	168	7.1	8.8	8.0	100		
11/21/05 - 11/27/05	168	7.6	8.9	8.3	100		
11/28/05 - 12/04/05	168	6.9	8.3	7.8	100		
12/05/05 - 12/11/05	168	8.0	9.2	8.6	100		
12/12/05 - 12/18/05	168	8.0	8.9	8.5	100		
12/19/05 - 12/25/05	168	7.2	9.1	8.4	100		
12/26/05 - 12/31/05	144	7.1	8.4	7.7	100		

TABLE A-18: WEEKLY DO SUMMARY STATISTICS AT CICERO AVENUE ON THE CALUMET-SAG CHANNEL DURING 2005

	Number of	Percent DO Values Above			
Monitoring Dates	DO Values	Min	Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	7.9	8.4	8.1	100
01/03/05 - 01/09/05	168	7.9	10.2	9.4	100
01/10/05 - 01/16/05	167	7.7	10.0	8.7	100
01/17/05 - 01/23/05	168	8.8	10.8	9.7	100
01/24/05 - 01/30/05	167	7.6	9.1	8.2	100
01/31/05 - 02/06/05	168	7.2	8.5	7.7	100
02/07/05 - 02/13/05	168	7.2	10.9	9.2	100
02/14/05 - 02/20/05	168	8.8	10.9	10.0	100
02/21/05 - 02/27/05	168	7.8	9.2	8.4	100
02/28/05 - 03/06/05	168	7.7	9.0	8.2	100
03/07/05 - 03/13/05	168	7.7	9.1	8.2	100
03/14/05 - 03/20/05	168	7.4	8.9	8.3	100
03/21/05 - 03/27/05	168	7.1	9.1	8.1	100
03/28/05 - 04/03/05	168	6.4	8.8	7.8	100
04/04/05 - 04/10/05	167	5.8	8.0	6.8	100
04/11/05 - 04/17/05	168	6.0	7.6	6.8	100
04/18/05 - 04/24/05	168	5.0	7.0	6.1	100
04/25/05 - 05/01/05	168	6.7	8.6	7.5	100
05/02/05 - 05/08/05	168	7.5	10.2	8.4	100
05/09/05 - 05/15/05	168	5.4	10.5	7.2	100
05/16/05 - 05/22/05	168	4.1	8.0	5.9	100
05/23/05 - 05/29/05	168	4.9	6.6	5.7	100
05/30/05 - 06/05/05	168	3.5	6.8	5.4	100
06/06/05 - 06/12/05	168	1.5	5.6	4.1	90
06/13/05 - 06/19/05	168	3.5	5.9	4.7	100
06/20/05 - 06/26/05	168	5.1	10.5	6.7	100
06/27/05 - 07/03/05	168	3.7	7.6	5.5	100
07/04/05 - 07/10/05	168	3.7	6.9	5.7	100
07/11/05 - 07/17/05	168	4.1	7.2	5.3	100
07/18/05 - 07/24/05	168	4.0	8.1	5.5	100
07/25/05 - 07/31/05	168	3.2	7.2	5.3	100

TABLE A-18 (Continued): WEEKLY DO SUMMARY STATISTICS AT CICERO AVENUE ON THE CALUMET-SAG CHANNEL DURING 2005

Monitoring Dates	Number of	DO Concentration (mg/L)			Percent DO Values Above
	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05	168	5.0	10.4	6.7	100
08/08/05 - 08/14/05	168	3.2	11.1	6.0	100
08/15/05 - 08/21/05	168	3.3	8.1	5.6	100
08/22/05 - 08/28/05	168	4.3	7.9	6.4	100
08/29/05 - 09/04/05	168	5.6	7.8	6.6	100
09/05/05 - 09/11/05	167	5.8	8.2	6.9	100
09/12/05 - 09/18/05	168	5.0	7.8	6.2	100
09/19/05 - 09/25/05	168	5.5	7.2	6.3	100
09/26/05 - 10/02/05	168	5.4	7.6	6.8	100
10/03/05 - 10/09/05	168	4.9	7.0	6.1	100
10/10/05 - 10/16/05	168	6.6	7.8	7.1	100
10/17/05 - 10/23/05	168	6.7	7.7	7.1	100
10/24/05 - 10/30/05	168	6.2	7.9	7.0	100
10/31/05 - 11/06/05	169	6.1	7.9	7.0	100
11/07/05 - 11/13/05	168	2.8	7.3	5.6	95
11/14/05 - 11/20/05	168	7.1	8.6	7.7	100
11/21/05 - 11/27/05	168	7.3	8.9	8.1	100
11/28/05 - 12/04/05	168	6.7	8.7	7.7	100
12/05/05 - 12/11/05	168	8.2	9.2	8.8	100
12/12/05 - 12/18/05	168	8.0	9.7	8.7	100
12/19/05 - 12/25/05	168	8.2	9.9	9.4	100
12/26/05 - 12/31/05	144	7.5	8.6	8.1	100

