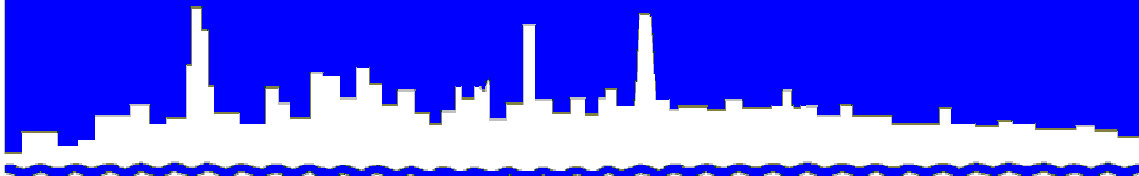


*Protecting Our Water Environment*



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

***RESEARCH AND DEVELOPMENT  
DEPARTMENT***

***REPORT NO. 07-28***

***CONTINUOUS DISSOLVED OXYGEN MONITORING***

***IN CHICAGO AREA WADEABLE STREAMS***

***DURING 2006***

***May 2007***

**Metropolitan Water Reclamation District of Greater Chicago**

100 East Erie Street Chicago, Illinois 60611-2803 312-751-5600

**CONTINUOUS DISSOLVED OXYGEN MONITORING  
IN CHICAGO AREA WADEABLE STREAMS  
DURING 2006**

**By**

**Thomas A. Minarik, Jr.  
Biologist I**

**Michael Sopcak  
Biologist III**

**Jennifer L. Wasik  
Biologist II**

**Samuel G. Dennison  
Biologist IV**

**Research and Development Department  
Louis Kollias, Director**

**May 2007**

## TABLE OF CONTENTS

	<u>Page</u>
LIST OF TABLES	ii
LIST OF FIGURES	iv
ACKNOWLEDGEMENT	v
DISCLAIMER	v
INTRODUCTION	1
MONITORING STATIONS	2
Locations and Descriptions	2
Designated Uses	2
Water Quality Standards	2
MATERIALS AND METHODS	3
Water Quality Monitor	3
Data Management and Review	3
Verification of Representative Data	4
RESULTS	5
REFERENCES	26
APPENDIX:	
A Weekly DO Summary Statistics at all Wadeable Stream Monitoring Stations During 2006	A-1

## LIST OF TABLES

<u>Table No.</u>		<u>Page</u>
1	Wadeable Stream Continuous Dissolved Oxygen Monitoring Stations	6
2	Minimum, Maximum, and Mean Hourly Dissolved Oxygen Concentrations	9
3	Number and Percent of Dissolved Oxygen Values Not Meeting Acceptance Criteria	10
4	Number and Percent of Dissolved Oxygen Values Measured Above the Illinois Pollution Control Board's Water Quality Standard	11
5	Percent of Dissolved Oxygen Values in Selected Ranges	12
A-1	Weekly DO Summary Statistics at Central Park Avenue on the North Branch Chicago River During 2006	A-1
A-2	Weekly DO Summary Statistics at Devon Avenue on the Des Plaines River During 2006	A-3
A-3	Weekly DO Summary Statistics at Irving Park Road on the Des Plaines River During 2006	A-5
A-4	Weekly DO Summary Statistics at Ogden Avenue on the Des Plaines River During 2006	A-7
A-5	Weekly DO Summary Statistics at Material Service Road on the Des Plaines River During 2006	A-9
A-6	Weekly DO Summary Statistics at Busse Lake Dam on Salt Creek During 2006	A-11
A-7	Weekly DO Summary Statistics at J. F. Kennedy Boulevard on Salt Creek During 2006	A-13
A-8	Weekly DO Summary Statistics at Thorndale Avenue on Salt Creek During 2006	A-15
A-9	Weekly DO Summary Statistics at Wolf Road on Salt Creek During 2006	A-17

## LIST OF TABLES (Continued)

<u>Table No.</u>		<u>Page</u>
A-10	Weekly DO Summary Statistics at Hohman Avenue on the Grand Calumet River During 2006	A-19
A-11	Weekly DO Summary Statistics at Wentworth Avenue on the Little Calumet River During 2006	A-21
A-12	Weekly DO Summary Statistics at Ashland Avenue on the Little Calumet River During 2006	A-23

## LIST OF FIGURES

<u>Figure No.</u>		<u>Page</u>
1	Continuous Dissolved Oxygen Monitoring and Ambient Water Quality Monitoring Sample Stations	13
2	Dissolved Oxygen Concentration Measured Hourly at Central Park Avenue on the North Branch Chicago River From January 2006 Through December 2006	14
3	Dissolved Oxygen Concentration Measured Hourly at Devon Avenue on the Des Plaines River From January 2006 Through December 2006	15
4	Dissolved Oxygen Concentration Measured Hourly at Irving Park Road on the Des Plaines River From January 2006 Through December 2006	16
5	Dissolved Oxygen Concentration Measured Hourly at Ogden Avenue on the Des Plaines River From January 2006 Through December 2006	17
6	Dissolved Oxygen Concentration Measured Hourly at Material Service Road on the Des Plaines River From January 2006 Through December 2006	18
7	Dissolved Oxygen Concentration Measured Hourly at Busse Lake Dam on Salt Creek From January 2006 Through December 2006	19
8	Dissolved Oxygen Concentration Measured Hourly at J. F. Kennedy Boulevard on Salt Creek From January 2006 Through December 2006	20
9	Dissolved Oxygen Concentration Measured Hourly at Thorndale Avenue on Salt Creek From January 2006 Through December 2006	21
10	Dissolved Oxygen Concentration Measured Hourly at Wolf Road on Salt Creek From January 2006 Through December 2006	22
11	Dissolved Oxygen Concentration Measured Hourly at Hohman Avenue on the Grand Calumet River From January 2006 Through December 2006	23
12	Dissolved Oxygen Concentration Measured Hourly at Wentworth Avenue on the Little Calumet River From January 2006 Through December 2006	24
13	Dissolved Oxygen Concentration Measured Hourly at Ashland Avenue on the Little Calumet River From January 2006 Through December 2006	25

## **ACKNOWLEDGMENT**

Thanks are extended to staff from the Industrial Waste Division who deployed and retrieved the water quality monitors weekly during the study. Special thanks to Richard Schackart, Justin Vick, Dustin Gallagher, Donald Rohe, Angel Whittington, Panu Lansiri, and Colleen Joyce for downloading and servicing the monitors.

Thanks are also extended to Dr. Thomas Granato, Assistant Director of Research and Development, Environmental Monitoring and Research Division, for his helpful review comments.

We thank Robert Larson, Illinois State Water Survey, for designing the Access<sup>®</sup> database program, and Roger Smith, Senior Program Analyst, Information Technology Department, for modifying the database program. Their help with the Access<sup>®</sup> program is greatly appreciated.

We thank Dr. Zainul Abedin, Biostatistician, for modifying the database program and for performing the calculations for the data summaries used in this report.

Particular thanks are due to Joan Scrima for formatting, and typing the report.

## **DISCLAIMER**

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

## 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 dissolved oxygen (DO) concentrations to fall below DO standards established by the Illinois Pollution Control Board (IPCB). More than 30 years ago, the Metropolitan Water Reclamation District of Greater Chicago (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 water reclamation plants (WRPs), Calumet, North Side, and Stickney, and by the capture and treatment of combined sewer overflows (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 sidestream elevated pool aeration [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 and has since been extended. Subsequently, the scope of the monitoring program was first expanded to include the Calumet River System, and then later the Chicago area wadeable streams.

Data in this report are from the 12 wadeable stream continuous DO monitoring stations of the District's Continuous Dissolved Oxygen Monitoring (CDOM) Program. This report covers the monitoring results for the period January 2006 through December 2006 for wadeable streams in the Chicago River System, Des Plaines River System, and Calumet River System.



## MONITORING STATIONS

### Locations and Descriptions

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 streams and deep-draft waterways within its jurisdiction. All stations for both programs are shown in Figure 1. Descriptions of the wadeable CDOM stations are listed in Table 1.

### Designated Uses

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, the deep-draft Chicago and Calumet Rivers, and the wadeable streams of the Chicago, Des Plaines, and Calumet River Systems.

Secondary Contact Waters include the North Shore Channel from the North Side WRP to the North Branch Chicago River, the North Branch Chicago River from the North Shore Channel to the Chicago River, the South Branch 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.

### Water Quality Standards

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.

## MATERIALS AND METHODS

### Water Quality Monitor

The continuous water quality monitors (monitor) used to collect these data were manufactured by YSI Incorporated (YSI) of Yellow Springs, Ohio. DO was measured hourly using the YSI Model 6920 or Model 6600 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. Installation designs resulted in a fixed length of pipe at each location with multiple 2-inch circular openings on the submerged end to allow sufficient flow of water through the pipe. Each monitor housing was vertically mounted on the side of a bridge abutment with an access hatch on the top end to allow for the exchange of monitors.

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<sup>®</sup> 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).
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 2006, cross-sectional DO surveys were conducted in the CWS and Des Plaines River System 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

The annual minimum, maximum, and mean DO concentrations measured at all 12 stations during 2006 are shown in Table 2.

The number and percent of measured DO concentrations rejected and removed from the Access<sup>®</sup> database following review during 2006 are summarized in Table 3.

The number and percent of DO concentrations above the applicable IPCB DO standard for each waterway during 2006 are presented in Table 4. The DO data shown in Table 4 do not include the DO concentrations rejected during the data review.

Table 5 shows the percent distribution of DO concentrations from <1.0 mg/L to >5.0 mg/L at the 12 monitoring stations during 2006. The current national one-day minimum dissolved oxygen criterion for adult life stages of fish is 3.0 mg/L (Chapman, 1986).

Individual line drawings showing hourly DO concentrations at each monitoring station are indicated in Figure 2 through Figure 13.

Weekly DO summary statistics during 2006 are presented for each monitoring station in Appendix A, Tables A-1 through A-12.

TABLE 1: WADEABLE STREAM CONTINUOUS DISSOLVED OXYGEN MONITORING STATIONS

Monitoring Station	Waterway	Description of Monitoring Station
<u>Chicago River System</u>		
Central Park Avenue	North Branch Chicago River	0.8 mile above junction with North Shore Channel, water quality monitor on northeast side of Central Park Avenue bridge, 2 feet below water surface.
<u>Des Plaines River System</u>		
Devon Avenue	Des Plaines River	0.7 mile above junction with Willow Creek, water quality monitor on northwest side of Devon Avenue bridge, 2 feet below water surface.
Irving Park Road	Des Plaines River	3.1 miles below junction with Willow Creek, water quality monitor on northeast side of Irving Park Road bridge, 2 feet below water surface.
Ogden Avenue	Des Plaines River	1.7 miles below junction with Salt Creek, 25.8 miles above junction with Chicago Sanitary and Ship Canal, water quality monitor on center of south side of Ogden Avenue bridge, 2 feet below water surface.
Material Service Road	Des Plaines River	3.2 miles above junction with Chicago Sanitary & Ship Canal, water quality monitor on center of northwest side of Material Service Road bridge, 2 feet below water surface.

TABLE 1 (Continued): WADEABLE STREAM CONTINUOUS DISSOLVED OXYGEN MONITORING STATIONS

Monitoring Station	Waterway	Description of Monitoring Station
<u>Des Plaines River System (Continued)</u>		
Busse Lake Dam	Salt Creek	0.1 mile above Egan WRP outfall, water quality monitor on bike path bridge support, downstream of Busse Woods South Dam, in center of creek, 2 feet below water surface.
J. F. Kennedy Boulevard	Salt Creek	0.8 mile below Egan WRP outfall, water quality monitor on southeast side of J. F. Kennedy Boulevard bridge, 2 feet below water surface.
Thorndale Avenue	Salt Creek	2.6 miles below Egan WRP outfall, water quality monitor on southeast side of Thorn-dale Avenue bridge, 2 feet below water surface.
Wolf Road	Salt Creek	8.0 miles above junction with Des Plaines River, water quality monitor on northwest side of Wolf Road bridge, 1 foot below water surface.
<u>Calumet River System</u>		
Hohman Avenue	Grand Calumet River	3.1 miles above junction with Calumet River, water quality monitor on southeast side of Hohman Avenue bridge, 1 foot below water surface.

TABLE 1 (Continued): WADEABLE STREAM CONTINUOUS DISSOLVED OXYGEN MONITORING STATIONS

Monitoring Station	Waterway	Description of Monitoring Station
<u>Calumet River System (Continued)</u>		
Wentworth Avenue	Little Calumet River	12.4 miles above junction with Calumet-Sag Channel, water quality monitor on center of east side of Wentworth Avenue bridge, 2 feet below water surface.
Ashland Avenue	Little Calumet River	0.5 mile above junction with Calumet-Sag Channel, water quality monitor attached to east side Ashland Avenue bridge, 2 feet below water surface.

