

Metropolitan Water Reclamation District of Greater Chicago

RESEARCH AND DEVELOPMENT DEPARTMENT

REPORT NO. 04-6

CONTINUOUS DISSOLVED OXYGEN MONITORING FROM
WILMETTE TO JOLIET IN THE CHICAGO WATERWAY SYSTEM
DURING AUGUST 2000 THROUGH DECEMBER 2001

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CONTINUOUS DISSOLVED OXYGEN MONITORING FROM WILMETTE TO JOLIET IN THE CHICAGO WATERWAY SYSTEM DURING AUGUST 2000 THROUGH DECEMBER 2001

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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 instream aeration stations and five sidestream elevated pool aeration stations (SEPAs) 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.

Additional stations were added to the DO monitoring network in order to monitor the Calumet Waterway System.

In the present study, DO was measured hourly at 23 stations for an 18-month period (August 2000 through December 2001) using continuous water quality monitors, Models 6600 and 6920 manufactured by Yellow Springs, Incorporated, (YSI), Yellow Springs, Ohio.

Conclusions

The results of the continuous DO monitoring conducted in the Chicago Waterway System during the period from August 2000 through December 2001 indicated the following.

- 1. DO supersaturation occurred at Main Street on the North Shore Channel and Interstate 55 on Bubbly Creek. Hourly DO concentrations of zero were recorded numerous times at Linden Street, Simpson Street, and Main Street on the North Shore Channel and Interstate 55 on Bubbly Creek.
- 2. None of the 23 monitoring stations recorded DO concentrations above the applicable IPCB standards at all times. However, six monitoring stations were above the applicable IPCB DO standard at least 99 percent of the time. The six

Stations were Devon Avenue on the North Shore Channel and Lawrence Avenue and Addison Street on the North Branch of the Chicago River, the Chicago River Controlling Works and Michigan Avenue on the Chicago River, and Loomis Street on the South Branch of the Chicago River.

- 3. Monitoring stations where the DO concentration was above the DO standard 90 to 98 percent of the time included Fullerton Avenue and Division Street, and Kinzie Street on the North Branch of the Chicago River, Clark Street on the Chicago River, Jackson Boulevard on the South Branch of the Chicago River, B&O Central Railroad and River Mile 302.6 on the Chicago Sanitary and Ship Canal, Route 83 on the Calumet-Sag Channel, and Jefferson Street on the Des Plaines River.
- 4. Monitoring stations recording DO levels above the applicable IPCB DO standards 50 to 89 percent of the time included Linden Street on the North Shore Channel, Interstate 55 on Bubbly Creek, and Cicero Avenue, Route 83, Romeoville Road, and Lockport on the Chicago Sanitary and Ship Canal.

- 5. The DO concentration at Simpson Street and Main Street on the North Shore Channel was above the DO standard less than 50 percent of the time.
- 6. Based upon the results of this study, it appears that the North Shore Channel upstream of the North Side WRP and Bubbly Creek are the main areas, of those monitored, that are experiencing problems maintaining DO above the applicable DO standard.

The data base resulting from the operation of the continuous DO monitors has been found to be an important source of information for determining the oxygen 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 calibration and verification of an unsteady-state water quality model for the Chicago and Calumet Waterway Systems.

INTRODUCTION

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 Waterway Systems, the District designed and constructed artificial aeration systems (instream diffuser and SEPA) during the late 1970s and early 1990s, respectively.

From October 1994 through May 1996, the Research and Development (R&D) Department conducted weekly DO surveys in the Chicago Waterway 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 values in selected waterway reaches were less than IPCB DO standards applicable to these reaches.

In August 1996, the R&D Department began developing a comprehensive field-monitoring program in order to locate and identify reaches in the Chicago Waterway System where the DO concentration is less than the applicable IPCB DO standard. Initially, the program was to focus on the Chicago Waterway 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 Waterway System for the latter two years.

Polls (2002) summarized monitoring results from August 1998 through July 2000 for the Chicago Waterway System. This report covers the monitoring results for the period from August 2000 through December 2001.

MONITORING STATIONS

Monitoring data for 23 stations are presented in this report (Figure 1). Four stations were located on the North Shore Channel, five on the North Branch of the Chicago River, three on the Chicago River, two on the South Branch of the Chicago River, one on Bubbly Creek, six on the Chicago Sanitary and Ship Canal, one station on the Calumet-Sag Channel, and one station on the Des Plaines River. Table 1 describes the locations of the 23 monitoring stations.

Initially, in 1998, 20 stations were selected for DO monitoring along the Chicago Waterway System from Wilmette, Illinois on the North Shore Channel to the Lockport Powerhouse and Lock on the Chicago Sanitary and Ship Canal (Figure 1). Three additional monitoring stations were added during 2000, including Michigan Avenue and the Chicago River Controlling Works (CRCW) on the Chicago River on February 29, 2000, and Jefferson Street on the Des Plaines River on March 16, 2000. The Michigan Avenue monitoring station had to be repositioned, which precluded data from being collected from May 22, 2001 through January 2, 2002 at that location. On January 18, 2001, monitoring ceased at four of the stations, including Devon Avenue (North Shore Channel), Lawrence Avenue (North Branch of

FIGURE 1

CONTINUOUS DISSOLVED OXYGEN MONITORING STATIONS

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

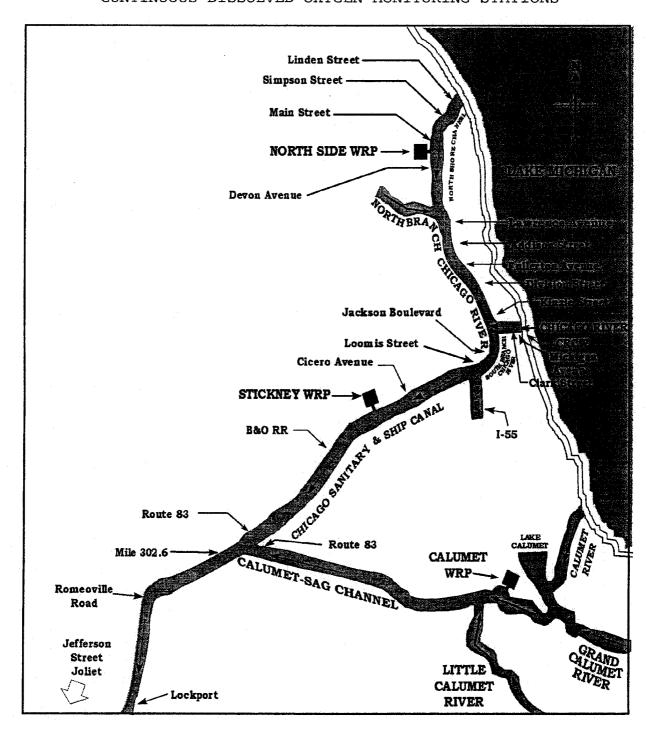


TABLE 1

CONTINUOUS DISSOLVED OXYGEN MONITORING LOCATIONS

Monitoring Location	Waterways	Description of Monitoring Location
Linden Street	North Shore Channel	0.1 mile below Wilmette Pumping Station; 7.1 miles above North Side WRP outfall; water quality monitor under Linden Street bridge, center of channel, one foot above bottom.
Simpson Street	North Shore Channel	1.6 miles below Wilmette Pumping Station; 5.6 miles above North Side WRP outfall; water quality monitor under Simpson Street bridge, center of channel, one foot above bottom.
Main Street	North Shore Channel	4.1 miles below Wilmette Pumping Station; 3.1 miles above North Side WRP outfall; water quality monitor under Main Street bridge, center of channel, one foot above bottom.
Devon Avenue	North Shore Channel	1.2 miles below North Side WRP outfall; 0.1 mile above Devon Aeration Station; water quality monitor under Devon Avenue bridge, center of channel, one foot above bottom.
Lawrence Avenue	North Branch Chicago River	3.5 miles below North Side WRP outfall; 0.4 miles below junction with North Shore Channel; 0.1 mile below Lawrence Avenue Pumping Station; water quality monitor on northwest side Lawrence Avenue bridge, three 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, three feet below water surface.
Fullerton Avenue	North Branch Chicago River	7.2 miles below North Side WRP outfall; 0.4 miles above Webster Aeration Station; water quality monitor on northwest side Fullerton Avenue bridge, three feet below water surface.

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TABLE 1 (Continued)

CONTINUOUS DISSOLVED OXYGEN MONITORING LOCATIONS

Monitoring Location	Waterways	Description of Monitoring Location
Division Street	North Branch Chicago River	8.8 miles below North Side WRP outfall; 1.4 miles below Webster Aeration Station; water quality monitor on northeast side Division Street bridge, three feet below water surface.
Kinzie Street	North Branch Chicago River	9.9 miles below North Side WRP outfall; 0.1 mile above junction with Chicago River; water quality monitor on northeast side Kinzie Street bridge, three feet below water surface.
Chicago River Controlling Works	Chicago River	0.1 miles below Chicago River Controlling Works; 1.5 miles above junction with South Branch Chicago River; water quality monitor on south guidewall of lock, three feet below water surface.
Michigan Avenue	Chicago River	0.8 miles below Chicago River Controlling Works; 0.8 miles above junction with South Branch Chicago River; water quality monitor on northeast side of Michigan Avenue bridge, three feet below water surface.
Clark Street	Chicago River	1.2 miles below Chicago River Controlling Works; 0.4 miles above junction with South Branch Chicago River; water quality monitor on southeast side Clark Street bridge, three feet below water surface.
Jackson Boulevard	South Branch Chicago River	1.0 mile below junction with Chicago River; water quality monitor on northeast side of Jackson Boulevard bridge, three feet below water surface.