TABLE A-19: WEEKLY DO SUMMARY STATISTICS AT 104^{TH} AVENUE ON THE CALUMET-SAG CHANNEL DURING 2005

	Number of	Percent DO Values Above			
Monitoring Dates	DO Values	Min	oncentratio Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	8.6	9.4	8.9	100
01/03/05 - 01/09/05	167	8.5	10.4	9.7	100
01/10/05 - 01/16/05	168	8.0	10.1	9.1	100
01/17/05 - 01/23/05	168	9.5	11.1	10.1	100
01/24/05 - 01/30/05	168	7.2	10.0	8.4	100
01/31/05 - 02/06/05	168	6.9	7.8	7.3	100
02/07/05 - 02/13/05	168	7.2	10.3	8.7	100
02/14/05 - 02/20/05	59	9.1	10.3	9.6	100
02/21/05 - 02/27/05	109	7.9	11.8	9.3	100
02/28/05 - 03/06/05	168	8.0	10.9	8.9	100
03/07/05 - 03/13/05	168	8.0	9.1	8.5	100
03/14/05 - 03/20/05	168	7.5	9.3	8.5	100
03/21/05 - 03/27/05	168	7.3	8.7	8.1	100
03/28/05 - 04/03/05	168	6.8	8.8	8.0	100
04/04/05 - 04/10/05	167	5.9	7.6	6.7	100
04/11/05 - 04/17/05	168	6.0	7.5	6.8	100
04/18/05 - 04/24/05	168	5.5	6.8	6.2	100
04/25/05 - 05/01/05	59	6.7	7.3	6.9	100
05/02/05 - 05/08/05	108	7.5	9.0	7.9	100
05/09/05 - 05/15/05	168	5.4	10.6	8.1	100
05/16/05 - 05/22/05	168	4.4	6.9	6.0	100
05/23/05 - 05/29/05	168	3.9	6.0	5.0	100
05/30/05 - 06/05/05	167	3.4	5.4	4.9	100
06/06/05 - 06/12/05	168	2.2	5.3	3.9	88
06/13/05 - 06/19/05	59	3.8	5.2	4.5	100
06/20/05 - 06/26/05			NO DATA	1	
06/27/05 - 07/03/05	109	3.2	6.3	4.2	100
07/04/05 - 07/10/05	168	4.5	6.2	5.3	100
07/11/05 - 07/17/05	168	4.1	6.7	5.2	100
07/18/05 - 07/24/05	84	4.2	7.0	5.6	100
07/25/05 - 07/31/05			NO DATA	1	

TABLE A-19 (Continued): WEEKLY DO SUMMARY STATISTICS AT $104^{\rm TH}$ AVENUE ON THE CALUMET-SAG CHANNEL DURING 2005

	Number of	DO Co	oncentration	n (mg/L)	Percent DO Values Above IPCB Standard		
Monitoring Dates	DO Values	Min	Max	Mean			
08/01/05 - 08/07/05	NO DATA						
08/08/05 - 08/14/05	83	3.5	5.9	4.7	100		
08/15/05 - 08/21/05	168	2.9	7.1	4.9	98		
08/22/05 - 08/28/05	60	4.9	7.1	5.6	100		
08/29/05 - 09/04/05	110	6.2	7.6	6.7	100		
09/05/05 - 09/11/05	168	6.0	8.2	6.7	100		
09/12/05 - 09/18/05	168	4.1	7.7	5.8	100		
09/19/05 - 09/25/05	168	4.6	6.1	5.5	100		
09/26/05 - 10/02/05	167	5.2	7.0	6.2	100		
10/03/05 - 10/09/05	168	4.9	6.9	5.9	100		
10/10/05 - 10/16/05	167	4.6	7.2	6.5	100		
10/17/05 - 10/23/05	168	6.6	7.3	6.9	100		
10/24/05 - 10/30/05	168	5.3	7.6	6.4	100		
10/31/05 - 11/06/05	169	5.7	7.7	7.1	100		
11/07/05 - 11/13/05	168	4.3	7.1	6.2	100		
11/14/05 - 11/20/05	168	6.5	8.6	7.7	100		
11/21/05 - 11/27/05	168	8.0	9.0	8.6	100		
11/28/05 - 12/04/05	58	7.5	8.9	8.2	100		
12/05/05 - 12/11/05			NO DATA	L			
12/12/05 - 12/18/05			NO DATA				
12/19/05 - 12/25/05			NO DATA				
12/26/05 - 12/31/05	84	6.8	8.1	7.4	100		