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

Monitoring Station	Waterway	DO Concentration (mg/L)		
		Minimum	Maximum	Mean
<u>Chicago River System</u>				
Central Park Avenue	North Branch Chicago River	0.1	18.0	8.8
<u>Des Plaines River System</u>				
Devon Avenue	Des Plaines River	0.0	15.5	9.1
Irving Park Road	Des Plaines River	1.9	15.7	8.9
Ogden Avenue	Des Plaines River	4.2	15.4	9.9
Material Service Road	Des Plaines River	4.1	19.5	10.1
Busse Lake Dam	Salt Creek	0.3	17.6	10.6
J. F. Kennedy Boulevard	Salt Creek	5.1	13.5	9.1
Thorndale Avenue	Salt Creek	2.8	16.0	9.2
Wolf Road	Salt Creek	3.1	16.1	9.2
<u>Calumet River System</u>				
Hohman Avenue	Grand Calumet River	0.0	10.9	2.7
Wentworth Avenue	Little Calumet River	0.0	14.3	7.8
Ashland Avenue	Little Calumet River	2.6	14.9	7.9

<sup>1</sup>Dissolved 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<sup>1</sup>

Monitoring Station	Waterway	Number of DO Values Rejected	Percent of DO Values Rejected
<u>Chicago River System</u>			
Central Park Avenue	North Branch Chicago River	169	2
<u>Des Plaines River System</u>			
Devon Avenue	Des Plaines River	339	4
Irving Park Road	Des Plaines River	186	2
Ogden Avenue	Des Plaines River	1	0
Material Service Road	Des Plaines River	923	11
Busse Lake Dam	Salt Creek	237	3
J. F. Kennedy Boulevard	Salt Creek	0	0
Thorndale Avenue	Salt Creek	1,180	14
Wolf Road	Salt Creek	193	2
<u>Calumet River System</u>			
Hohman Avenue	Grand Calumet River	5,462	62
Wentworth Avenue	Little Calumet River	252	3
Ashland Avenue	Little Calumet River	361	4

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

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

Monitoring Station	Waterway	IPCB DO Standard	Number of DO Values	Number Above Standard	Percent Above Standard
<u>Chicago River System</u>					
Central Park Avenue	North Branch Chicago River	5	8,591	7,858	92
<u>Des Plaines River System</u>					
Devon Avenue	Des Plaines River	5	8,421	7,283	87
Irving Park Road	Des Plaines River	5	8,574	7,597	89
Ogden Avenue	Des Plaines River	5	8,759	8,719	>99
Material Service Road	Des Plaines River	5	7,837	7,757	99
Busse Lake Dam	Salt Creek	5	8,523	8,315	98
J. F. Kennedy Boulevard	Salt Creek	5	8,760	8,760	100
Thorndale Avenue	Salt Creek	5	7,580	7,477	99
Wolf Road	Salt Creek	5	8,567	8,185	96
<u>Calumet River System</u>					
Hohman Avenue	Grand Calumet River	5	3,298	433	13
Wentworth Avenue	Little Calumet River	5	8,508	6,513	77
Ashland Avenue	Little Calumet River	5	8,399	6,652	79

<sup>1</sup>Dissolved 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 Station	Waterway	Percent of DO Values in Range (mg/L)					
		0-<1	1-<2	2-<3	3-<4	4-<5	≥5
<u>Chicago River System</u>							
Central Park Avenue	North Branch Chicago River	<1	<1	<1	1	7	92
<u>Des Plaines River System</u>							
Devon Avenue	Des Plaines River	<1	<1	2	4	7	87
Irving Park Road	Des Plaines River	0	0	1	4	6	89
Ogden Avenue	Des Plaines River	0	0	0	0	<1	>99
Material Service Road	Des Plaines River	0	0	0	0	1	99
Busse Lake Dam	Salt Creek	<1	<1	<1	<1	<1	98
J. F. Kennedy Boulevard	Salt Creek	0	0	0	0	0	100
Thorndale Avenue	Salt Creek	0	0	0	<1	1	99
Wolf Road	Salt Creek	0	0	0	<1	4	96
<u>Calumet River System</u>							
Hohman Avenue	Grand Calumet River	24	18	15	16	13	13
Wentworth Avenue	Little Calumet River	<1	<1	3	8	12	77
Ashland Avenue	Little Calumet River	0	0	<1	7	14	79



FIGURE 2: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT CENTRAL PARK AVENUE ON THE NORTH BRANCH CHICAGO RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

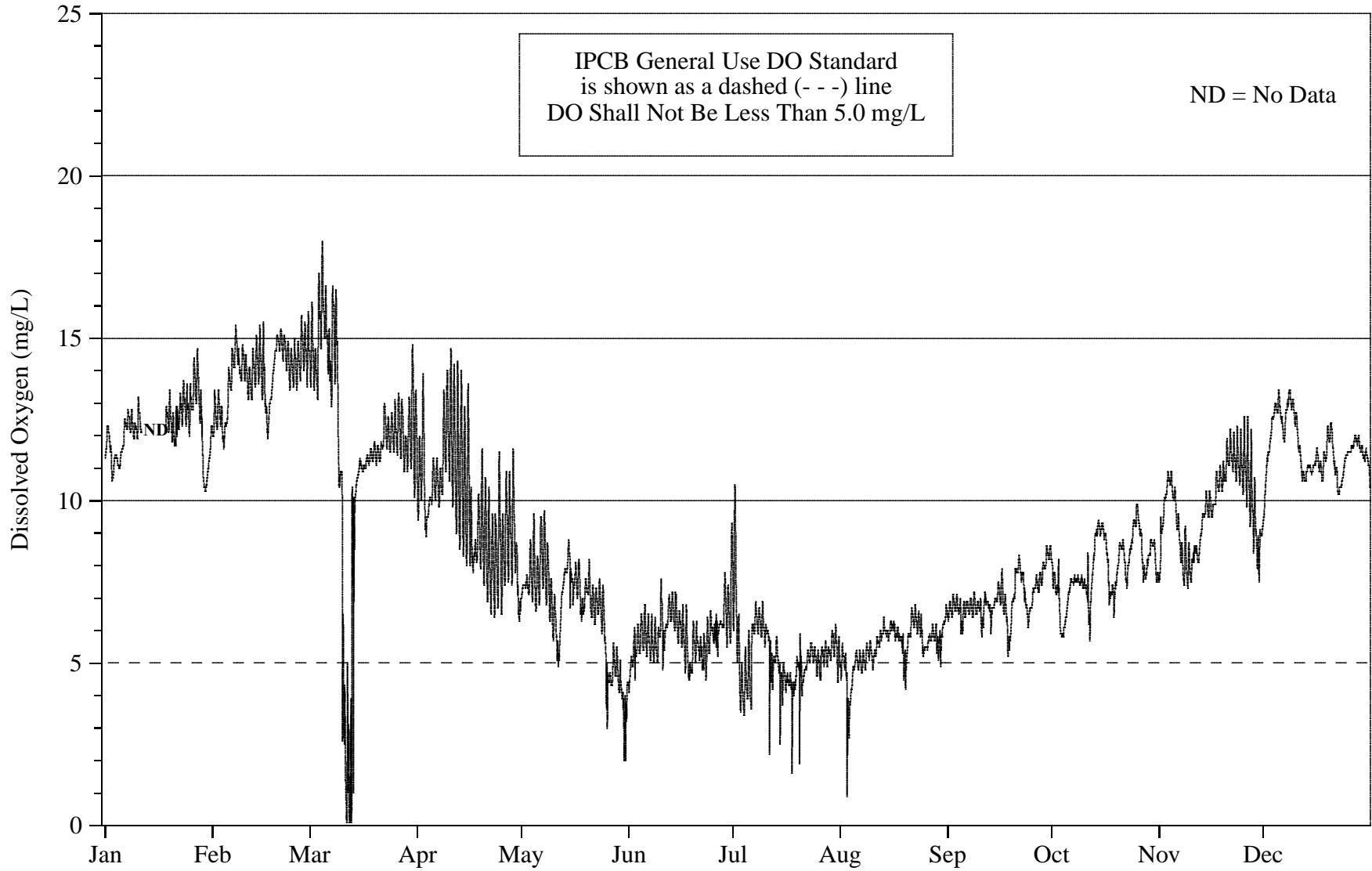


FIGURE 3: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT DEVON AVENUE ON THE DES PLAINES RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

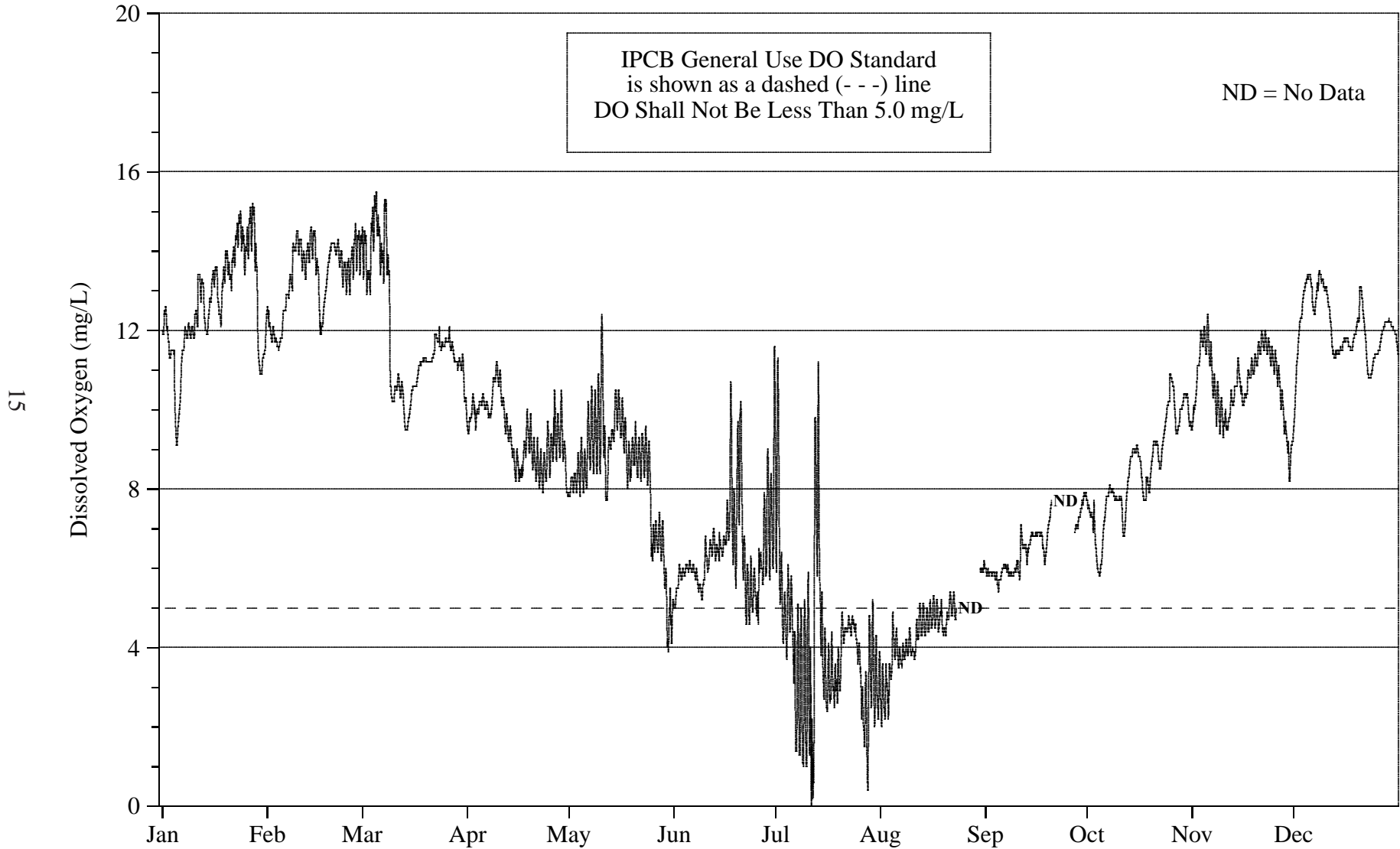


FIGURE 4: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT IRVING PARK ROAD ON THE DES PLAINES RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

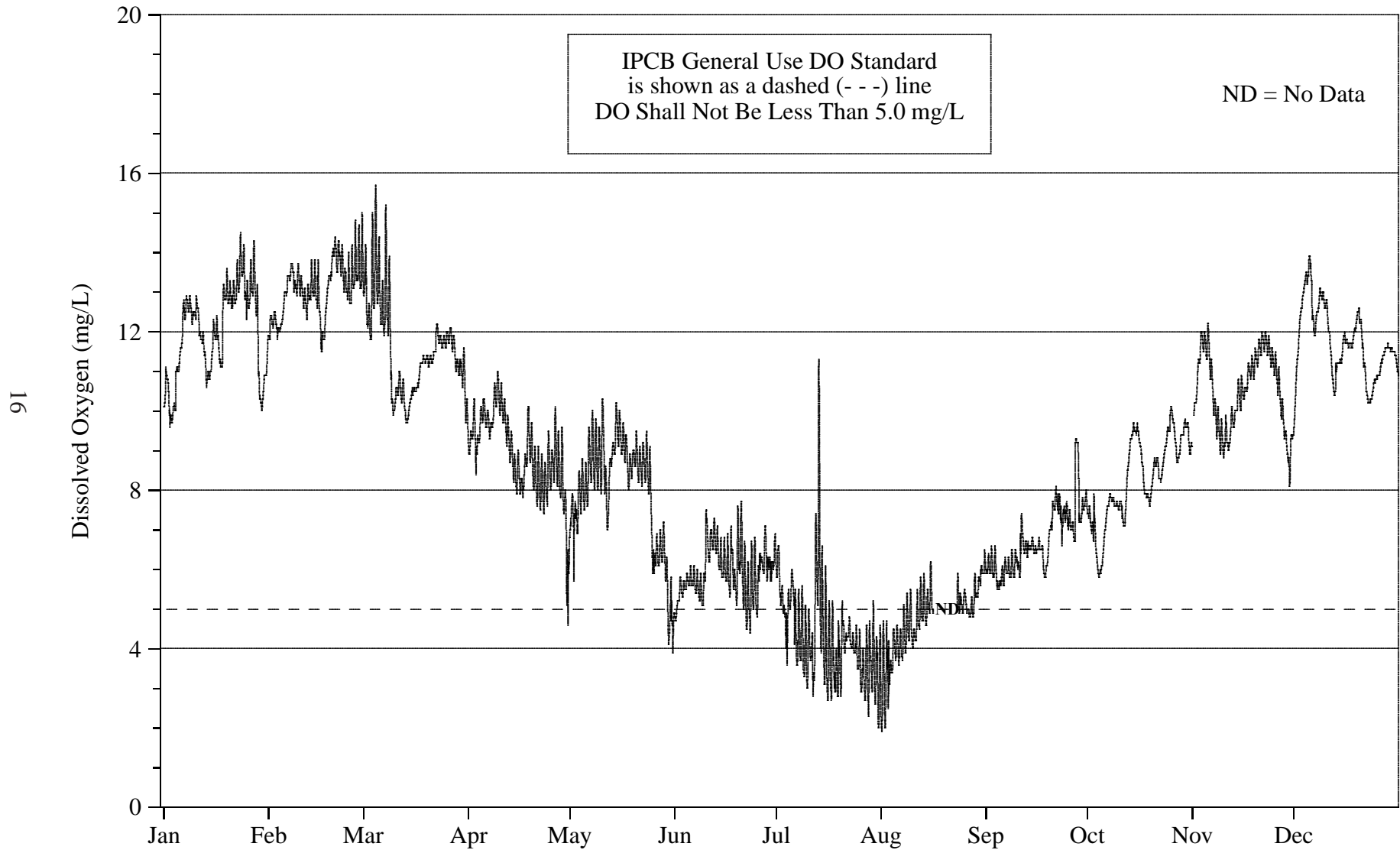


FIGURE 5: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT OGDEN AVENUE ON THE DES PLAINES RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