TABLE 1 (Continued)

CONTINUOUS DISSOLVED OXYGEN MONITORING LOCATIONS

Monitoring Location	Waterways	Description of Monitoring Location				
Loomis Street	South Branch Chicago River	4.0 miles below junction with Chicago River; 0 miles below Fisk Generating Station discharge water quality monitor on northeast side Looms Street bridge, three feet below water surface.				
Interstate 55	Bubbly Creek	1.0 mile below Racine Avenue Pumping Station; 0.4 miles above junction with South Branch Chicago River; water quality monitor on northeast side I-55 bridge, three feet below water surface.				
Cicero Avenue	Chicago Sanitary & Ship Canal	1.9 miles above Stickney WRP outfall; 1.0 mile below Crawford Generating Station cooling water discharge; water quality monitor on northeast side Cicero Avenue bridge, three feet below water surface.				
B&O Central RR	Chicago Sanitary & Ship Canal	6.8 miles below Stickney WRP outfall; water quality monitor in center of canal, east side B&O RR bridge, three feet below water surface.				
Route 83	Chicago Sanitary & Ship Canal	1.0 mile above junction with Calumet-Sag Channel; 0.8 miles above Canal Junction SEPA Station; water quality monitor 0.3 miles above Route 83 bridge, center of canal, one foot above bottom.				
Mile 302.6	Chicago Sanitary & Ship Canal	1.2 miles below junction with Calumet-Sag Channel; 1.3 miles below Canal Junction SEPA Station; water quality monitor in center of canal, one foot above bottom.				
Romeoville Road	Chicago Sanitary & Ship Canal	7.1 miles below junction with Calumet-Sag Channel; 5.1 miles above Lockport Lock; water quality monitor on southeast side Romeoville Road bridge, three feet below water surface.				

TABLE 1 (Continued)

CONTINUOUS DISSOLVED OXYGEN MONITORING LOCATIONS

Monitoring Location	Waterways	Description of Monitoring Location			
Lockport	Chicago Sanitary & 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, three feet below water surface.			
Route 83	Calumet-Sag Channel	0.3 miles above junction with Chicago Sanitary & Ship Canal; 0.2 miles above Canal Junction SEPA Station; water quality monitor on southwest side Gulf, Mobile & Ohio RR bridge, three feet below water surface.			
Jefferson Street	Des Plaines River	3.0 miles below Lockport Lock, 2.1 miles below junction with Des Plaines River; water quality monitor on southeast side Jefferson Street bridge, three feet below water surface.			

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the Chicago River), I-55 (Bubbly Creek), and Loomis Street (South Branch of the Chicago River), because it was decided that sufficient information had been gathered at these four stations to use for future planning.

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; (4) below North Branch and Racine Avenue wastewater pumping stations; (5) above and below the North Side and Stickney WRPs; (6) below discretionary diversion locations; and (7) minimal cross-sectional DO variability.

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 suspended approximately 1 foot off the bottom of the waterway and orientated 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 (IWD) 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 was directly exported electronically from individual monitors to a specially designed Access® database for data processing and storage. Following data downloading, the weekly DO data was carefully reviewed for accuracy. The review process included the following: (1) Comparing a grab sample DO value measured in the field with a DO value recorded by a retrieved monitor (DO rejection criteria = difference greater than 2.0 mg/L); (2) Comparing the last hourly DO value measured by a retrieved monitor with the first hourly DO value recorded by a deployed monitor (DO rejection criteria = difference greater than 2.0 mg/L); and (3) Comparing a DO value measured in a laboratory holding tank and a DO value recorded by a retrieved monitor (DO rejection criteria = difference greater than 1.0 mg/L).

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 values were prepared.

Verification of Representative Data

During the fall of 2000 and spring, summer, and fall of 2001, cross-sectional DO surveys were conducted in the Chicago Waterway 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 value measured by the monitor at the fixed locations.

RESULTS AND DISCUSSION

The number and percent of DO values rejected and removed from the Access® database are summarized in <u>Table 2</u>. Based on the data review methodology previously described, eight percent of the data were rejected. The number of DO values rejected ranged from a low of 0 at Michigan Avenue on the Chicago River and Loomis Street on the South Branch of the Chicago River to a high of 3,058 (25 percent) at Linden Street on the North Shore Channel.

The minimum, maximum, and mean DO concentrations measured at the 23 stations from August 2000 through December 2001 are shown in Table 3.

The number and percent of DO values above the applicable IPCB DO standard for the subject waterways are presented in Table 4. The DO data shown in Table 4 do not include the DO values rejected during the data review.

Table 5 shows the percent distribution of DO values from <1.0 mg/L to >5.0 mg/L at the 23 monitoring stations. In general, it is thought that 3.0 mg/L is the minimum allowable DO concentration that avoids acute mortality and protects most warm water fish.

TABLE 2

NUMBER AND PERCENT OF DISSOLVED OXYGEN VALUES REJECTED DURING AUGUST 2000 THROUGH DECEMBER 2001¹

Monitoring Location	Waterway	Number of DO Values Rejected	Percent of DO Values Rejected
Linden	North Shore Channel	3,058	25
Simpson	North Shore Channel	1,389	11
Main	North Shore Channel	1,008	8
Devon	North Shore Channel	389	9 .
Lawrence	North Branch Chicago River	1	<1
Addison	North Branch Chicago River	189	2
Fullerton	North Branch Chicago River	350	3
Division	North Branch Chicago River	178	1
Kinzie	North Branch Chicago River	178	. 1
CRCW	Chicago River	559	4
Michigan	Chicago River	0	0
Clark	Chicago River	121	1
Jackson	South Branch Chicago River	193	2
Loomis	South Branch Chicago River	0	0
I-55	Bubbly Creek	2	<1
Cicero	Chicago Sanitary and Ship Canal	9	<1
B&O RR	Chicago Sanitary and Ship Canal	394	3
Route 83	Chicago Sanitary and Ship Canal	207	2
Mile 302.6	Chicago Sanitary and Ship Canal	258	2
Romeoville	Chicago Sanitary and Ship Canal	520	4
Lockport	Chicago Sanitary and Ship Canal	902	7
Route 83	Calumet-Sag Channel	377	3
Jefferson	Des Plaines River	340	3

¹DO values were rejected based on quality control check and/or operational problems with monitor.

TABLE 3

MINIMUM, MAXIMUM, AND MEAN DISSOLVED OXYGEN VALUES MEASURED HOURLY IN THE CHICAGO WATERWAY SYSTEM DURING AUGUST 2000 THROUGH DECEMBER 2001¹

Monitoring		DO Values (mg/L)			
Location	Waterway	Minimum	Maximum	Mean	
Linden	North Shore Channel	0.0	13.4	7.2	
Simpson	North Shore Channel	0.0	12.9	4.3	
Main	North Shore Channel	0.0	13.6	4.7	
Devon	North Shore Channel	3.3	9.4	7.1	
Lawrence	North Branch Chicago River	3.4	9.9	7.2	
Addison	North Branch Chicago River	0.3	11.3	6.7	
Fullerton	North Branch Chicago River	0.1	11.1	5.8	
Division	North Branch Chicago River	0.5	10.7	6.3	
Kinzie	North Branch Chicago River	0.2	10.5	6.0	
CRCW	Chicago River	1.3	14.1	8.8	
Michigan	Chicago River	4.1	13.1	8.3	
Clark	Chicago River	1.1	12.3	7.6	
Jackson	South Branch Chicago River	0.8	9.9	5.9	
Loomis	South Branch Chicago River	2.1	9.8	6.9	
I- 5 5	Bubbly Creek	0.1	9.1	4.4	
Cicero	Chicago Sanitary and Ship Canal	0.0	9.2	5.1	
B&O RR	Chicago Sanitary and Ship Canal	1.6	11.5	6.4	
Route 83	Chicago Sanitary and Ship Canal	0.0	9.2	5.5	
Mile 302.6	Chicago Sanitary and Ship Canal	0.0	13.6	5.7	
Romeoville	Chicago Sanitary and Ship Canal	0.7	10.4	5.5	
Lockport	Chicago Sanitary and Ship Canal	0.3	9.8	5.5	
Route 83	Calumet-Sag Channel	1.4	11.0	6.4	
Jefferson	Des Plaines River	1.3	12.5	7.1	

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

NUMBER AND PERCENT OF DISSOLVED OXYGEN VALUES MEASURED ABOVE THE ILLINOIS POLLUTION CONTROL BOARD'S WATER QUALITY STANDARD IN THE CHICAGO WATERWAY SYSTEM DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Location	Waterway	IPCB DO Standard	Number of DO Values	Number of DO Values Above Standard	Percent of DO Values Above Standard
Linden	North Shore Channel	5.0	9,374	6,950	74
Simpson	North Shore Channel	5.0	11,043	4,757	43
Main	North Shore Channel	5.0	11,424	5,523	48
Devon	North Shore Channel	4.0	3,706	3,684	99
Lawrence	North Branch Chicago River	4.0	4,093	4,092	>99
Addison	North Branch Chicago River	4.0	12,243	12,181	99
Fullerton	North Branch Chicago River	4.0	12,082	11,312	94
Division	North Branch Chicago River	4.0	12,254	11,968	98
Kinzie	North Branch Chicago River	4.0	12,254	11,800	96
CRCW	Chicago River	5.0	11,873	11,743	99
Michigan	Chicago River	5.0	7,066	7,012	99
Clark	Chicago River	5.0	12,311	11,803	96

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TABLE 4 (Continued)

NUMBER AND PERCENT OF DISSOLVED OXYGEN VALUES MEASURED ABOVE THE ILLINOIS POLLUTION CONTROL BOARD'S WATER QUALITY STANDARD IN THE CHICAGO WATERWAY SYSTEM DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Location	Waterway	IPCB DO Standard	Number of DO Values	Number of DO Values Above Standard	Percent of DO Values Above Standard
Jackson	South Branch Chicago River	4.0	12,239	11,522	94
Loomis	South Branch Chicago River	4.0	4,091	4,053	99
I-55	Bubbly Creek	4.0	4,089	2,475	61
Cicero	Chicago Sanitary and Ship Canal	4.0	12,423	9,371	75
B&O RR	Chicago Sanitary and Ship Canal	4.0	12,038	11,707	97
Route 83	Chicago Sanitary and Ship Canal	4.0	12,225	10,507	86
Mile 302.6	Chicago Sanitary and Ship Canal	4.0	12,174	10,903	90
Romeoville	Chicago Sanitary and Ship Canal	4.0	11,912	9,833	83
Lockport	Chicago Sanitary and Ship Canal	4.0	11,530	9,296	81
Route 83	Calumet-Sag Channel	3.0	12,055	11,818	98
Jefferson	Des Plaines River	4.0	12,092	11,836	98