TABLE A-20: WEEKLY DO SUMMARY STATISTICS AT ROUTE 83 ON THE CALUMET-SAG CHANNEL DURING 2005

	Number of	Percent DO Values Above			
Monitoring Dates	DO Values	Min	oncentratio Max	Mean	IPCB Standard
01/01/05 - 01/02/05	48	8.6	9.4	8.9	100
01/03/05 - 01/09/05	168	8.7	10.3	9.7	100
01/10/05 - 01/16/05	168	8.5	10.6	9.4	100
01/17/05 - 01/23/05	168	9.3	10.5	10.1	100
01/24/05 - 01/30/05	168	7.7	9.6	8.8	100
01/31/05 - 02/06/05	168	7.3	8.2	7.6	100
02/07/05 - 02/13/05	168	7.3	10.8	9.1	100
02/14/05 - 02/20/05	168	9.4	10.6	9.8	100
02/21/05 - 02/27/05	168	8.1	9.6	8.6	100
02/28/05 - 03/06/05	168	8.3	9.4	8.8	100
03/07/05 - 03/13/05	168	7.2	8.8	8.4	100
03/14/05 - 03/20/05	168	8.0	9.1	8.5	100
03/21/05 - 03/27/05	167	7.3	8.9	8.3	100
03/28/05 - 04/03/05	168	6.4	8.8	7.8	100
04/04/05 - 04/10/05	167	5.2	7.1	6.3	100
04/11/05 - 04/17/05	61	5.4	7.1	6.3	100
04/18/05 - 04/24/05	109	5.5	6.8	6.2	100
04/25/05 - 05/01/05	168	6.1	7.8	7.0	100
05/02/05 - 05/08/05	59	6.0	7.7	7.2	100
05/09/05 - 05/15/05	83	4.4	9.4	6.7	100
05/16/05 - 05/22/05	168	4.6	6.6	5.5	100
05/23/05 - 05/29/05	167	3.5	6.0	4.7	100
05/30/05 - 06/05/05	168	2.7	5.1	4.3	96
06/06/05 - 06/12/05	168	1.8	4.1	2.9	44
06/13/05 - 06/19/05	168	2.5	5.4	4.1	95
06/20/05 - 06/26/05	168	4.1	7.6	5.3	100
06/27/05 - 07/03/05	168	3.4	6.4	4.3	100
07/04/05 - 07/10/05	168	3.3	6.5	5.0	100
07/11/05 - 07/17/05	168	3.7	6.9	5.0	100
07/18/05 - 07/24/05	168	4.5	7.6	5.7	100
07/25/05 - 07/31/05	168	3.1	6.7	4.5	100

TABLE A-20 (Continued): WEEKLY DO SUMMARY STATISTICS AT ROUTE 83 ON THE CALUMET-SAG CHANNEL DURING 2005

Monitoring Dates	Number of	DO Concentration (mg/L)			Percent DO Values Above
	DO Values	Min	Max	Mean	IPCB Standard
08/01/05 - 08/07/05	168	4.1	10.2	6.5	100
08/08/05 - 08/14/05	168	2.8	8.1	5.5	98
08/15/05 - 08/21/05	168	2.3	7.1	4.9	94
08/22/05 - 08/28/05	167	5.2	7.8	6.3	100
08/29/05 - 09/04/05	168	5.5	8.6	6.5	100
09/05/05 - 09/11/05	168	5.3	8.8	6.5	100
09/12/05 - 09/18/05	168	4.5	8.8	5.9	100
09/19/05 - 09/25/05	167	4.4	6.0	5.3	100
09/26/05 - 10/02/05	168	4.8	7.2	6.0	100
10/03/05 - 10/09/05	168	4.9	6.9	6.0	100
10/10/05 - 10/16/05	168	5.2	7.1	6.2	100
10/17/05 - 10/23/05	168	5.9	7.0	6.5	100
10/24/05 - 10/30/05	168	5.9	7.5	6.6	100
10/31/05 - 11/06/05	169	5.9	7.5	6.8	100
11/07/05 - 11/13/05	168	5.3	7.2	6.4	100
11/14/05 - 11/20/05	168	5.7	8.4	7.5	100
11/21/05 - 11/27/05	168	7.2	8.9	8.3	100
11/28/05 - 12/04/05	168	6.9	8.7	7.8	100
12/05/05 - 12/11/05	169	6.6	9.4	8.2	100
12/12/05 - 12/18/05	168	8.6	10.6	10.1	100
12/19/05 - 12/25/05	168	8.7	10.5	9.5	100
12/26/05 - 12/31/05	144	6.9	9.3	8.2	100