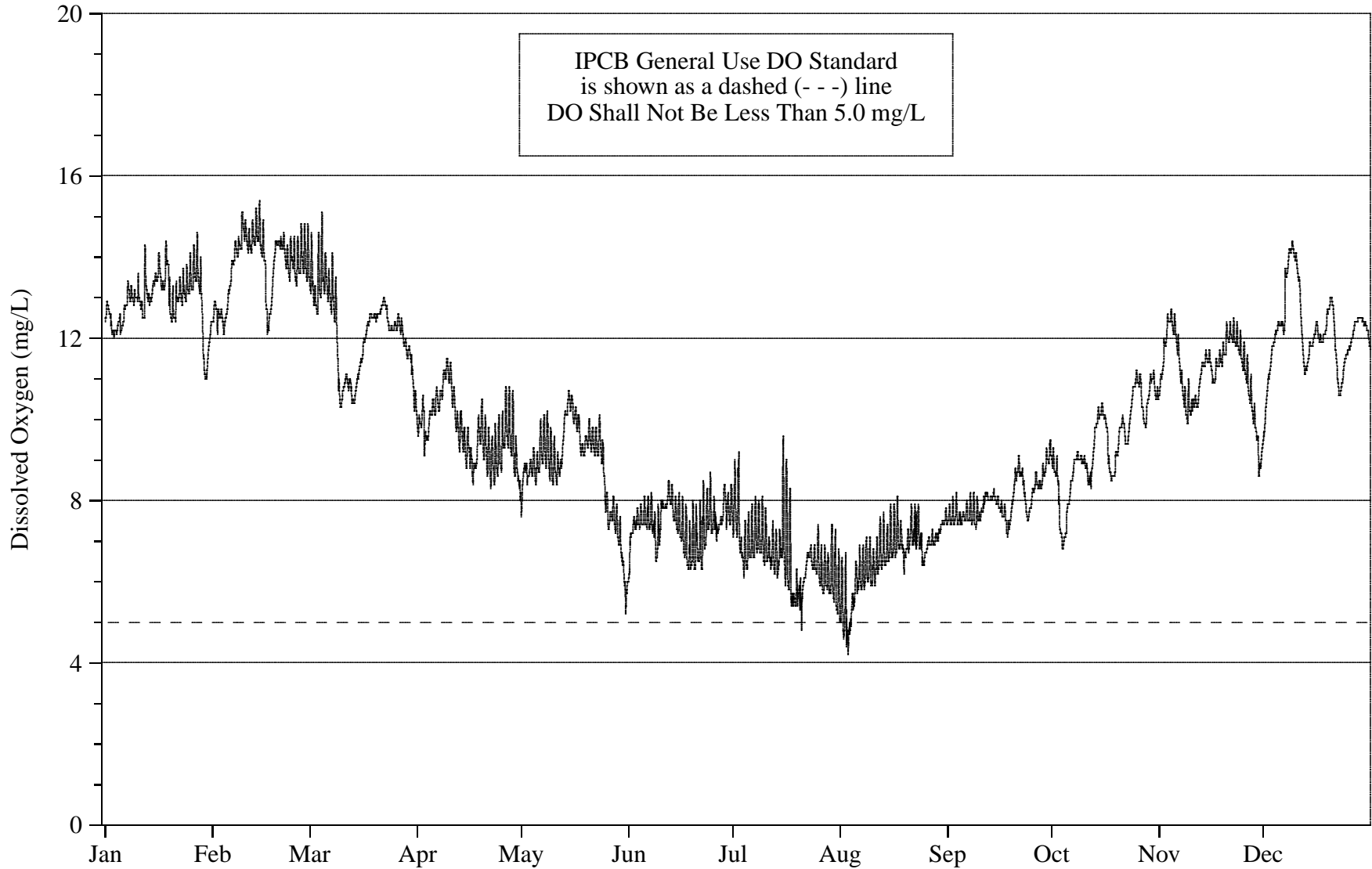




FIGURE 6: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT MATERIAL SERVICE ROAD ON THE DES PLAINES RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

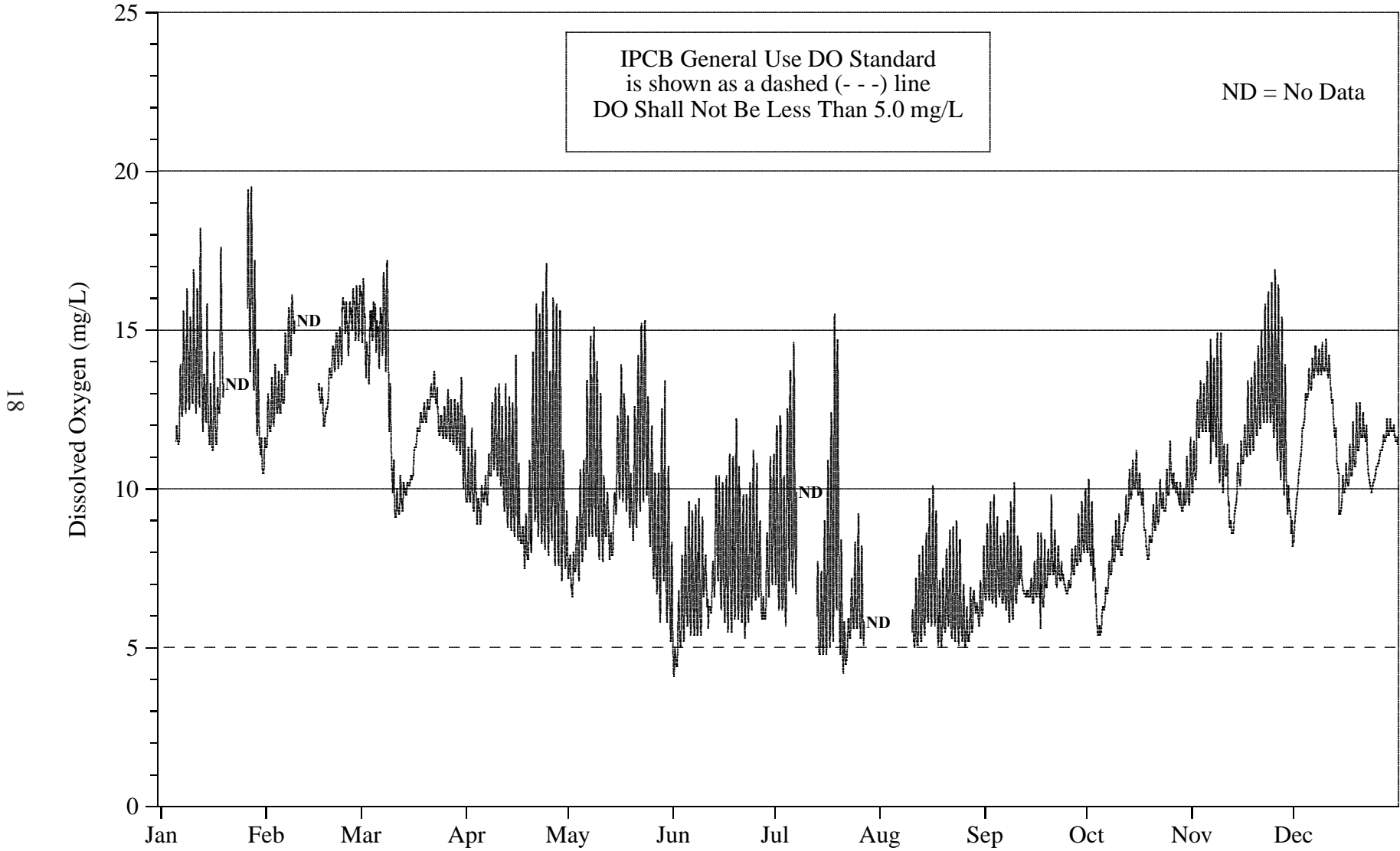


FIGURE 7: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT BUSSE LAKE DAM ON SALT CREEK FROM JANUARY 2006 THROUGH DECEMBER 2006

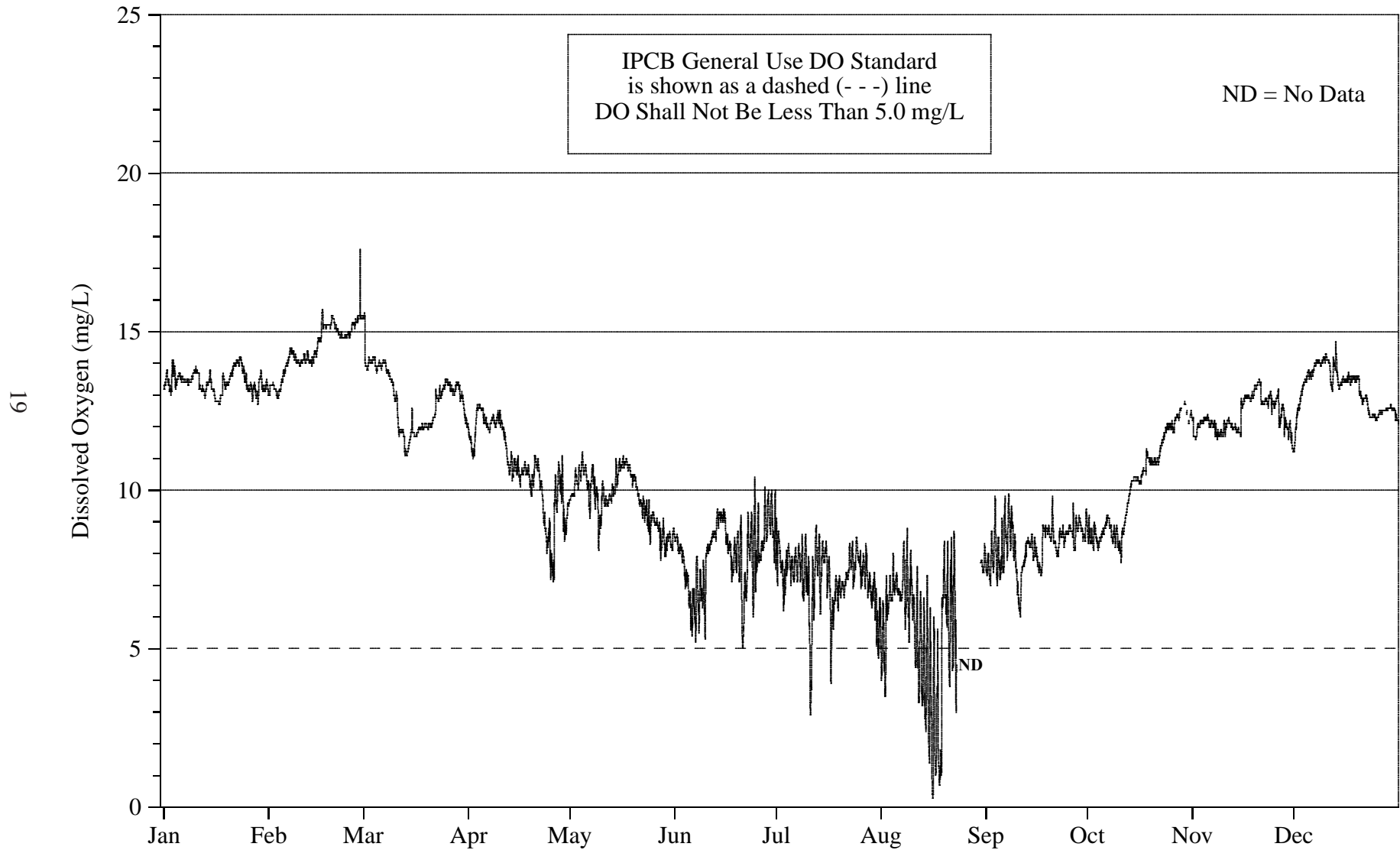


FIGURE 8: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT J. F. KENNEDY BOULEVARD ON SALT CREEK FROM JANUARY 2006 THROUGH DECEMBER 2006