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

TABLE 5

PERCENT OF DISSOLVED OXYGEN (DO) VALUES IN SELECTED RANGES
IN THE CHICAGO WATERWAY SYSTEM DURING
AUGUST 2000 THROUGH DECEMBER 2001

Monitoring		Percei	nt of D	U Vaiu	es in	Range	(mg/L
Location	Waterway	<1	1-2	2-3	3-4	4-5	≥5
Linden	North Shore Channel	7	5	4	5	4	74
Simpson	North Shore Channel	28	6	6	8	9	43
Main	North Shore Channel	18	6	8	10	9	48
Devon	North Shore Channel	0	0	0	1	1	98
Lawrence	North Branch Chicago River	0	0	0	<1	<1	>99
Addison	North Branch Chicago River	<1	<1	<1	<1	3	96
Fullerton	North Branch Chicago River	<1	<1	1	5	19	75
Division	North Branch Chicago River	<1	<1	<1	2	9	89
Kinzie	North Branch Chicago River	<1	<1	1	3	13	83
CRCW	Chicago River	O	<1	<1	<1	1	99
Michigan	Chicago River	0	0	0	0	1	99
Clark	Chicago River	0	<1	<1	<1	3,	96
Jackson	South Branch Chicago River	<1	<1	1	5	17	78
Loomis	South Branch Chicago River	0	0	<1	1	1	98
I-55	Bubbly Creek	7	9	11	12	14	46
Cicero	Chicago Sanitary & Ship Canal	1	2	5	16	24	51
B&O RR	Chicago Sanitary & Ship Canal	0	<1	1	2	10	87
Route 83	Chicago Sanitary & Ship Canal	1	2	3	8	25	61
Mile 302.6	Chicago Sanitary & Ship Canal	1	1	2	7	22	68
Romeoville	Chicago Sanitary & Ship Canal	<1	1	3	13	25	57
Lockport	Chicago Sanitary & Ship Canal	<1	1	3	15	22	59
Route 83	Calumet-Sag Channel	0	<1	2	5	14	79
Jefferson	Des Plaines River	0	<1	<1	2	11	87

Weekly DO summary statistics for the 18-month monitoring period at the 23 stations are presented in Appendices AI-1 through AI-23.

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 Waterway 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-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.

North Shore Channel

LINDEN STREET

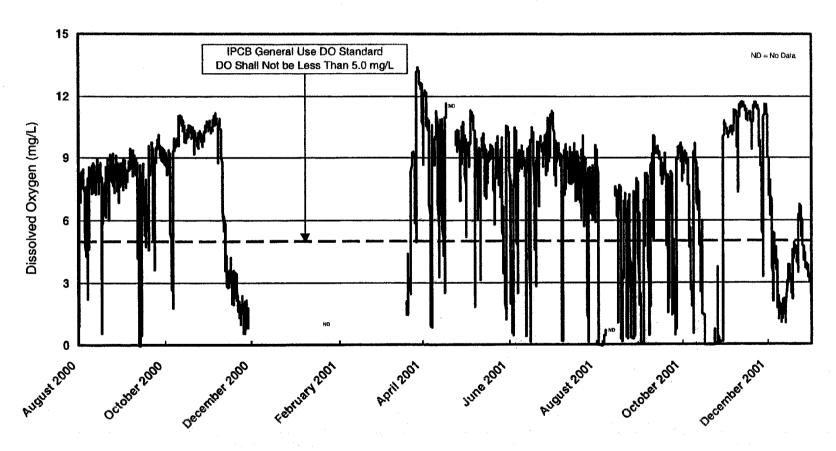
The maximum DO value recorded at Linden Street on the North Shore Channel from August 2000 through December 2001 was 13.4 mg/L. The minimum DO value was 0.0 mg/L. During the 18-month period, the mean DO concentration was 7.2 mg/L at Linden Street.

The IPCB requires that the DO concentration in those portions of the North Shore Channel classified as General Use Waters shall not be less than 5.0 mg/L at any time. From August 2000 through December 2001, 6,950 of 9,374 DO values at Linden Street (74 percent) were above the IPCB General Use DO standard.

During the 18-month monitoring period, DO measurements below the 5.0 mg/L standard occurred in all months (Figure 2).

FIGURE 2

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT LINDEN STREET ON THE NORTH SHORE CHANNEL
FROM AUGUST 2000 THROUGH DECEMBER 2001



During the period November 28, 2000 through March 20, 2001, the DO monitor at Linden Avenue was not accessible for service because of ice cover and the data were lost. Sixteen percent of the DO values recorded at Linden Street were below 3.0 mg/L (Table 5).

SIMPSON STREET

From August 2000 through December 2001, the DO concentration measured at Simpson Street on the North Shore Channel ranged from a low of 0.0 mg/L to a high of 12.9 mg/L. The mean DO value at Simpson Street was 4.3 mg/L during the 18-month period.

The IPCB DO standard applicable to Simpson Street on the North Shore Channel is 5.0 mg/L. From August 2000 through December 2001, 4,757 of 11,043 DO observations at Simpson Street (43 percent) were above the IPCB General Use DO standard.

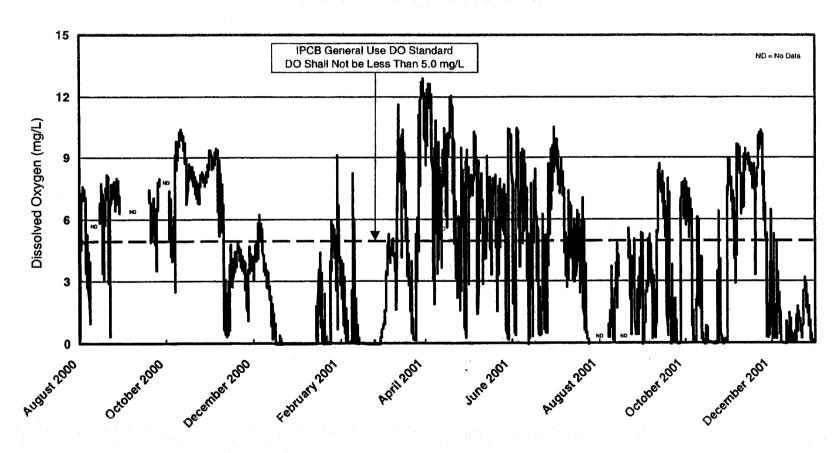
During the 18-month monitoring period, DO measurements below the 5.0 mg/L standard occurred in all months (Figure 3). Forty percent of the DO values recorded at Simpson Street were below 3.0 mg/L (Table 5).

MAIN STREET

The maximum DO value recorded at Main Street on the North Shore Channel from August 2000 through December 2001 was

FIGURE 3

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT SIMPSON STREET ON THE NORTH SHORE CHANNEL
FROM AUGUST 2000 THROUGH DECEMBER 2001



13.6 mg/L. The minimum DO value was 0.0 mg/L. During the 18-month period, the mean DO concentration was 4.7 mg/L at Main Street.

The IPCB requires that the DO concentration in those portions of the North Shore Channel classified as General Use Waters shall not be less than 5.0 mg/L at any time. From August 2000 through December 2001, 5,523 of 11,424 DO values at Main Street (69 percent) were above the IPCB General Use DO standard.

During the 18-month monitoring period, DO measurements below the 5.0 mg/L standard occurred in all months (Figure 4). Thirty-two percent of the DO values recorded at Main Street were below 3.0 mg/L (Table 5).

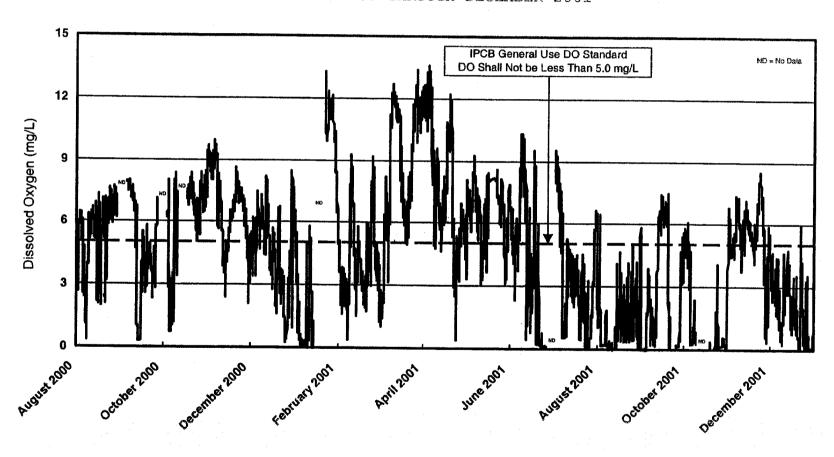
DEVON AVENUE

From August 2000 through January 18, 2001, the DO concentration measured at Devon Avenue on the North Shore Channel ranged from a low of 3.3 mg/L to a high of 9.4 mg/L. The mean value was 7.1 mg/L during the 6-month period that monitoring was conducted at Devon Avenue.

The IPCB DO standard applicable to Devon Avenue on the North Shore Channel is 4.0 mg/L. From August 2000 through January 18, 2001, 3,684 of 3,706 DO observations at Devon

FIGURE 4

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT MAIN STREET ON THE NORTH SHORE CHANNEL FROM AUGUST 2000 THROUGH DECEMBER 2001



Avenue (99 percent) were above the IPCB Secondary Contact DO standard.

During the 6-month monitoring period at Devon Avenue, DO measurements below the 4.0 mg/L standard occurred in September 2000 and November 2000 (Figure 5). None of the DO values recorded at Devon Avenue were below 3.0 mg/L (Table 5).

Continuous DO monitoring was discontinued at the Devon Avenue station on January 18, 2001, because it was decided that sufficient information had been gathered at this location for future planning.