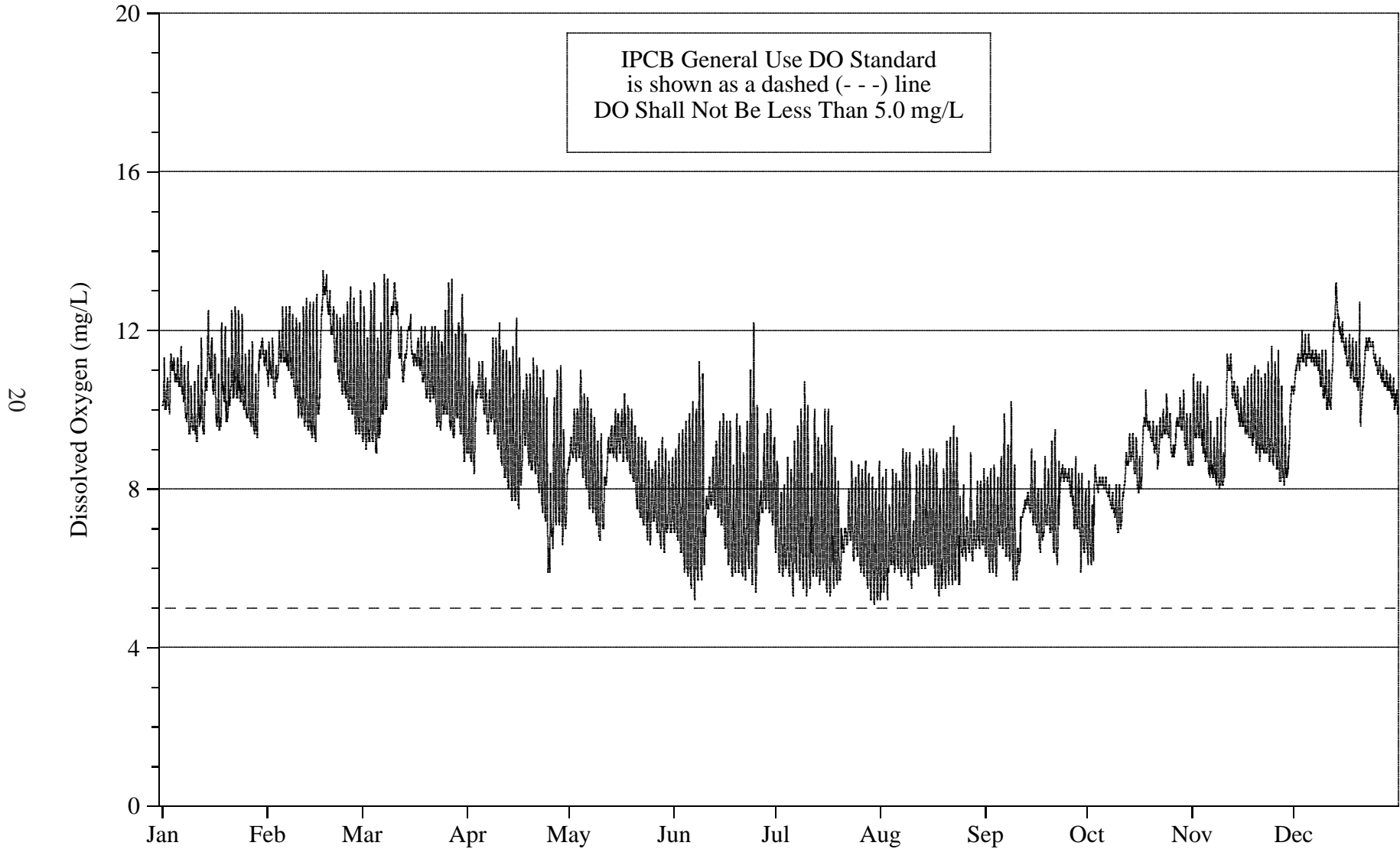


FIGURE 9: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT THORNDALE AVENUE ON SALT CREEK FROM JANUARY 2006 THROUGH DECEMBER 2006

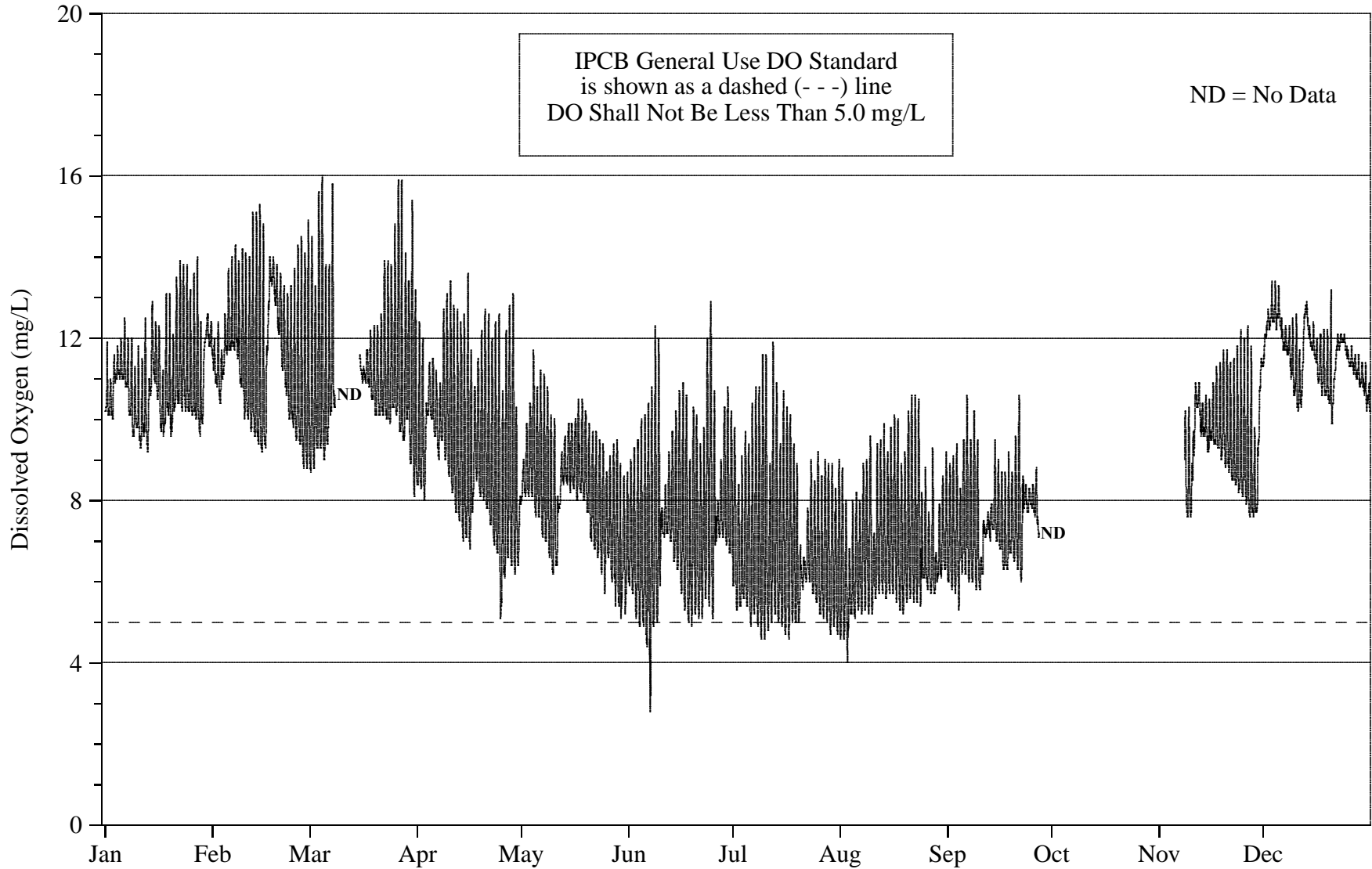


FIGURE 10: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT WOLF ROAD ON SALT CREEK FROM JANUARY 2006 THROUGH DECEMBER 2006

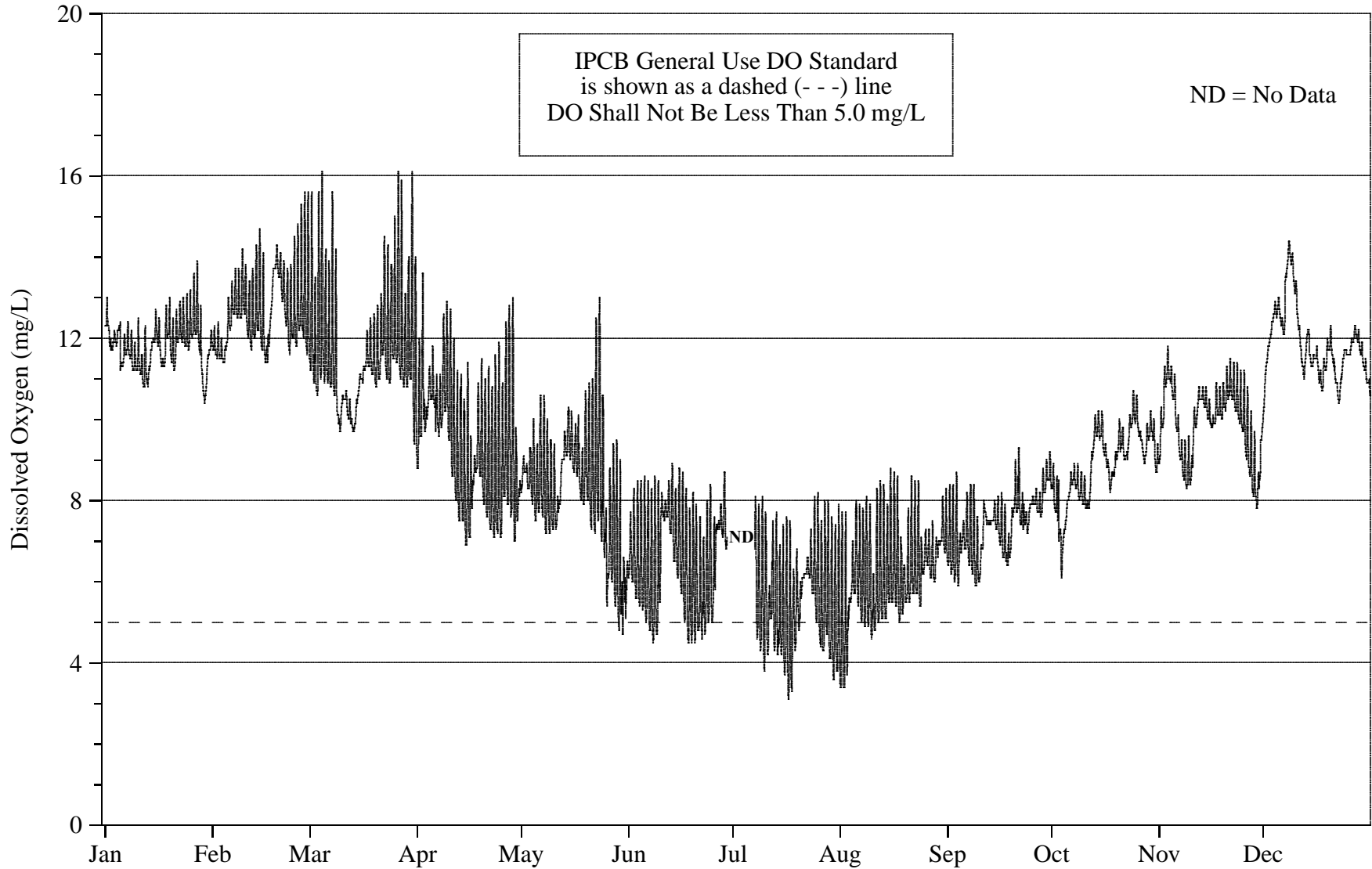
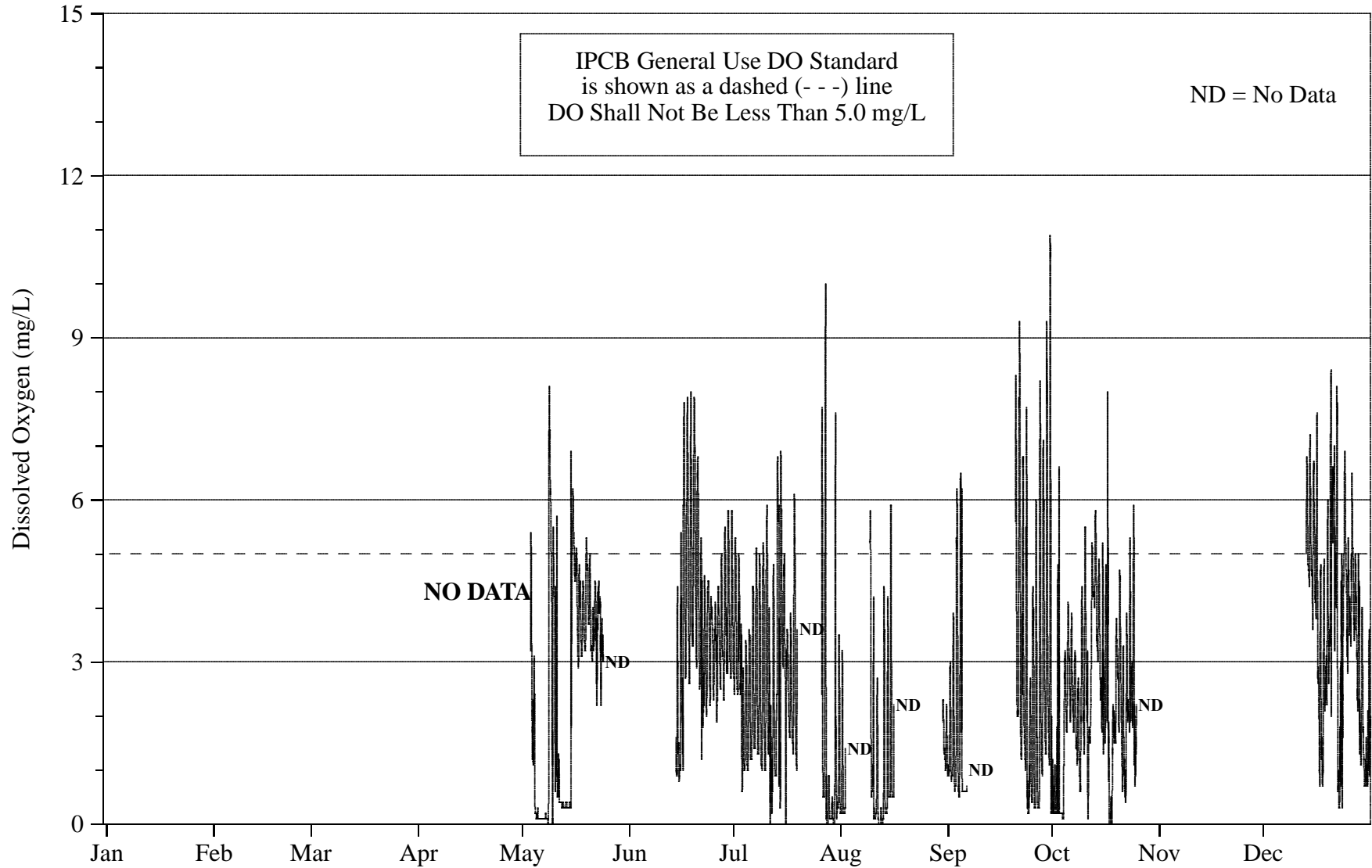


FIGURE 11: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT HOHMAN AVENUE ON THE GRAND CALUMET RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006



IPCB General Use DO Standard  
is shown as a dashed (- - -) line  
DO Shall Not Be Less Than 5.0 mg/L

ND = No Data

FIGURE 12: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT WENTWORTH AVENUE ON THE LITTLE CALUMET RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006

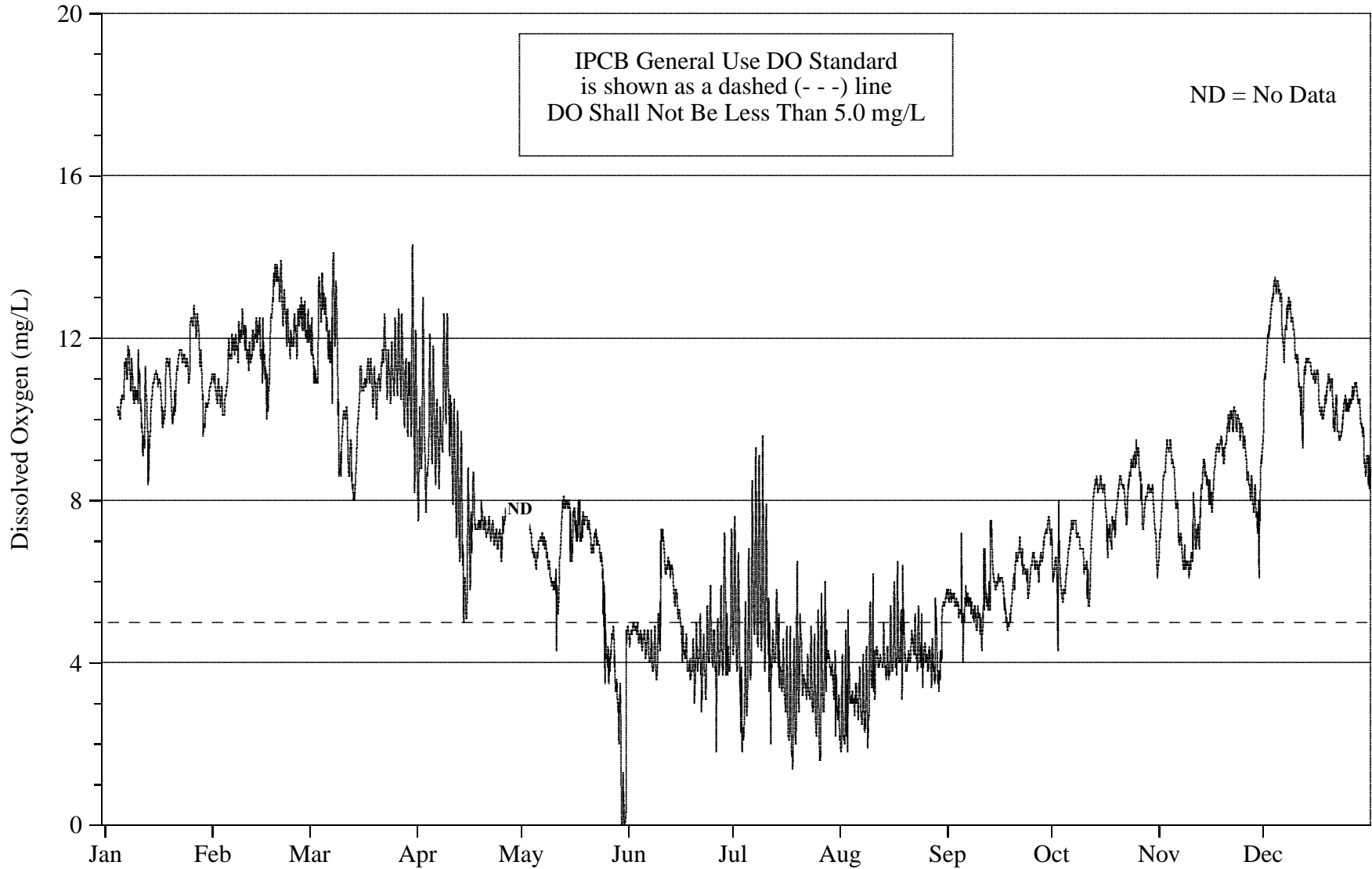
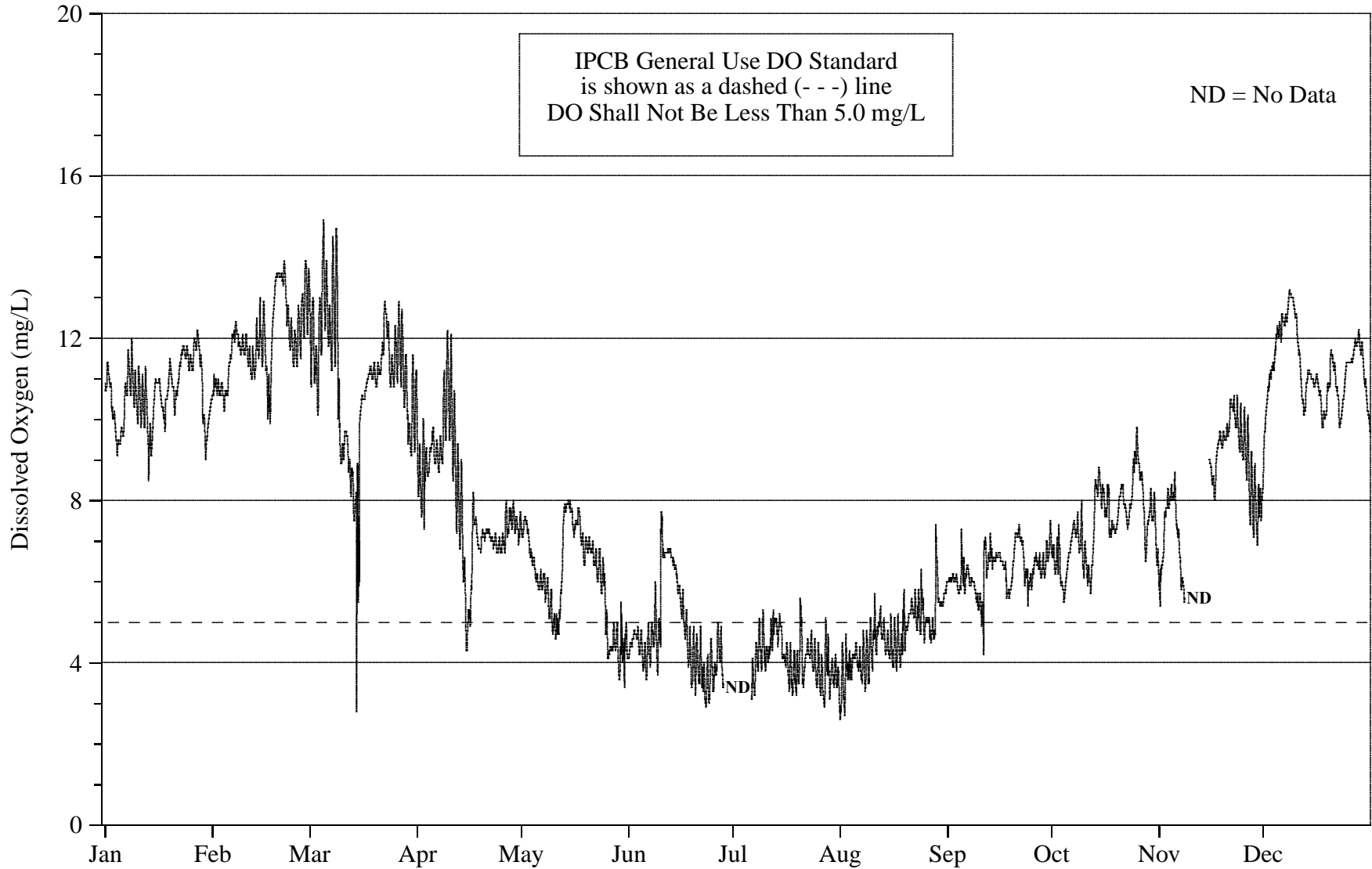


FIGURE 13: DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT ASHLAND AVENUE ON THE LITTLE CALUMET RIVER FROM JANUARY 2006 THROUGH DECEMBER 2006





## **REFERENCES**

Chapman, G., "Water Quality Criteria for Dissolved Oxygen," EPA 440/5-86-003, United States Environmental Protection Agency, Office of Water Regulations and Standards, Washington, D.C., 1986.

Lanyon, R., "Description of the Chicago Waterway System," Use Attainability Analysis Study Conducted by Illinois Environmental Protection Agency in Cooperation with Metropolitan Water Reclamation District of Greater Chicago, Illinois, May 2002.

APPENDIX A

WEEKLY DO SUMMARY STATISTICS AT ALL WADEABLE STREAM  
MONITORING STATIONS DURING 2006

TABLE A-1: WEEKLY DO SUMMARY STATISTICS AT CENTRAL PARK AVENUE  
ON THE NORTH BRANCH CHICAGO RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	11.3	12.3	11.9	100
01/02/06 - 01/08/06	168	10.6	12.8	11.7	100
01/09/06 - 01/15/06	60	11.9	13.2	12.3	100
01/16/06 - 01/22/06	108	11.7	13.4	12.5	100
01/23/06 - 01/29/06	168	10.3	14.7	12.8	100
01/30/06 - 02/05/06	168	10.3	14.1	12.2	100
02/06/06 - 02/12/06	168	13.1	15.4	14.1	100
02/13/06 - 02/19/06	168	11.9	15.5	13.9	100
02/20/06 - 02/26/06	168	13.4	15.7	14.5	100
02/27/06 - 03/05/06	168	13.1	18.0	15.0	100
03/06/06 - 03/12/06	168	0.1	16.6	9.5	67
03/13/06 - 03/19/06	168	0.1	11.8	10.5	96
03/20/06 - 03/26/06	168	11.1	13.3	12.0	100
03/27/06 - 04/02/06	168	9.4	14.8	11.9	100
04/03/06 - 04/09/06	167	8.9	14.0	10.7	100
04/10/06 - 04/16/06	168	8.0	14.7	11.0	100
04/17/06 - 04/23/06	168	6.4	11.6	8.6	100
04/24/06 - 04/30/06	168	6.3	11.6	8.5	100
05/01/06 - 05/07/06	168	6.6	9.7	7.8	100
05/08/06 - 05/14/06	168	4.9	8.8	7.0	99
05/15/06 - 05/21/06	168	6.3	8.3	7.3	100
05/22/06 - 05/28/06	168	3.0	7.6	5.6	61
05/29/06 - 06/04/06	168	2.0	6.5	4.8	46
06/05/06 - 06/11/06	168	4.8	7.6	5.8	96
06/12/06 - 06/18/06	168	4.5	7.2	6.1	86
06/19/06 - 06/25/06	168	4.5	6.6	5.6	83
06/26/06 - 07/02/06	168	5.0	10.5	6.7	99
07/03/06 - 07/09/06	167	3.4	6.9	5.3	59
07/10/06 - 07/16/06	168	2.2	6.2	5.0	51
07/17/06 - 07/23/06	168	1.6	5.9	4.7	29
07/24/06 - 07/30/06	168	4.5	6.2	5.3	79
07/31/06 - 08/06/06	168	0.9	5.8	4.7	36
08/07/06 - 08/13/06	168	4.7	6.4	5.4	85

TABLE A-1 (Continued): WEEKLY DO SUMMARY STATISTICS AT CENTRAL PARK AVENUE ON THE NORTH BRANCH CHICAGO RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	4.2	6.3	5.7	90
08/21/06 - 08/27/06	168	5.2	6.8	6.0	100
08/28/06 - 09/03/06	168	4.9	7.1	6.3	99
09/04/06 - 09/10/06	168	5.8	7.2	6.6	100
09/11/06 - 09/17/06	168	5.9	7.9	6.9	100
09/18/06 - 09/24/06	168	5.2	8.3	7.0	100
09/25/06 - 10/01/06	168	6.7	8.6	7.7	100
10/02/06 - 10/08/06	168	5.8	8.2	7.0	100
10/09/06 - 10/15/06	168	5.7	9.4	8.0	100
10/16/06 - 10/22/06	168	6.4	9.1	7.9	100
10/23/06 - 10/29/06	168	7.5	9.9	8.6	100
10/30/06 - 11/05/06	169	7.5	10.9	9.4	100
11/06/06 - 11/12/06	168	7.3	9.6	8.3	100
11/13/06 - 11/19/06	168	8.9	11.2	10.1	100
11/20/06 - 11/26/06	168	9.8	12.6	11.2	100
11/27/06 - 12/03/06	168	7.5	12.6	10.1	100
12/04/06 - 12/10/06	168	11.8	13.4	12.7	100
12/11/06 - 12/17/06	168	10.6	12.2	11.1	100
12/18/06 - 12/24/06	168	10.2	12.4	11.2	100
12/25/06 - 12/31/06	168	10.4	12.0	11.5	100