North Branch of the Chicago River

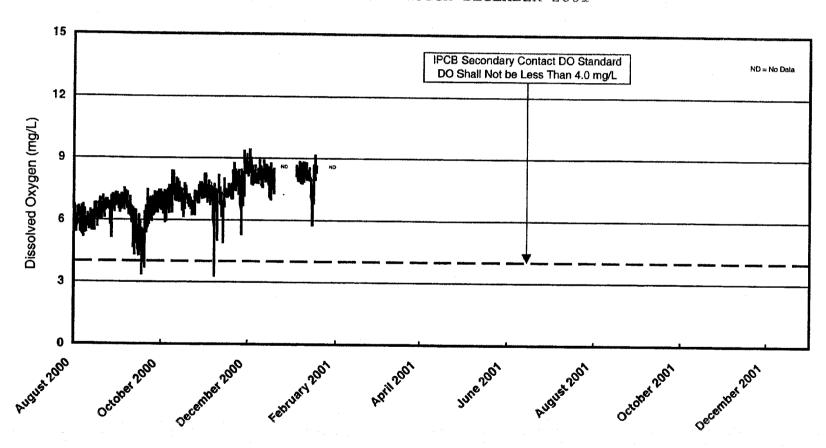
LAWRENCE AVENUE

The maximum DO value recorded at Lawrence Avenue on the North Branch of the Chicago River from August 2000 through January 18, 2001, was 9.9 mg./L. The minimum DO value was 3.4 mg/L. During the 6-month period that monitoring was conducted at Lawrence Avenue, the mean DO concentration was 7.2 mg/L.

The IPCB requires that the DO concentration in those portions of the North Branch of the Chicago River classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. From August 2000 through January 18, 2001, 4,092 of

FIGURE 5

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT DEVON AVENUE ON THE NORTH SHORE CHANNEL FROM AUGUST 2000 THROUGH DECEMBER 2001



27

4,093 DO values at Lawrence Avenue (>99 percent) were above the IPCB Secondary Contact DO standard.

During the 6-month monitoring period at Lawrence Avenue, DO measurements below the 4.0 mg/L standard occurred in August 2000 (Figure 6). None of the DO values recorded at Lawrence Avenue were below 3.0 mg/L (Table 5).

Continuous D monitoring was discontinued at the Lawrence Avenue station on January 18, 2001, because it was decided that sufficient information had been gathered at this location for future planning.

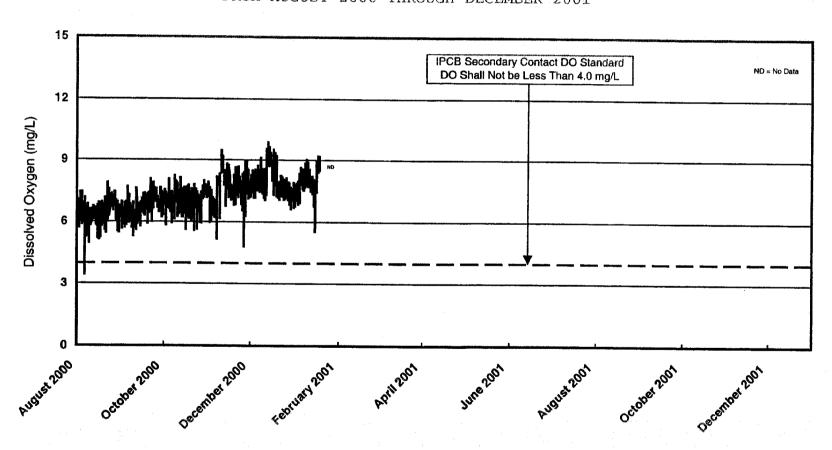
ADDISON STREET

From August 2000 through December 2001, the DO concentration measured at Addison Street on the North Branch of the Chicago River ranged from a low of 0.3 mg/L to a high of 11.3 mg/L. The mean DO value at Addison Street was 6.7 mg/L during the 18-month period.

The IPCB DO standard applicable to Addison Street on the North Branch of the Chicago River is 4.0 mg/L. From August 2000 through December 2001, 12,181 of 12,243 DO observations at Addison Street (99 percent) were above the IPCB Secondary Contact DO standard.

FIGURE 6

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT LAWRENCE AVENUE ON THE NORTH BRANCH OF THE CHICAGO RIVER
FROM AUGUST 2000 THROUGH DECEMBER 2001



During the 18-month monitoring period, DO measurements below the 4.0 mg/L standard occurred in August 2000, December 2000, and June through October 2001 (Figure 7). Less than one percent of the DO values recorded at Addison Street were below 3.0 mg/L (Table 5).

FULLERTON AVENUE

The maximum DO value recorded at Fullerton Avenue on the North Branch of the Chicago River from August 2000 through December 2001 was 11.1 mg/L. The minimum DO value was 0.1 mg/L. During the 18-month period, the mean DO concentration was 5.8 mg/L at Fullerton Avenue.

The IPCB requires that the DO concentration in those portions of the North Branch of the Chicago River classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. From August 2000 through December 2001, 11,312 of 12,082 DO values at Fullerton Avenue (94 percent) were above the IPCB Secondary Contact DO standard.

DO measurements below the 4.0 mg/L standard occurred in August 2000, September 2000, November 2000, and February through December 2001, (Figure 8). One percent of the DO values recorded at Fullerton Avenue were below 3.0 mg/L (Table 5).

FIGURE 7

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT ADDISON STREET ON THE NORTH BRANCH OF THE CHICAGO RIVER
FROM AUGUST 2000 THROUGH DECEMBER 2001

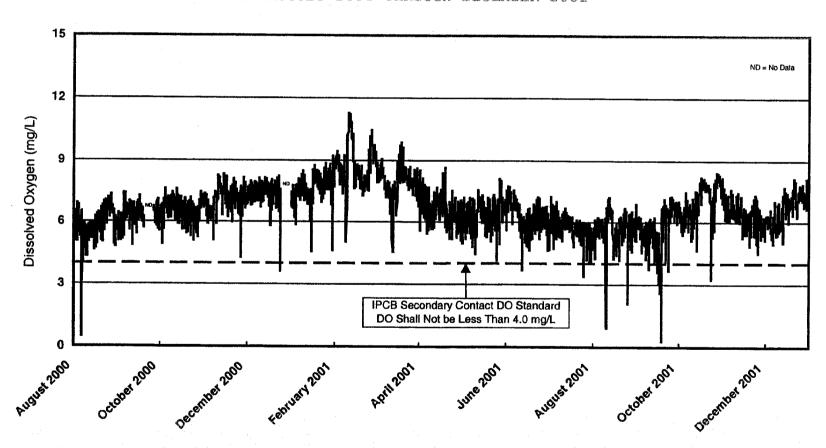
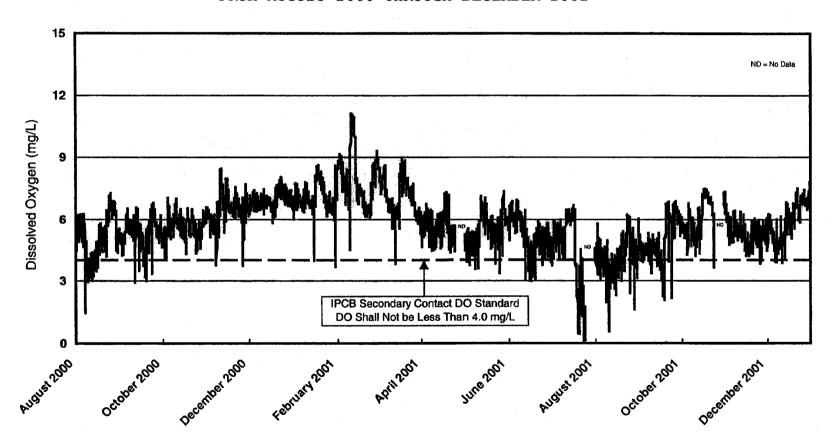


FIGURE 8

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT FULLERTON AVENUE ON THE NORTH BRANCH OF THE CHICAGO RIVER
FROM AUGUST 2000 THROUGH DECEMBER 2001



DIVISION STREET

From August 2000 through December 2001, the DO concentration measured at Division Street on the North Branch of the Chicago River ranged from a low of 0.5 mg/L to a high of 10.7 mg/L. The mean DO value at Division Street was 5.8 mg/L during the 18-month period.

The IPCB DO standard applicable to Division Street on the North Branch of the Chicago River is 4.0 mg/L. From August 2000 through December 2001, 11,968 of 12,254 DO observations at Division Street (98 percent) were above the Secondary Contact DO standard.

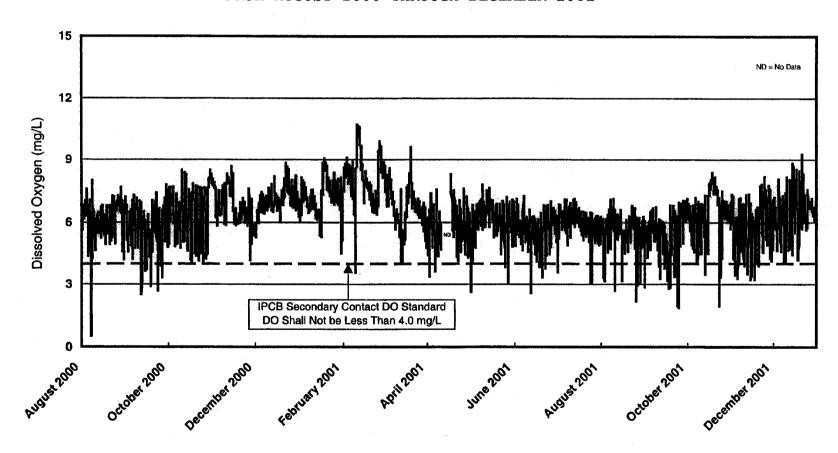
DO measurements below the 4.0 mg/L standard occurred in August 2000, September 2000, February 2001, and April through November 2001 (Figure 9). Less than one percent of the DO values recorded at Division Street were below 3.0 mg/L (Table 5).

KINZIE STREET

The maximum DO value recorded at Kinzie Street on the North Branch of the Chicago River from August 2000 through December 2001 was 10.5 mg/L. The minimum DO value was 0.2 mg/L. During the 18-month period, the mean DO concentration was 6.0 mg/L at Kinzie Street.