TABLE A-2: WEEKLY DO SUMMARY STATISTICS AT DEVON AVENUE  
ON THE DES PLAINES RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	11.9	12.6	12.2	100
01/02/06 - 01/08/06	168	9.1	12.6	11.2	100
01/09/06 - 01/15/06	168	11.8	13.5	12.5	100
01/16/06 - 01/22/06	168	12.1	14.5	13.4	100
01/23/06 - 01/29/06	168	10.9	15.2	14.0	100
01/30/06 - 02/05/06	168	10.9	12.6	11.8	100
02/06/06 - 02/12/06	168	12.5	14.5	13.6	100
02/13/06 - 02/19/06	168	11.9	14.6	13.5	100
02/20/06 - 02/26/06	168	12.9	14.5	13.8	100
02/27/06 - 03/05/06	168	12.9	15.5	14.2	100
03/06/06 - 03/12/06	168	10.2	15.3	12.1	100
03/13/06 - 03/19/06	167	9.5	11.3	10.5	100
03/20/06 - 03/26/06	168	11.2	12.1	11.6	100
03/27/06 - 04/02/06	168	9.4	11.7	10.7	100
04/03/06 - 04/09/06	167	9.5	11.2	10.2	100
04/10/06 - 04/16/06	168	8.2	11.0	9.4	100
04/17/06 - 04/23/06	168	7.9	10.0	8.8	100
04/24/06 - 04/30/06	168	7.8	10.5	9.1	100
05/01/06 - 05/07/06	168	7.8	10.6	8.6	100
05/08/06 - 05/14/06	168	7.7	12.4	9.5	100
05/15/06 - 05/21/06	168	8.0	10.5	9.2	100
05/22/06 - 05/28/06	167	6.2	9.6	7.7	100
05/29/06 - 06/04/06	167	3.9	6.4	5.4	81
06/05/06 - 06/11/06	168	5.2	6.8	5.9	100
06/12/06 - 06/18/06	168	6.1	10.7	7.0	100
06/19/06 - 06/25/06	167	4.6	10.2	6.3	83
06/26/06 - 07/02/06	167	4.7	11.6	7.2	99
07/03/06 - 07/09/06	168	1.0	6.1	3.9	21
07/10/06 - 07/16/06	168	0.0	11.2	4.2	32
07/17/06 - 07/23/06	168	2.5	4.9	3.9	0
07/24/06 - 07/30/06	168	0.4	5.2	3.3	2
07/31/06 - 08/06/06	168	2.0	4.9	3.4	0
08/07/06 - 08/13/06	168	3.5	5.1	4.2	7

TABLE A-2 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
DEVON AVENUE ON THE DES PLAINES RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	4.3	5.3	4.7	17
08/21/06 - 08/27/06	59	4.7	5.4	5.0	47
08/28/06 - 09/03/06	107	5.7	6.2	5.9	100
09/04/06 - 09/10/06	168	5.4	6.2	5.9	100
09/11/06 - 09/17/06	168	5.7	7.1	6.7	100
09/18/06 - 09/24/06	61	6.1	7.7	6.8	100
09/25/06 - 10/01/06	110	6.9	7.9	7.5	100
10/02/06 - 10/08/06	168	5.8	8.1	7.1	100
10/09/06 - 10/15/06	168	6.8	9.1	8.1	100
10/16/06 - 10/22/06	168	7.7	9.2	8.5	100
10/23/06 - 10/29/06	169	8.8	10.9	10.0	100
10/30/06 - 11/05/06	169	9.5	12.4	10.8	100
11/06/06 - 11/12/06	168	9.3	11.7	10.2	100
11/13/06 - 11/19/06	168	10.1	11.4	10.7	100
11/20/06 - 11/26/06	168	10.6	12.0	11.4	100
11/27/06 - 12/03/06	168	8.2	12.9	10.3	100
12/04/06 - 12/10/06	168	12.4	13.5	13.1	100
12/11/06 - 12/17/06	168	11.3	12.9	11.7	100
12/18/06 - 12/24/06	168	10.8	13.1	11.8	100
12/25/06 - 12/31/06	168	11.4	12.3	11.9	100

TABLE A-3: WEEKLY DO SUMMARY STATISTICS AT IRVING PARK ROAD  
ON THE DES PLAINES RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	10.1	11.1	10.6	100
01/02/06 - 01/08/06	168	9.6	12.9	11.3	100
01/09/06 - 01/15/06	168	10.6	12.9	11.8	100
01/16/06 - 01/22/06	168	11.1	13.8	12.5	100
01/23/06 - 01/29/06	168	10.0	14.5	12.8	100
01/30/06 - 02/05/06	167	10.0	13.0	11.9	100
02/06/06 - 02/12/06	168	12.3	13.7	13.2	100
02/13/06 - 02/19/06	168	11.5	14.0	12.9	100
02/20/06 - 02/26/06	168	12.7	14.8	13.6	100
02/27/06 - 03/05/06	168	11.8	15.7	13.3	100
03/06/06 - 03/12/06	168	9.9	15.2	11.5	100
03/13/06 - 03/19/06	168	9.7	11.4	10.6	100
03/20/06 - 03/26/06	168	11.1	12.2	11.7	100
03/27/06 - 04/02/06	168	8.9	11.9	10.6	100
04/03/06 - 04/09/06	167	8.4	11.0	9.8	100
04/10/06 - 04/16/06	168	7.9	10.7	9.2	100
04/17/06 - 04/23/06	168	7.4	10.1	8.5	100
04/24/06 - 04/30/06	168	4.6	10.1	8.1	99
05/01/06 - 05/07/06	168	5.7	10.0	8.0	100
05/08/06 - 05/14/06	168	7.0	10.3	8.8	100
05/15/06 - 05/21/06	168	8.0	10.0	9.0	100
05/22/06 - 05/28/06	168	5.9	9.5	7.4	100
05/29/06 - 06/04/06	168	3.9	6.5	5.3	68
06/05/06 - 06/11/06	168	5.1	7.5	5.9	100
06/12/06 - 06/18/06	168	5.3	7.3	6.3	100
06/19/06 - 06/25/06	167	4.4	7.7	5.7	82
06/26/06 - 07/02/06	167	5.1	7.1	6.1	100
07/03/06 - 07/09/06	168	3.3	6.0	4.7	46
07/10/06 - 07/16/06	167	2.7	11.3	4.7	33
07/17/06 - 07/23/06	168	2.7	5.2	3.9	2
07/24/06 - 07/30/06	168	2.3	5.2	3.7	2
07/31/06 - 08/06/06	168	1.9	4.7	3.6	0
08/07/06 - 08/13/06	168	3.7	5.9	4.7	28

TABLE A-3 (Continued): WEEKLY DO SUMMARY STATISTICS AT IRVING PARK ROAD ON THE DES PLAINES RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	60	4.6	6.2	5.2	60
08/21/06 - 08/27/06	109	4.8	5.9	5.1	68
08/28/06 - 09/03/06	168	4.8	6.6	5.8	93
09/04/06 - 09/10/06	168	5.5	6.5	6.0	100
09/11/06 - 09/17/06	168	5.8	7.4	6.6	100
09/18/06 - 09/24/06	168	5.8	8.1	7.1	100
09/25/06 - 10/01/06	168	6.7	9.3	7.6	100
10/02/06 - 10/08/06	167	5.8	7.9	7.0	100
10/09/06 - 10/15/06	168	7.1	9.7	8.3	100
10/16/06 - 10/22/06	168	7.6	9.5	8.4	100
10/23/06 - 10/29/06	168	8.4	10.1	9.3	100
10/30/06 - 11/05/06	157	8.9	12.2	10.7	100
11/06/06 - 11/12/06	167	8.8	11.6	9.8	100
11/13/06 - 11/19/06	168	9.6	11.6	10.6	100
11/20/06 - 11/26/06	168	10.4	12.0	11.4	100
11/27/06 - 12/03/06	168	8.1	13.0	10.3	100
12/04/06 - 12/10/06	168	11.9	13.9	12.9	100
12/11/06 - 12/17/06	168	10.4	12.6	11.4	100
12/18/06 - 12/24/06	167	10.2	12.6	11.3	100
12/25/06 - 12/31/06	168	10.7	11.7	11.3	100



TABLE A-4: WEEKLY DO SUMMARY STATISTICS AT OGDEN AVENUE  
ON THE DES PLAINES RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	12.4	12.9	12.7	100
01/02/06 - 01/08/06	168	12.0	13.4	12.6	100
01/09/06 - 01/15/06	168	12.5	14.3	13.1	100
01/16/06 - 01/22/06	168	12.4	14.4	13.2	100
01/23/06 - 01/29/06	168	11.0	14.6	13.2	100
01/30/06 - 02/05/06	168	11.0	13.3	12.4	100
02/06/06 - 02/12/06	168	13.3	15.1	14.3	100
02/13/06 - 02/19/06	168	12.1	15.4	13.9	100
02/20/06 - 02/26/06	168	13.3	14.8	14.0	100
02/27/06 - 03/05/06	168	12.6	15.1	13.6	100
03/06/06 - 03/12/06	168	10.3	14.1	11.8	100
03/13/06 - 03/19/06	168	10.4	12.6	11.7	100
03/20/06 - 03/26/06	168	12.2	13.0	12.5	100
03/27/06 - 04/02/06	168	9.6	12.5	11.0	100
04/03/06 - 04/09/06	167	9.1	11.5	10.4	100
04/10/06 - 04/16/06	168	8.6	11.4	9.9	100
04/17/06 - 04/23/06	168	8.3	10.5	9.2	100
04/24/06 - 04/30/06	168	8.0	10.8	9.3	100
05/01/06 - 05/07/06	168	7.6	10.1	8.9	100
05/08/06 - 05/14/06	168	8.4	10.7	9.3	100
05/15/06 - 05/21/06	168	9.1	10.6	9.7	100
05/22/06 - 05/28/06	168	7.1	10.1	8.4	100
05/29/06 - 06/04/06	168	5.2	7.9	6.9	100
06/05/06 - 06/11/06	168	6.5	8.2	7.5	100
06/12/06 - 06/18/06	168	6.3	8.5	7.5	100
06/19/06 - 06/25/06	168	6.3	8.7	7.2	100
06/26/06 - 07/02/06	168	7.0	9.2	7.7	100
07/03/06 - 07/09/06	168	6.1	8.1	7.0	100
07/10/06 - 07/16/06	168	5.9	9.6	6.9	100
07/17/06 - 07/23/06	168	4.8	8.3	6.1	99
07/24/06 - 07/30/06	168	5.4	7.4	6.3	100
07/31/06 - 08/06/06	168	4.2	6.9	5.5	77
08/07/06 - 08/13/06	168	5.8	7.7	6.5	100

TABLE A-4 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
 OGDEN AVENUE ON THE DES PLAINES RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	6.2	8.1	7.0	100
08/21/06 - 08/27/06	168	6.4	7.9	7.0	100
08/28/06 - 09/03/06	168	6.9	8.2	7.4	100
09/04/06 - 09/10/06	168	7.3	8.2	7.6	100
09/11/06 - 09/17/06	168	7.5	8.3	7.9	100
09/18/06 - 09/24/06	168	7.1	9.1	8.1	100
09/25/06 - 10/01/06	168	7.8	9.5	8.7	100
10/02/06 - 10/08/06	168	6.8	9.2	8.1	100
10/09/06 - 10/15/06	168	8.3	10.4	9.3	100
10/16/06 - 10/22/06	168	8.5	10.1	9.4	100
10/23/06 - 10/29/06	168	9.4	11.2	10.5	100
10/30/06 - 11/05/06	169	10.5	12.7	11.6	100
11/06/06 - 11/12/06	168	9.9	12.1	10.7	100
11/13/06 - 11/19/06	167	10.9	11.9	11.4	100
11/20/06 - 11/26/06	168	10.6	12.5	11.7	100
11/27/06 - 12/03/06	168	8.6	11.8	10.2	100
12/04/06 - 12/10/06	168	11.8	14.4	13.1	100
12/11/06 - 12/17/06	168	11.1	13.7	12.0	100
12/18/06 - 12/24/06	168	10.6	13.0	11.8	100
12/25/06 - 12/31/06	168	11.6	12.5	12.2	100

TABLE A-5: WEEKLY DO SUMMARY STATISTICS AT MATERIAL SERVICE ROAD  
ON THE DES PLAINES RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/02/06 - 01/08/06	85	11.4	16.3	13.2	100
01/09/06 - 01/15/06	168	11.4	18.2	13.7	100
01/16/06 - 01/22/06	82	11.2	17.6	13.1	100
01/23/06 - 01/29/06	85	11.6	19.5	15.1	100
01/30/06 - 02/05/06	168	10.5	13.9	12.2	100
02/06/06 - 02/12/06	83	12.7	16.1	14.5	100
02/13/06 - 02/19/06	86	12.0	13.8	12.8	100
02/20/06 - 02/26/06	168	13.5	16.3	14.9	100
02/27/06 - 03/05/06	168	13.3	16.6	15.2	100
03/06/06 - 03/12/06	168	9.1	17.2	12.6	100
03/13/06 - 03/19/06	168	9.3	12.7	11.0	100
03/20/06 - 03/26/06	168	11.6	13.7	12.5	100
03/27/06 - 04/02/06	168	9.6	13.5	11.3	100
04/03/06 - 04/09/06	168	8.9	13.2	10.3	100
04/10/06 - 04/16/06	168	8.4	14.2	10.7	100
04/17/06 - 04/23/06	168	7.5	16.2	10.2	100
04/24/06 - 04/30/06	168	7.1	17.1	10.4	100
05/01/06 - 05/07/06	168	6.6	14.8	8.9	100
05/08/06 - 05/14/06	168	7.7	15.1	9.7	100
05/15/06 - 05/21/06	168	8.4	14.2	10.8	100
05/22/06 - 05/28/06	168	5.8	15.3	10.2	100
05/29/06 - 06/04/06	168	4.1	13.4	6.7	80
06/05/06 - 06/11/06	168	5.4	9.7	7.0	100
06/12/06 - 06/18/06	168	5.5	11.1	7.9	100
06/19/06 - 06/25/06	168	5.3	12.2	8.0	100
06/26/06 - 07/02/06	168	5.9	12.3	8.1	100
07/03/06 - 07/09/06	107	5.7	14.6	9.3	100
07/10/06 - 07/16/06	85	4.8	10.9	6.7	78
07/17/06 - 07/23/06	168	4.2	15.5	7.2	83
07/24/06 - 07/30/06	83	5.1	9.2	6.6	100
07/31/06 - 08/06/06			NO DATA		
08/07/06 - 08/13/06	84	5.0	8.2	6.2	100
08/14/06 - 08/20/06	168	5.0	10.1	6.8	100

TABLE A-5 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
MATERIAL SERVICE ROAD ON THE DES PLAINES RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/21/06 - 08/27/06	168	5.0	9.0	6.3	100
08/28/06 - 09/03/06	168	5.5	9.8	6.9	100
09/04/06 - 09/10/06	168	5.8	10.2	7.3	100
09/11/06 - 09/17/06	168	5.6	8.6	7.0	100
09/18/06 - 09/24/06	168	6.3	9.8	7.5	100
09/25/06 - 10/01/06	168	6.7	10.3	8.0	100
10/02/06 - 10/08/06	168	5.4	9.6	6.9	100
10/09/06 - 10/15/06	168	7.7	11.2	9.2	100
10/16/06 - 10/22/06	168	7.8	10.5	9.1	100
10/23/06 - 10/29/06	168	9.3	11.5	9.9	100
10/30/06 - 11/05/06	169	9.5	14.0	11.4	100
11/06/06 - 11/12/06	168	8.6	14.9	11.4	100
11/13/06 - 11/19/06	168	8.6	14.0	11.1	100
11/20/06 - 11/26/06	168	10.9	16.9	13.4	100
11/27/06 - 12/03/06	168	8.2	15.4	10.4	100
12/04/06 - 12/10/06	168	12.0	14.7	13.6	100
12/11/06 - 12/17/06	168	9.2	14.2	11.2	100
12/18/06 - 12/24/06	168	9.9	12.7	11.1	100
12/25/06 - 12/31/06	168	10.4	12.2	11.4	100

TABLE A-6: WEEKLY DO SUMMARY STATISTICS AT BUSSE LAKE DAM  
ON SALT CREEK DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	13.2	13.7	13.4	100
01/02/06 - 01/08/06	168	13.0	14.1	13.5	100
01/09/06 - 01/15/06	168	12.9	13.9	13.4	100
01/16/06 - 01/22/06	168	12.7	14.1	13.4	100
01/23/06 - 01/29/06	168	12.7	14.2	13.4	100
01/30/06 - 02/05/06	168	12.9	13.8	13.3	100
02/06/06 - 02/12/06	168	13.9	14.5	14.1	100
02/13/06 - 02/19/06	168	13.9	15.7	14.8	100
02/20/06 - 02/26/06	168	14.8	15.4	15.0	100
02/27/06 - 03/05/06	168	13.7	17.6	14.5	100
03/06/06 - 03/12/06	168	11.7	14.1	13.1	100
03/13/06 - 03/19/06	168	11.1	12.6	11.8	100
03/20/06 - 03/26/06	168	11.9	13.5	12.8	100
03/27/06 - 04/02/06	168	11.0	13.4	12.5	100
04/03/06 - 04/09/06	167	11.7	12.7	12.3	100
04/10/06 - 04/16/06	167	10.1	12.5	11.1	100
04/17/06 - 04/23/06	168	8.7	11.1	10.3	100
04/24/06 - 04/30/06	168	7.1	11.1	9.2	100
05/01/06 - 05/07/06	168	9.1	11.2	10.3	100
05/08/06 - 05/14/06	168	8.1	11.0	9.7	100
05/15/06 - 05/21/06	167	9.5	11.1	10.5	100
05/22/06 - 05/28/06	168	7.8	9.8	9.0	100
05/29/06 - 06/04/06	168	6.9	8.8	8.1	100
06/05/06 - 06/11/06	168	5.2	8.4	7.0	100
06/12/06 - 06/18/06	168	7.1	9.4	8.6	100
06/19/06 - 06/25/06	168	5.0	10.4	7.7	100
06/26/06 - 07/02/06	168	7.0	10.1	8.6	100
07/03/06 - 07/09/06	168	6.2	8.6	7.6	100
07/10/06 - 07/16/06	168	2.9	8.9	7.2	92
07/17/06 - 07/23/06	168	3.9	8.4	6.9	97
07/24/06 - 07/30/06	168	5.1	8.5	7.3	100
07/31/06 - 08/06/06	168	3.5	8.0	6.2	86
08/07/06 - 08/13/06	167	3.2	8.8	6.1	76

TABLE A-6 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
BUSSE LAKE DAM ON SALT CREEK DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	0.3	8.4	3.9	40
08/21/06 - 08/27/06	58	3.0	8.7	5.9	59
08/28/06 - 09/03/06	108	7.0	9.8	7.9	100
09/04/06 - 09/10/06	168	6.2	9.9	8.1	100
09/11/06 - 09/17/06	168	6.0	8.9	7.9	100
09/18/06 - 09/24/06	168	7.9	9.8	8.6	100
09/25/06 - 10/01/06	168	8.1	9.6	8.8	100
10/02/06 - 10/08/06	168	8.1	9.2	8.7	100
10/09/06 - 10/15/06	168	7.7	10.4	9.3	100
10/16/06 - 10/22/06	168	10.2	11.5	10.8	100
10/23/06 - 10/29/06	143	11.4	12.8	12.1	100
10/30/06 - 11/05/06	130	11.6	12.7	12.1	100
11/06/06 - 11/12/06	168	11.6	12.3	12.0	100
11/13/06 - 11/19/06	168	11.7	13.3	12.6	100
11/20/06 - 11/26/06	168	12.0	13.5	12.9	100
11/27/06 - 12/03/06	168	11.2	13.3	12.2	100
12/04/06 - 12/10/06	168	13.3	14.3	13.9	100
12/11/06 - 12/17/06	168	13.1	14.7	13.6	100
12/18/06 - 12/24/06	168	12.3	13.6	13.0	100
12/25/06 - 12/31/06	168	12.1	12.7	12.5	100

TABLE A-7: WEEKLY DO SUMMARY STATISTICS AT J. F. KENNEDY BOULEVARD  
ON SALT CREEK DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	10.0	11.3	10.4	100
01/02/06 - 01/08/06	168	9.4	11.6	10.6	100
01/09/06 - 01/15/06	168	9.2	12.5	10.3	100
01/16/06 - 01/22/06	168	9.5	12.6	10.6	100
01/23/06 - 01/29/06	168	9.3	12.5	10.5	100
01/30/06 - 02/05/06	168	10.3	12.6	11.2	100
02/06/06 - 02/12/06	168	9.5	12.8	11.0	100
02/13/06 - 02/19/06	168	9.2	13.5	11.5	100
02/20/06 - 02/26/06	168	9.6	13.1	11.2	100
02/27/06 - 03/05/06	168	8.9	13.2	10.3	100
03/06/06 - 03/12/06	168	9.3	13.4	11.6	100
03/13/06 - 03/19/06	168	10.3	12.4	11.4	100
03/20/06 - 03/26/06	168	9.5	13.2	10.8	100
03/27/06 - 04/02/06	167	8.6	13.3	10.1	100
04/03/06 - 04/09/06	167	8.4	11.8	10.2	100
04/10/06 - 04/16/06	168	7.5	12.3	9.4	100
04/17/06 - 04/23/06	168	7.4	11.3	9.3	100
04/24/06 - 04/30/06	168	5.9	11.1	8.0	100
05/01/06 - 05/07/06	168	7.5	11.0	9.1	100
05/08/06 - 05/14/06	168	6.7	10.0	8.4	100
05/15/06 - 05/21/06	168	7.4	10.4	9.0	100
05/22/06 - 05/28/06	168	6.5	9.3	7.7	100
05/29/06 - 06/04/06	168	5.9	9.7	7.6	100
06/05/06 - 06/11/06	168	5.2	11.2	7.6	100
06/12/06 - 06/18/06	168	5.8	9.9	7.8	100
06/19/06 - 06/25/06	168	5.4	12.2	7.6	100
06/26/06 - 07/02/06	168	5.9	10.0	7.8	100
07/03/06 - 07/09/06	168	5.3	10.7	7.2	100
07/10/06 - 07/16/06	168	5.3	10.1	7.2	100
07/17/06 - 07/23/06	168	5.3	9.6	6.9	100
07/24/06 - 07/30/06	168	5.1	8.7	6.8	100
07/31/06 - 08/06/06	168	5.2	8.7	6.7	100
08/07/06 - 08/13/06	168	5.5	9.0	7.0	100

TABLE A-7 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
J. F. KENNEDY BOULEVARD ON SALT CREEK DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	5.3	9.2	6.9	100
08/21/06 - 08/27/06	168	5.6	9.6	7.0	100
08/28/06 - 09/03/06	168	5.9	8.6	7.0	100
09/04/06 - 09/10/06	168	5.7	10.2	7.2	100
09/11/06 - 09/17/06	168	6.2	9.0	7.4	100
09/18/06 - 09/24/06	168	6.1	9.5	7.7	100
09/25/06 - 10/01/06	168	5.9	8.8	7.5	100
10/02/06 - 10/08/06	168	6.1	8.6	7.8	100
10/09/06 - 10/15/06	168	6.9	9.4	8.2	100
10/16/06 - 10/22/06	169	7.9	10.5	9.2	100
10/23/06 - 10/29/06	168	8.8	10.5	9.5	100
10/30/06 - 11/05/06	169	8.4	10.9	9.4	100
11/06/06 - 11/12/06	168	8.0	11.4	9.3	100
11/13/06 - 11/19/06	168	8.9	11.1	9.9	100
11/20/06 - 11/26/06	168	8.2	11.6	9.5	100
11/27/06 - 12/03/06	168	8.1	12.0	10.0	100
12/04/06 - 12/10/06	168	10.0	11.9	11.1	100
12/11/06 - 12/17/06	168	10.0	13.2	11.5	100
12/18/06 - 12/24/06	168	9.6	12.7	11.2	100
12/25/06 - 12/31/06	168	9.9	11.4	10.7	100



TABLE A-8: WEEKLY DO SUMMARY STATISTICS AT THORNDALE AVENUE  
ON SALT CREEK DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	10.1	11.9	10.7	100
01/02/06 - 01/08/06	168	9.7	12.5	11.0	100
01/09/06 - 01/15/06	168	9.2	12.9	10.6	100
01/16/06 - 01/22/06	168	9.6	13.9	10.9	100
01/23/06 - 01/29/06	168	9.6	14.0	11.1	100
01/30/06 - 02/05/06	168	10.4	13.7	11.7	100
02/06/06 - 02/12/06	168	9.7	15.1	11.9	100
02/13/06 - 02/19/06	168	9.2	15.3	12.0	100
02/20/06 - 02/26/06	168	9.4	14.5	11.5	100
02/27/06 - 03/05/06	168	8.7	16.0	10.9	100
03/06/06 - 03/12/06	57	9.4	15.8	11.3	100
03/13/06 - 03/19/06	110	10.1	12.3	11.2	100
03/20/06 - 03/26/06	168	9.7	15.9	11.4	100
03/27/06 - 04/02/06	168	8.1	15.9	10.6	100
04/03/06 - 04/09/06	167	8.0	13.1	10.2	100
04/10/06 - 04/16/06	168	6.8	13.6	9.5	100
04/17/06 - 04/23/06	168	6.9	12.7	9.4	100
04/24/06 - 04/30/06	168	5.1	13.1	8.2	100
05/01/06 - 05/07/06	168	7.1	11.7	8.9	100
05/08/06 - 05/14/06	168	6.2	10.8	8.3	100
05/15/06 - 05/21/06	168	7.0	10.5	8.8	100
05/22/06 - 05/28/06	168	5.4	9.7	7.5	100
05/29/06 - 06/04/06	167	4.9	10.0	6.9	97
06/05/06 - 06/11/06	168	2.8	12.3	7.3	88
06/12/06 - 06/18/06	168	5.0	10.9	7.7	99
06/19/06 - 06/25/06	168	4.9	12.9	7.6	99
06/26/06 - 07/02/06	168	5.3	10.8	7.8	100
07/03/06 - 07/09/06	168	4.6	11.6	7.2	93
07/10/06 - 07/16/06	168	4.6	11.9	7.1	88
07/17/06 - 07/23/06	167	4.6	10.1	6.6	95
07/24/06 - 07/30/06	168	4.7	9.2	6.6	95
07/31/06 - 08/06/06	168	4.0	9.0	6.2	85
08/07/06 - 08/13/06	168	5.2	9.9	6.9	100

TABLE A-8 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
THORNDALE AVENUE ON SALT CREEK DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	5.2	10.2	7.1	100
08/21/06 - 08/27/06	168	5.4	10.6	7.1	100
08/28/06 - 09/03/06	168	5.7	9.4	7.0	100
09/04/06 - 09/10/06	168	5.3	10.6	7.3	100
09/11/06 - 09/17/06	168	6.2	9.5	7.4	100
09/18/06 - 09/24/06	168	6.0	10.6	7.7	100
09/25/06 - 10/01/06	58	7.1	8.8	7.9	100
10/02/06 - 10/08/06			NO DATA		
10/09/06 - 10/15/06			NO DATA		
10/16/06 - 10/22/06			NO DATA		
10/23/06 - 10/29/06			NO DATA		
10/30/06 - 11/05/06			NO DATA		
11/06/06 - 11/12/06	110	7.6	10.9	9.3	100
11/13/06 - 11/19/06	168	9.0	11.7	9.9	100
11/20/06 - 11/26/06	168	7.9	12.3	9.5	100
11/27/06 - 12/03/06	168	7.6	13.4	10.6	100
12/04/06 - 12/10/06	168	10.3	13.4	11.9	100
12/11/06 - 12/17/06	168	10.2	12.9	11.6	100
12/18/06 - 12/24/06	168	9.9	13.2	11.4	100
12/25/06 - 12/31/06	168	10.2	11.8	11.1	100