FIGURE 9

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT DIVISION STREET ON THE NORTH BRANCH OF THE CHICAGO RIVER
FROM AUGUST 2000 THROUGH DECEMBER 2001



The IPCB requires that the DO concentration in those portions of the North Branch of the Chicago River classified as Secondary Contact Waters shall not be less than 4.0 mg/L at any time. From August 2000 through December 2001, 11,800 of 12,254 DO values at Kinzie Street (96 percent) were above the IPCB Secondary Contact DO standard.

DO measurements below the 4.0 mg/L standard occurred during August through October 2000, February 2001, and April through December 2001 (Figure 10). One percent of the DO values recorded at Kinzie Street were below 3.0 mg/L (Table 5).

Chicago River

CHICAGO RIVER CONTROLLING WORKS (CRCW)

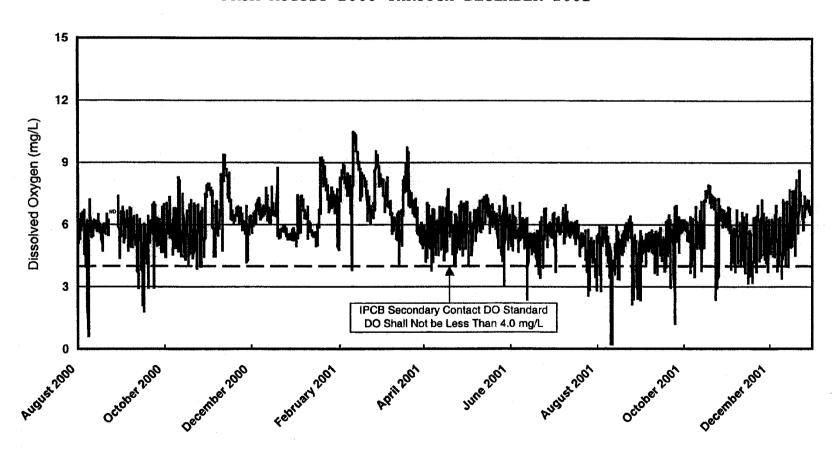
From August 2000 through December 2001, the DO concentration measured at CRCW on the Chicago River ranged from a low of 1.3 mg/L to a high of 14.1 mg/L. The mean DO value at CRCW Street was 8.8 mg/L during the 18-month period.

The IPCB DO standard applicable to CRCW on the Chicago River is 5.0 mg/L. From August 2000 through December 2001, 11,743 of 11,873 DO observations at CRCW (99 percent) were above the IPCB General Use DO standard.

During the 18-month monitoring period, DO measurements below the 5.0 mg/L standard occurred in April 2001, August

FIGURE 10

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT KINZIE STREET ON THE NORTH BRANCH OF THE CHICAGO RIVER
FROM AUGUST 2000 THROUGH DECEMBER 2001



2001, and October 2001 (Figure 11). Less than one percent of the DO values recorded at CRCW were below 3.0 mg/L (Table 5).

MICHIGAN AVENUE

From August 2000 through May 22, 2001, the DO concentration measured at Michigan Avenue on the Chicago River ranged from a low of 4.1 mg/L to a high of 13.1 mg/L. The mean DO value was 8.3 mg/L during the 9-month monitoring period at Michigan Avenue.

The IPCB DO standard applicable to Michigan Avenue on the Chicago River is 5.0 mg/L. From August 2000 through May 22, 2001, 7,012 of 7,066 DO observations at Michigan Avenue (99 percent) were above the IPCB General Use DO standard.

During the 11-month monitoring period, DO measurements below the 5.0 mg/L standard occurred in April and May 2001 (Figure 12). None of the DO values recorded at Michigan Avenue were below 3.0 mg/L (Table 5).

Continuous DO monitoring was discontinued at the Michigan Avenue station between May 22, 2001, and January 2, 2002, because the DO monitor had to be repositioned in the waterway at this location.

FIGURE 11

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT THE CHICAGO RIVER CONTROLLING WORKS ON THE CHICAGO RIVER
FROM AUGUST 2000 THROUGH DECEMBER 2001

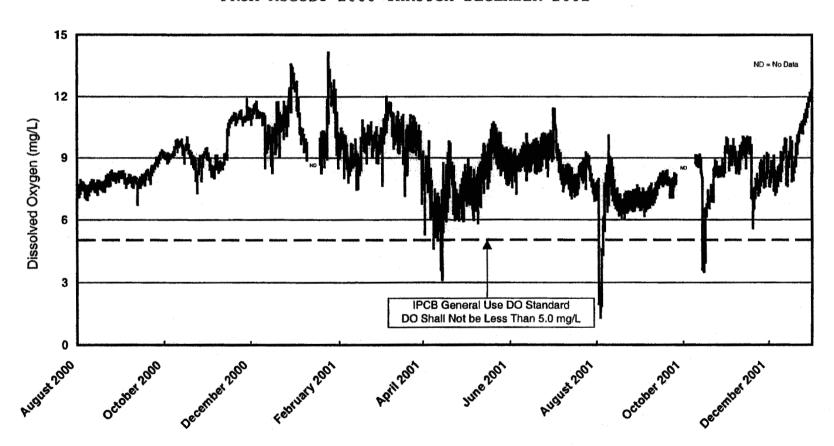
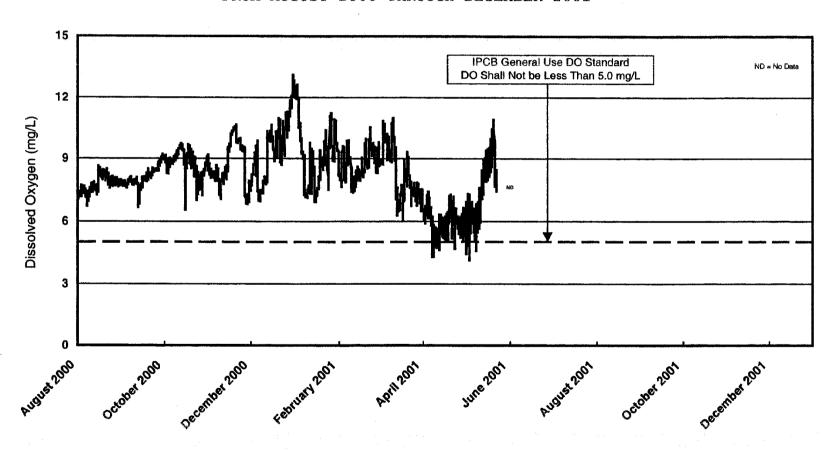


FIGURE 12

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT MICHIGAN AVENUE ON THE CHICAGO RIVER FROM AUGUST 2000 THROUGH DECEMBER 2001



CLARK STREET

From August 2000 through December 2001, the DO concentration measured at Clark Street on the Chicago River ranged from a low of 1.1 mg/L to a high of 12.3 mg/L. The mean DO value at Clark Street was 7.6 mg/L during the 18-month period.

The IPCB DO standard applicable to Clark Street on the Chicago River is 5.0 mg/L. From August 2000 through December 2001, 11,803 of 12,311 DO observations at Clark Street (96 percent) were above the IPCB General Use DO standard.

During the 18-month monitoring period, DO measurements below the 5.0 mg/L standard occurred in September 2000, and April, May, August, October, and November 2001 (Figure 13). Less than one percent of the DO values recorded at Clark Street were below 3.0 mg/L (Table 5).

South Branch of the Chicago River

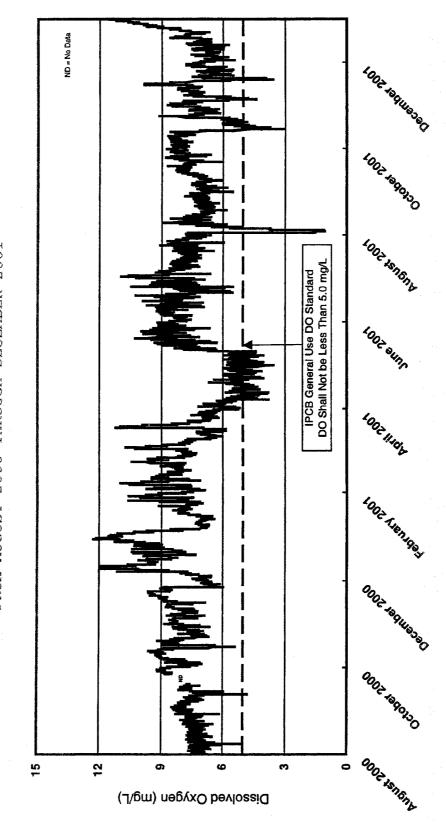
JACKSON BOULEVARD

The maximum DO value recorded at Jackson Boulevard on the South Branch of the Chicago River from August 2000 through December 2001 was 9.9 mg/L. The minimum DO value was 0.8 mg/L. During the 18-month period, the mean DO concentration was 5.9 mg/L at Jackson Boulevard.

METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO

FIGURE 13

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT CLARK STREET ON THE CHICAGO RIVER
FROM AUGUST 2000 THROUGH DECEMBER 2001



The IPCB requires that the DO concentration in the South Branch of the Chicago River shall not be less than 4.0 mg/L at any time. From August 2000 through December 2001, 11,522 of 12,239 DO values at Jackson Boulevard (94 percent) were above the IPCB Secondary Contact DO standard.

During the 18-month monitoring period, DO measurements below the 4.0 mg/L standard occurred in August and September 2000 and March through December, 2001 (Figure 14). One percent of the DO values recorded at Jackson Boulevard were below 3.0 mg/L (Table 5).