TABLE A-9: WEEKLY DO SUMMARY STATISTICS AT WOLF ROAD  
ON SALT CREEK DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	12.3	13.0	12.5	100
01/02/06 - 01/08/06	168	11.2	12.4	11.8	100
01/09/06 - 01/15/06	168	10.8	12.7	11.5	100
01/16/06 - 01/22/06	168	11.2	13.0	11.9	100
01/23/06 - 01/29/06	168	10.4	13.9	12.1	100
01/30/06 - 02/05/06	168	10.6	13.0	11.8	100
02/06/06 - 02/12/06	168	11.7	14.2	12.8	100
02/13/06 - 02/19/06	168	11.4	14.7	12.8	100
02/20/06 - 02/26/06	168	11.6	15.3	13.0	100
02/27/06 - 03/05/06	168	10.6	16.1	12.5	100
03/06/06 - 03/12/06	168	9.7	15.6	10.9	100
03/13/06 - 03/19/06	168	9.7	12.6	11.0	100
03/20/06 - 03/26/06	168	10.8	16.1	12.3	100
03/27/06 - 04/02/06	168	8.8	16.1	11.5	100
04/03/06 - 04/09/06	168	9.6	12.9	10.6	100
04/10/06 - 04/16/06	168	6.9	12.7	9.0	100
04/17/06 - 04/23/06	167	7.1	11.6	9.0	100
04/24/06 - 04/30/06	168	7.0	13.0	8.9	100
05/01/06 - 05/07/06	168	7.4	10.6	8.6	100
05/08/06 - 05/14/06	168	7.2	10.3	8.5	100
05/15/06 - 05/21/06	168	7.3	11.0	9.0	100
05/22/06 - 05/28/06	168	5.3	13.0	7.8	100
05/29/06 - 06/04/06	168	4.7	9.0	6.4	95
06/05/06 - 06/11/06	168	4.5	8.6	6.6	83
06/12/06 - 06/18/06	168	4.5	8.9	6.9	95
06/19/06 - 06/25/06	168	4.5	8.4	5.9	71
06/26/06 - 07/02/06	82	5.9	8.7	7.4	100
07/03/06 - 07/09/06	62	4.2	8.1	6.0	63
07/10/06 - 07/16/06	168	3.6	7.7	5.3	53
07/17/06 - 07/23/06	168	3.1	7.5	5.6	76
07/24/06 - 07/30/06	168	3.6	8.2	5.7	62
07/31/06 - 08/06/06	168	3.4	8.0	5.6	70
08/07/06 - 08/13/06	168	4.6	8.5	6.0	81

TABLE A-9 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
WOLF ROAD ON SALT CREEK DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	5.0	8.8	6.3	100
08/21/06 - 08/27/06	168	5.4	8.6	6.6	100
08/28/06 - 09/03/06	168	6.0	8.7	7.0	100
09/04/06 - 09/10/06	167	5.9	8.4	6.9	100
09/11/06 - 09/17/06	168	6.5	8.2	7.4	100
09/18/06 - 09/24/06	169	6.4	9.3	7.6	100
09/25/06 - 10/01/06	168	7.6	9.2	8.2	100
10/02/06 - 10/08/06	168	6.1	8.9	7.9	100
10/09/06 - 10/15/06	168	7.8	10.2	8.9	100
10/16/06 - 10/22/06	168	8.2	10.0	9.1	100
10/23/06 - 10/29/06	168	8.9	10.7	9.7	100
10/30/06 - 11/05/06	169	8.7	11.8	10.2	100
11/06/06 - 11/12/06	168	8.3	10.8	9.4	100
11/13/06 - 11/19/06	168	9.8	10.9	10.3	100
11/20/06 - 11/26/06	168	8.8	11.5	10.4	100
11/27/06 - 12/03/06	168	7.8	12.5	9.9	100
12/04/06 - 12/10/06	167	12.1	14.4	13.1	100
12/11/06 - 12/17/06	168	10.7	12.6	11.6	100
12/18/06 - 12/24/06	168	10.4	12.3	11.3	100
12/25/06 - 12/31/06	168	10.6	12.3	11.6	100

TABLE A-10: WEEKLY DO SUMMARY STATISTICS AT HOHMAN AVENUE  
ON THE GRAND CALUMET RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 04/30/06			NO DATA		
05/01/06 - 05/07/06	109	0.1	5.4	0.8	2
05/08/06 - 05/14/06	168	0.0	8.1	1.6	11
05/15/06 - 05/21/06	168	0.3	6.9	4.1	14
05/22/06 - 05/28/06	59	2.2	4.5	3.6	0
05/29/06 - 06/04/06			NO DATA		
06/05/06 - 06/11/06	109	1.2	9.0	4.1	37
06/12/06 - 06/18/06	168	0.8	8.0	3.1	23
06/19/06 - 06/25/06	168	1.2	7.9	3.9	17
06/26/06 - 07/02/06	168	1.9	5.8	3.6	12
07/03/06 - 07/09/06	168	0.6	5.2	2.5	3
07/10/06 - 07/16/06	168	0.0	6.9	2.9	15
07/17/06 - 07/23/06	59	1.0	6.1	2.6	8
07/24/06 - 07/30/06	109	0.0	10.0	1.5	14
07/31/06 - 08/06/06	58	0.2	3.5	0.9	0
08/07/06 - 08/13/06	109	0.0	5.8	1.0	4
08/14/06 - 08/20/06	58	0.2	5.9	1.4	7
08/21/06 - 08/27/06			NO DATA		
08/28/06 - 09/03/06	109	0.6	6.2	1.9	6
09/04/06 - 09/10/06	59	0.5	6.5	1.5	10
09/11/06 - 09/17/06			NO DATA		
09/18/06 - 09/24/06	109	0.2	9.3	3.2	27
09/25/06 - 10/01/06	168	0.2	10.9	2.6	18
10/02/06 - 10/08/06	168	0.1	6.6	1.9	1
10/09/06 - 10/15/06	167	0.1	5.8	3.1	8
10/16/06 - 10/22/06	168	0.0	8.0	2.1	2
10/23/06 - 10/29/06	59	0.7	5.9	2.6	10
10/30/06 - 11/05/06			NO DATA		
11/06/06 - 11/12/06			NO DATA		
11/13/06 - 11/19/06			NO DATA		
11/20/06 - 11/26/06			NO DATA		
11/27/06 - 12/03/06			NO DATA		
12/04/06 - 12/10/06			NO DATA		
12/11/06 - 12/17/06	109	0.7	7.6	4.5	37

TABLE A-10 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
HOHMAN AVENUE ON THE GRAND CALUMET RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
12/18/06 - 12/24/06	168	0.3	8.4	3.9	32
12/25/06 - 12/31/06	168	0.7	6.5	3.0	8

TABLE A-11: WEEKLY DO SUMMARY STATISTICS AT WENTWORTH AVENUE  
ON THE LITTLE CALUMET RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/02/06 - 01/08/06	108	10.0	11.8	10.9	100
01/09/06 - 01/15/06	168	8.4	11.7	10.4	100
01/16/06 - 01/22/06	168	9.8	11.7	10.8	100
01/23/06 - 01/29/06	168	9.6	12.8	11.6	100
01/30/06 - 02/05/06	168	10.1	12.0	10.7	100
02/06/06 - 02/12/06	168	11.2	12.7	11.9	100
02/13/06 - 02/19/06	168	10.0	13.8	12.1	100
02/20/06 - 02/26/06	168	11.5	13.9	12.5	100
02/27/06 - 03/05/06	168	10.9	13.6	12.2	100
03/06/06 - 03/12/06	167	8.6	14.1	10.8	100
03/13/06 - 03/19/06	168	8.0	11.5	10.3	100
03/20/06 - 03/26/06	168	10.0	12.7	11.3	100
03/27/06 - 04/02/06	168	7.5	14.3	10.6	100
04/03/06 - 04/09/06	166	7.7	12.6	10.0	100
04/10/06 - 04/16/06	168	5.0	10.9	7.9	100
04/17/06 - 04/23/06	168	6.9	8.7	7.4	100
04/24/06 - 04/30/06	60	6.5	7.8	7.1	100
05/01/06 - 05/07/06	109	6.3	7.4	6.9	100
05/08/06 - 05/14/06	168	4.3	8.1	6.7	99
05/15/06 - 05/21/06	168	6.5	8.0	7.3	100
05/22/06 - 05/28/06	168	2.9	7.3	5.2	44
05/29/06 - 06/04/06	168	0.0	5.0	3.6	3
06/05/06 - 06/11/06	168	3.6	7.3	5.0	28
06/12/06 - 06/18/06	168	3.6	6.6	5.2	58
06/19/06 - 06/25/06	168	2.8	5.9	4.2	11
06/26/06 - 07/02/06	168	1.8	7.6	4.9	36
07/03/06 - 07/09/06	168	1.8	9.6	5.1	44
07/10/06 - 07/16/06	168	2.0	7.9	4.3	17
07/17/06 - 07/23/06	168	1.4	6.5	3.5	5
07/24/06 - 07/30/06	168	1.6	6.0	3.6	5
07/31/06 - 08/06/06	168	1.8	5.3	3.0	1
08/07/06 - 08/13/06	168	1.9	6.2	3.7	5
08/14/06 - 08/20/06	168	3.1	6.5	4.3	16

TABLE A-11 (Continued): WEEKLY DO SUMMARY STATISTICS AT  
WENTWORTH AVENUE ON THE LITTLE CALUMET RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/21/06 - 08/27/06	168	3.4	5.4	4.3	5
08/28/06 - 09/03/06	168	3.3	5.8	5.0	68
09/04/06 - 09/10/06	168	4.0	7.2	5.3	85
09/11/06 - 09/17/06	168	4.7	7.5	5.9	97
09/18/06 - 09/24/06	168	4.8	7.1	6.0	89
09/25/06 - 10/01/06	168	6.0	7.6	6.7	100
10/02/06 - 10/08/06	168	4.3	8.0	6.6	98
10/09/06 - 10/15/06	168	5.4	8.6	7.3	100
10/16/06 - 10/22/06	168	6.6	8.6	7.8	100
10/23/06 - 10/29/06	169	7.3	9.5	8.5	100
10/30/06 - 11/05/06	169	6.1	9.5	8.2	100
11/06/06 - 11/12/06	168	6.1	8.2	6.9	100
11/13/06 - 11/19/06	168	7.7	9.6	8.8	100
11/20/06 - 11/26/06	168	8.4	10.3	9.7	100
11/27/06 - 12/03/06	168	6.1	13.1	9.7	100
12/04/06 - 12/10/06	168	11.4	13.5	12.6	100
12/11/06 - 12/17/06	168	9.3	11.6	10.9	100
12/18/06 - 12/24/06	168	9.5	11.1	10.3	100
12/25/06 - 12/31/06	168	8.3	10.9	10.0	100



TABLE A-12: WEEKLY DO SUMMARY STATISTICS AT ASHLAND AVENUE  
ON THE LITTLE CALUMET RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
01/01/06 - 01/01/06	24	10.7	11.4	11.0	100
01/02/06 - 01/08/06	168	9.1	12.0	10.3	100
01/09/06 - 01/15/06	168	8.5	11.3	10.3	100
01/16/06 - 01/22/06	168	9.7	11.6	10.7	100
01/23/06 - 01/29/06	168	9.0	12.2	11.4	100
01/30/06 - 02/05/06	168	9.1	11.4	10.5	100
02/06/06 - 02/12/06	168	11.0	12.4	11.7	100
02/13/06 - 02/19/06	168	9.9	13.6	11.9	100
02/20/06 - 02/26/06	168	11.3	13.9	12.6	100
02/27/06 - 03/05/06	168	10.1	14.9	12.5	100
03/06/06 - 03/12/06	168	8.1	14.7	10.9	100
03/13/06 - 03/19/06	168	2.8	11.4	9.7	99
03/20/06 - 03/26/06	168	10.8	12.9	11.6	100
03/27/06 - 04/02/06	168	7.6	12.7	10.1	100
04/03/06 - 04/09/06	168	7.3	12.2	9.4	100
04/10/06 - 04/16/06	168	4.3	12.1	7.6	91
04/17/06 - 04/23/06	168	6.7	8.2	7.2	100
04/24/06 - 04/30/06	168	6.7	8.0	7.3	100
05/01/06 - 05/07/06	168	5.7	7.6	6.6	100
05/08/06 - 05/14/06	168	4.6	8.0	6.0	77
05/15/06 - 05/21/06	168	6.4	8.0	7.2	100
05/22/06 - 05/28/06	168	4.1	6.8	5.3	53
05/29/06 - 06/04/06	168	3.4	5.5	4.4	2
06/05/06 - 06/11/06	168	3.6	7.7	5.1	35
06/12/06 - 06/18/06	168	3.9	6.8	5.7	76
06/19/06 - 06/25/06	168	2.9	4.9	3.8	0
06/26/06 - 07/02/06	58	3.4	5.0	4.1	0
07/03/06 - 07/09/06	86	3.1	5.3	4.1	13
07/10/06 - 07/16/06	168	3.8	5.3	4.5	16
07/17/06 - 07/23/06	168	3.2	5.6	4.0	5
07/24/06 - 07/30/06	168	2.9	5.1	3.8	1
07/31/06 - 08/06/06	167	2.6	4.7	3.8	0
08/07/06 - 08/13/06	168	3.3	5.7	4.4	11

TABLE A-12 (Continued): WEEKLY DO SUMMARY STATISTICS AT ASHLAND AVENUE ON THE LITTLE CALUMET RIVER DURING 2006

Monitoring Dates	Number of DO Values	DO Concentration (mg/L)			Percent DO Values Above IPCB Standard
		Minimum	Maximum	Mean	
08/14/06 - 08/20/06	168	3.8	5.8	4.5	17
08/21/06 - 08/27/06	168	4.5	6.3	5.1	66
08/28/06 - 09/03/06	168	4.6	7.4	5.8	92
09/04/06 - 09/10/06	168	4.9	7.3	5.9	99
09/11/06 - 09/17/06	168	4.2	7.2	6.4	97
09/18/06 - 09/24/06	168	5.4	7.4	6.4	100
09/25/06 - 10/01/06	168	5.8	7.5	6.5	100
10/02/06 - 10/08/06	168	5.5	7.7	6.6	100
10/09/06 - 10/15/06	168	5.7	8.8	7.2	100
10/16/06 - 10/22/06	168	7.1	8.4	7.7	100
10/23/06 - 10/29/06	168	6.5	9.8	8.1	100
10/30/06 - 11/05/06	169	5.4	8.7	7.4	100
11/06/06 - 11/12/06	59	5.5	7.5	6.5	100
11/13/06 - 11/19/06	108	8.0	9.7	9.0	100
11/20/06 - 11/26/06	168	8.5	10.6	9.7	100
11/27/06 - 12/03/06	168	6.9	11.4	9.0	100
12/04/06 - 12/10/06	168	11.2	13.2	12.4	100
12/11/06 - 12/17/06	168	10.0	12.0	10.9	100
12/18/06 - 12/24/06	168	9.8	11.7	10.6	100
12/25/06 - 12/31/06	168	9.7	12.2	11.3	100