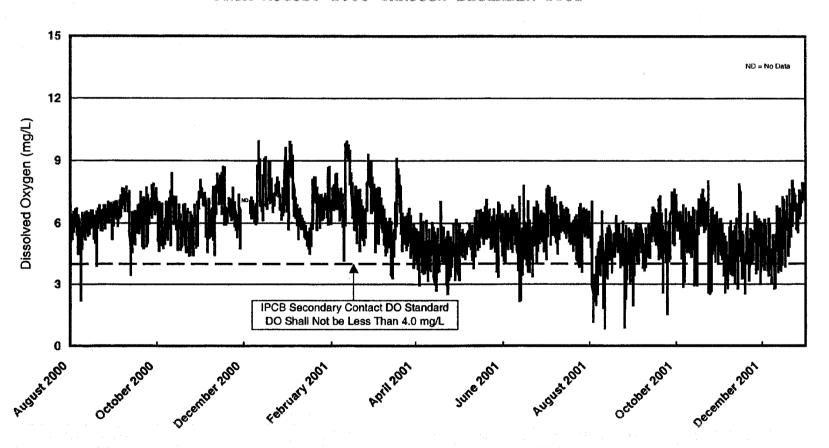
LOOMIS STREET

From August 2000 through January 18, 2001, the DO concentration measured at Loomis Street on the South Branch of the Chicago River ranged from a low of 2.1 mg/L to a high of 9.8 mg/L. The mean DO value was 6.9 mg/L during the 6-month monitoring period at Loomis Street.

The IPCB DO standard applicable to Loomis Street on the South Branch of the Chicago River is 4.0 mg/L. From August 2000 through December 2001, 4,053 of 4,091 DO observations at Loomis Street (99 percent) were above the IPCB Secondary Contact DO standard.

FIGURE 14

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT JACKSON BOULEVARD ON THE SOUTH BRANCH OF THE CHICAGO RIVER
FROM AUGUST 2000 THROUGH DECEMBER 2001



4

During the 18-month monitoring period, DO measurements below the 4.0 mg/L standard occurred in August and September 2000 (Figure 15). Less than one percent of the DO values recorded at Loomis Street were below 3.0 mg/L (Table 5).

Continuous DO monitoring was discontinued at the Loomis Street station on January 18, 2001, because it was decided that sufficient information had been gathered at this location for future planning.

Bubbly Creek

INTERSTATE HIGHWAY 55 (I-55)

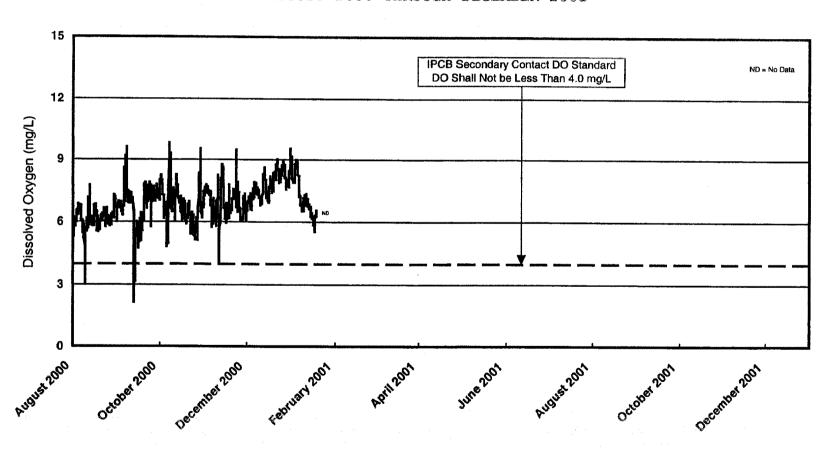
The maximum DO value recorded at I-55 on Bubbly Creek from August 2000 through January 18, 2001, was 9.1 mg/L. The minimum DO value was 0.1 mg/L. During the 6-month monitoring period at I-55, the mean DO concentration was 4.4 mg/L.

The IPCB requires that the DO concentration in Bubbly Creek shall not be less than 4.0 mg/L at any time. From August 2000 through December 2001, 2,475 of 4,089 DO values at I-55 (61 percent) were above the IPCB Secondary Contact DO standard.

During the 6-month monitoring period, DO measurements below the 4.0 mg/L standard occurred in every month except

FIGURE 15

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT LOOMIS STREET ON THE SOUTH BRANCH OF THE CHICAGO RIVER
FROM AUGUST 2000 THROUGH DECEMBER 2001



January 2001 (Figure 16). Twenty-seven percent of the DO values recorded at I-55 were below 3.0 mg/L (Table 5).

Continuous DO monitoring was discontinued at the I-55 station on January 18, 2001, because it was decided that sufficient information had been gathered at this location for future planning.

Chicago Sanitary and Ship Canal

CICERO AVENUE

From August 2000 through December 2001, the DO concentration measured at Cicero Avenue on the Chicago Sanitary and Ship Canal ranged from a low of 0.0 mg/L to a high of 9.2 mg/L. The mean DO value at Cicero Avenue was 5.1 mg/L during the 18-month period.

The IPCB DO standard applicable to Cicero Avenue on the Chicago Sanitary and Ship Canal is 4.0 mg/L. From August 2000 through December 2001, 9,371 of 12,423 DO observations at Cicero Avenue (75 percent) were above the IPCB Secondary Contact DO standard.

During the 18-month monitoring period, DO measurements below the 4.0 mg/L standard occurred during August through November 2000 and April through December 2001 (Figure 17).

FIGURE 16

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT INTERSTATE HIGHWAY 55 ON BUBBLY CREEK FROM AUGUST 2000 THROUGH DECEMBER 2001

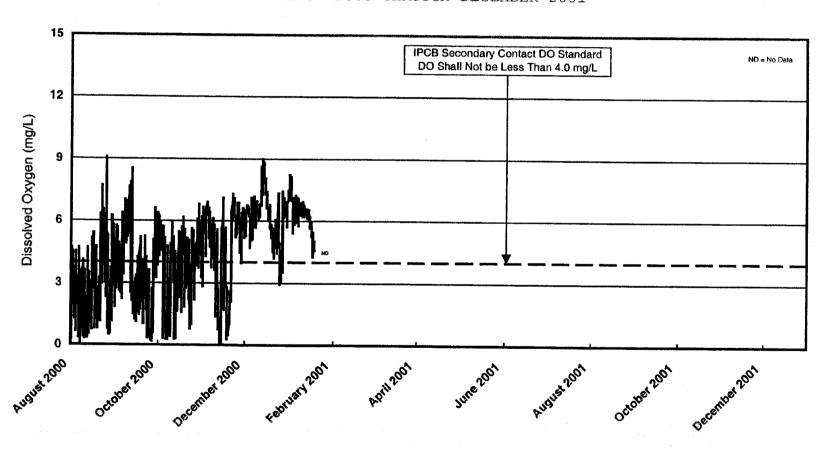
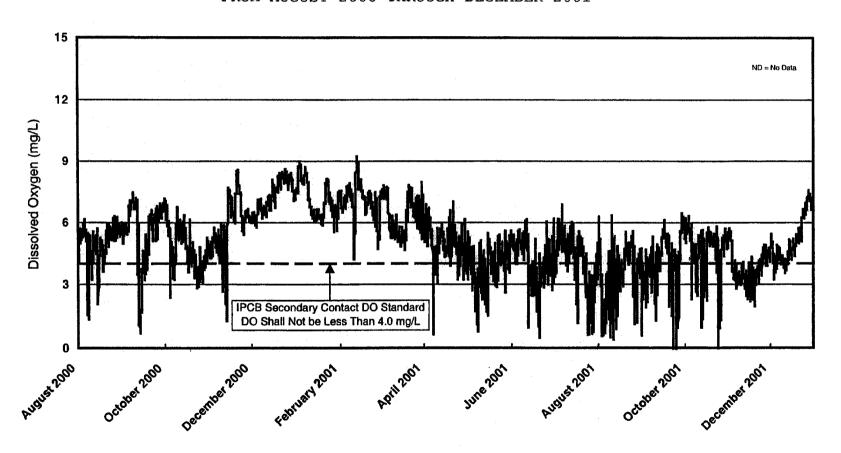


FIGURE 17

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT CICERO AVENUE ON THE CHICAGO SANITARY & SHIP CANAL
FROM AUGUST 2000 THROUGH DECEMBER 2001



Eight percent of the DO values recorded at Cicero Avenue were below $3.0\ \text{mg/L}$ (Table 5).

B&O CENTRAL RAILROAD

The maximum DO value recorded at B&O Central Railroad on the Chicago Sanitary and Ship Canal from August 2000 through December 2001 was 11.5 mg/L. The minimum DO value was 1.6 mg/L.

During the 18-month period, the mean DO concentration was 6.4 mg/L at B&O Central Railroad.

The IPCB requires that the DO concentration in the Chicago Sanitary and Ship Canal shall not be less than 4.0 mg/L at any time. From August 2000 through December 2001, 11,707 of 12,038 DO values at B&O Central Railroad (97 percent) were above the IPCB Secondary Contact DO standard.

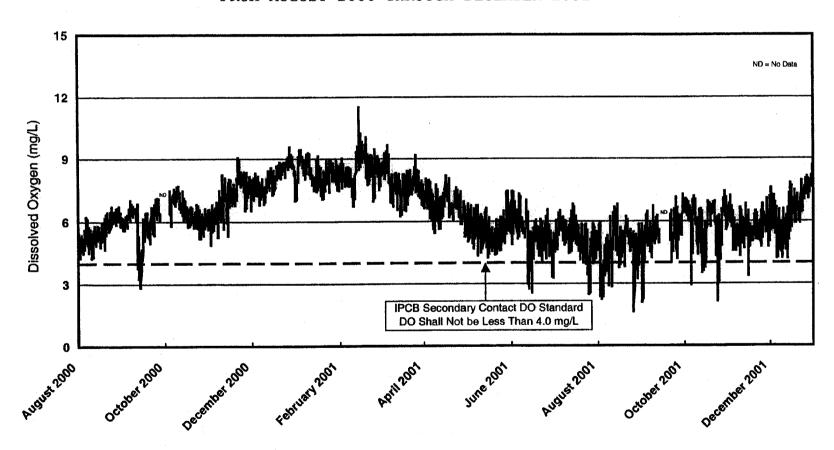
During the 18-month monitoring period, DO measurements below the 4.0 mg/L standard occurred in September 2000 and June through November 2001 (Figure 18). One percent of the DO values recorded at B&O Central Railroad were below 3.0 mg/L (Table 5).

ROUTE 83

From August 2000 through December 2001, the DO concentration measured at Route 83 on the Chicago Sanitary and Ship

FIGURE 18

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT B&O CENTRAL RAILROAD ON THE CHICAGO SANITARY & SHIP CANAL
FROM AUGUST 2000 THROUGH DECEMBER 2001



Canal ranged from a low of 0.0 mg/L to a high of 9.2 mg/L. The mean DO value at Route 83 was 5.5 mg/L during the 18-month period.

The IPCB DO standard applicable to Route 83 on the Chicago Sanitary and Ship Canal is 4.0 mg/L. From August 2000 through December 2001, 10,507 of 12,225 DO observations at Route 83 (86 percent) were above the IPCB Secondary Contact DO standard.

During the 18-month monitoring period, DO measurements below the 4.0 mg/L standard occurred during August through November 2000 and April through November 2001 (Figure 19). Six percent of the DO values recorded at Route 83 were below 3.0 mg/L (Table 5).

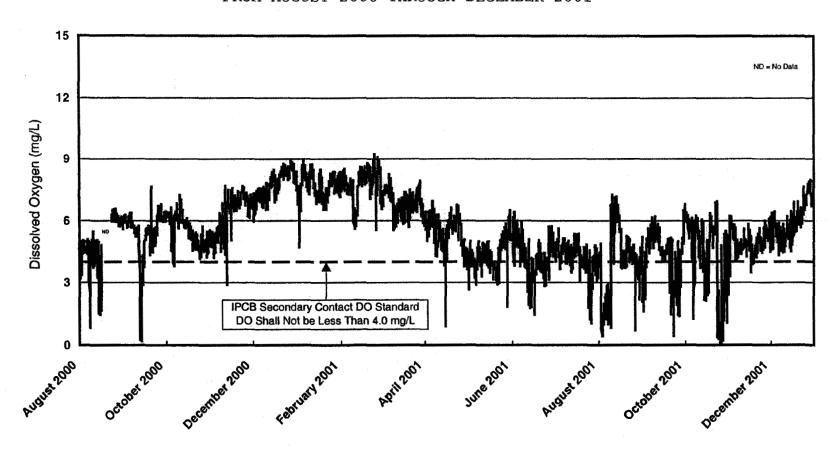
RIVER MILE 302.6

The maximum DO value recorded at River Mile 302.6 on the Chicago Sanitary and Ship Canal from August 2000 through December 2001 was 13.6 mg/L. The minimum DO value was 0.0 mg/L. During the 18-month period, the mean DO concentration was 5.7 mg/L at River Mile 302.6.

The IPCB requires that the DO concentration in the Chicago Sanitary and Ship Canal shall not be less than 4.0 mg/L at any time. From August 2000 through December 2001,

FIGURE 19

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT ROUTE 83 ON THE CHICAGO SANITARY & SHIP CANAL FROM AUGUST 2000 THROUGH DECEMBER 2001



10,903 of 12,174 DO values at River Mile 302.6 (90 percent) were above the IPCB Secondary Contact DO standard.

During the 18-month monitoring period, DO measurements below the 4.0 mg/L standard occurred during August and September 2000 and May through October 2001 (Figure 20). Four percent of the DO values recorded at River Mile 302.6 were below 3.0 mg/L (Table 5).

ROMEOVILLE ROAD

From August 2000 through December 2001, the DO concentration measured at Romeoville Road on the Chicago Sanitary and Ship Canal ranged from a low of 0.7 mg/L to a high of 10.4 mg/L. The mean DO value at Romeoville Road was 5.5 mg/L during the 18-month period.

The IPCB DO standard applicable to Romeoville Road on the Chicago Sanitary and Ship Canal is 4.0 mg/L. From August 2000 through December 2001, 9,833 of 11,912 DO observations at Romeoville Road (83 percent) were above the IPCB Secondary Contact DO standard.

During the 18-month monitoring period, DO measurements below the 4.0 mg/L standard occurred in August and September 2000 and May through November 2001 (Figure 21). Four percent

FIGURE 20

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT RIVER MILE 302.6 ON THE CHICAGO SANITARY & SHIP CANAL
FROM AUGUST 2000 THROUGH DECEMBER 2001

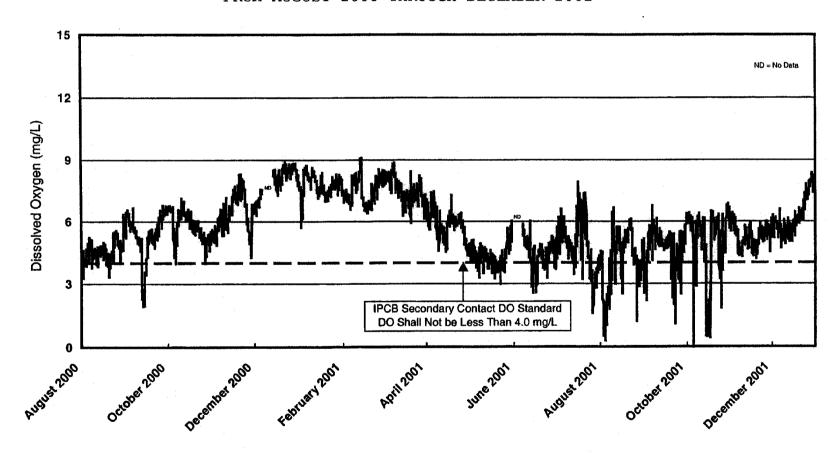
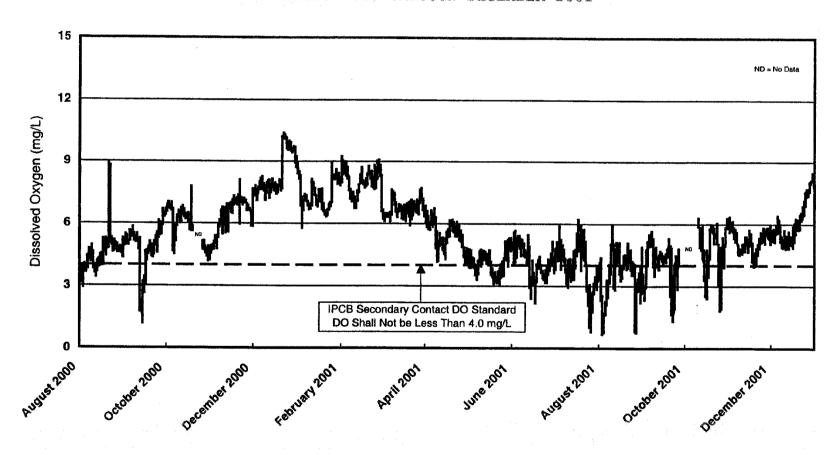


FIGURE 21

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT ROMEOVILLE ROAD ON THE CHICAGO SANITARY & SHIP CANAL
FROM AUGUST 2000 THROUGH DECEMBER 2001



of the DO values recorded at Romeoville Road were below 3.0 mg/L (Table 5).

LOCKPORT

The maximum DO value recorded at Lockport on the Chicago Sanitary and Ship Canal from August 2000 through December 2001 was 9.8 mg/L. The minimum DO value was 0.3 mg/L. During the 18-month period, the mean DO concentration was 5.5 mg/L at Lockport.

The IPCB requires that the DO concentration in the Chicago Sanitary and Ship Canal shall not be less than 4.0 mg/L at any time. From August 2000 through December 2001, 9,296 of 11,530 DO values at Lockport (81 percent) were above the IPCB Secondary Contact DO standard.

During the 18-month monitoring period, DO measurements below the 4.0 mg/L standard occurred during August through October 2000 and April through November 2001 (Figure 22). Four percent of the DO values recorded at Lockport were below 3.0 mg/L (Table 5).

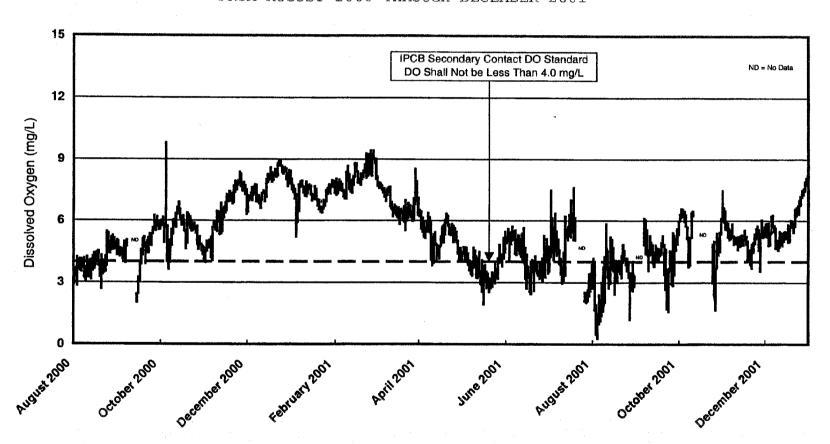
Calumet-Sag Channel

ROUTE 83

From August 2000 through December 2001, the DO concentration measured at Route 83 on the Calumet-Sag Channel ranged

FIGURE 22

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY
AT LOCKPORT POWERHOUSE ON THE CHICAGO SANITARY & SHIP CANAL
FROM AUGUST 2000 THROUGH DECEMBER 2001



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from a low of 1.4 mg/L to a high of 11.0 mg/L. The mean DO value at Route 83 was 6.4 mg/L during the 18-month period.

The IPCB DO standard applicable to Route 83 on the Calumet-Sag Channel is 3.0 mg/L. From August 2000 through December 2001, 11,818 of 12,055 DO observations at Route 83 (99 percent) were above the IPCB Secondary Contact DO standard.

During the 18-month monitoring period, DO measurements below the 3.0 mg/L standard occurred during September 2000 and June through August 2001 (Figure 23). Two percent of the DO values recorded at Route 83 on the Calumet-Sag Channel were below 3.0 mg/L (Table 5).

Des Plaines River

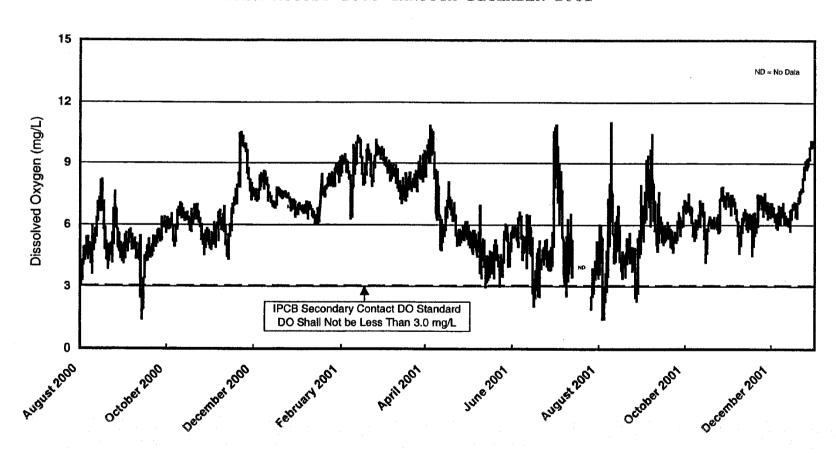
JEFFERSON STREET

From August 2000 through December 2001, the DO concentration measured at Jefferson Street on the Des Plaines River ranged from a low of 1.3 mg/L to a high of 12.5 mg/L. The mean DO value at Jefferson Street was 7.1 mg/L during the 18-month period.

The IPCB DO standard applicable to Jefferson Street on the Des Plaines River is 5.0 mg/L. From August 2000 through December 2001, 11,836 of 12,092 DO observations at Jefferson

FIGURE 23

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT ROUTE 83 ON THE CALUMET-SAG CHANNEL FROM AUGUST 2000 THROUGH DECEMBER 2001

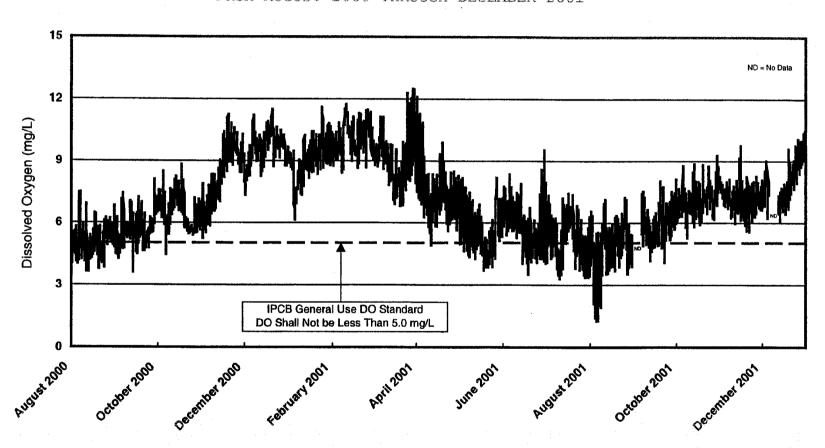


Street (98 percent) were above the IPCB Secondary Contact DO standard.

During the 18-month monitoring period, DO measurements below the 5.0~mg/L standard occurred during August through October 2000 and May through September 2001 (Figure 24). Less than one percent of the DO values recorded at Jefferson Street on the Des Plaines River were below 3.0~mg/L (Table 5).

FIGURE 24

DISSOLVED OXYGEN CONCENTRATION MEASURED HOURLY AT JEFFERSON STREET ON THE DES PLAINES RIVER FROM AUGUST 2000 THROUGH DECEMBER 2001



LITERATURE CITED

Polls, Irwin, "Continuous Dissolved Oxygen Monitoring from Wilmette to Lockport in the Chicago Waterway System During August through July 2000," Research and Development Department Report No. 02-11, Metropolitan Water Reclamation District of Greater Chicago, Chicago, Illinois, November 2002.

APPENDIX AI

WEEKLY DO SUMMARY STATISTICS
AT TWENTY-THREE MONITORING STATIONS
DURING AUGUST 2000 THROUGH DECEMBER 2001

TABLE AI-1

WEEKLY DO SUMMARY STATISTICS

AT LINDEN STREET ON THE NORTH SHORE CHANNEL

DURING AUGUST 2000 THROUGH DECEMBER 2001

					Percent	
Monitoring Dates	Number of DO Values	DO Co min	ncentratio max	n (mg/L) mean	DO Values Above Stand	
07/31/00 - 08/06/00	167	0.9	8.4	6.3	77	
08/07/00 - 08/13/00	167	2.2	8.7	7.3	90	
08/14/00 - 08/20/00	165	0.6	8.9	7.3	96	
08/21/00 - 08/27/00	168	6.0	9.2	8.2	100	
08/28/00 - 09/03/00	168	6.9	8.9	8.1	100	
09/04/00 - 09/10/00	168	7.8	9.4	8.6	100	
09/11/00 - 09/17/00	168	0.0	8.7	5.8	71	
09/18/00 - 09/24/00	168	3.6	9.7	7.7	93	
09/25/00 - 10/01/00	168	8.6	10.1	9.3	100	
10/02/00 - 10/08/00	168	1.8	9.9	7.4	79	
10/09/00 - 10/15/00	167	9.6	11.1	10.3	100	
10/16/00 - 10/22/00	168	9.2	10.6	10.1	100	
10/23/00 - 10/29/00	168	9.5	10.6	10.0	100	
10/23/00 - 10/23/00	158	10.2	11.2	10.6	100	
11/06/00 - 11/12/00	168	3.6	10.9	8.3	87	
11/13/00 - 11/12/00	168	1.9	4.3	3.2	0	
11/13/00 - 11/19/00 11/20/00 - 11/26/00	168	0.5	3.4	1.8	0	
11/20/00 - 11/26/00 11/27/00 - 12/03/00		0.8	2.2	1.4	0	
	40	0.8		1.4	U	
L2/04/00 - 12/10/00			NO DATA			
12/11/00 - 12/17/00			NO DATA			
12/18/00 - 12/24/00			NO DATA			
12/25/00 - 12/31/00			NO DATA			
01/01/01 - 01/07/01			NO DATA			
01/08/01 - 01/14/01			NO DATA			
01/15/01 - 01/21/01			NO DATA			
01/22/01 - 01/28/01			NO DATA			
01/29/01 - 02/04/01			NO DATA			
02/05/01 - 02/11/01			NO DATA			
02/12/01 - 02/18/01			NO DATA			
02/19/01 - 02/25/01			NO DATA			
02/26/01 - 03/04/01			NO DATA			
03/05/01 - 03/11/01			NO DATA			
03/12/01 - 03/18/01			NO DATA			
3/19/01 - 03/25/01	128	1.4	9.3	5.4	41	
03/26/01 - 04/01/01	168	4.9	13.4	10.8	99	
04/02/01 - 04/08/01	166	0.8	12.3	9.2	82	
04/09/01 - 04/15/01	168	3.3	11.3	9.1	93	
04/16/01 - 04/22/01	42	2.5	11.7	8.9	74	
04/23/01 - 04/29/01	127	6.9	10.7	9.9	100	
04/30/01 - 05/06/01	168	5.2	11.3	9.9	100	

TABLE AI-1 (Continued)

WEEKLY DO SUMMARY STATISTICS AT LINDEN STREET ON THE NORTH SHORE CHANNEL DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Dates	Number of DO Values	min	ncentration	(1119/11/	DO Values
			max	mean	Above Standard
E (07 (01 0E (12 (01					
05/07/01 - 05/13/01	167	1.8	10.3	8.6	94
05/14/01 - 05/20/01	168	7.1	9.6	9.0	100
05/21/01 - 05/27/01	168	3.5	10.0	8.0	91
5/28/01 - 06/03/01	168	0.4	10.5	5.6	45
06/04/01 - 06/10/01	168	2.5	10.5	8.5	90
06/11/01 - 06/17/01	168	0.1	10.5	7.8	82
06/18/01 - 06/24/01	168	2.8	10.0	8.5	97
06/25/01 - 07/01/01	166	8.2	11.3	10.3	100
7/02/01 - 07/08/01	168	0.2	10.2	7.4	80
7/09/01 - 07/15/01	168	7.2	9.7	8.4	100
7/16/01 - 07/22/01	156	6.1	10.1	8.3	100
07/23/01 - 07/29/01	168	0.1	9.1	6.7	89
7/30/01 - 08/05/01	168	0.0	9.6	3.9	49
8/06/01 - 08/12/01	39	0.1	0.7	0.4	0
8/13/01 - 08/19/01	129	0.1	7.7	4.9	64
8/20/01 - 08/26/01	167	0.3	7.3	4.3	54
8/27/01 - 09/02/01	168	0.0	8.0	3.8	39
9/03/01 - 09/09/01	167	0.0	9.2	6.0	71
9/10/01 - 09/16/01	168	5.1	10.1	9.1	100
9/17/01 - 09/23/01	168	1.4	9.2	6.8	84
9/24/01 - 09/30/01	168	0.5	9.7	6.6	63 [°]
0/01/01 - 10/07/01	168	1.9	9.3	7.0	74
0/08/01 - 10/14/01	168	0.5	9.7	6.0	65
0/15/01 - 10/21/01	168	0.0	1.5	0.3	0
0/22/01 - 10/28/01	168	0.0	3.8	0.3	0
0/22/01 - 10/23/01	168	0.1	10.8	9.5	92
1/05/01 - 11/11/01	168	7.4	11.7	10.6	100
1/12/01 - 11/18/01	168	10.8	11.7	11.3	100
1/19/01 - 11/25/01	168	8.6	11.7	10.8	100
1/26/01 - 12/02/01	168	3.3	11.6	8.7	92
2/03/01 - 12/02/01	168	1.2	7.0	3.6	14
2/10/01 - 12/16/01	168	1.0	3.9	2.3	0
2/17/01 - 12/13/01	168	2.2	6.8	4.6	23
2/17/01 - 12/23/01 2/24/01 - 12/30/01	168	3.0	6.7	4.3	24
2/31/01 - 01/06/02	168	1.4	3.2	2.6	0

TABLE AI-2

WEEKLY DO SUMMARY STATISTICS

AT SIMPSON STREET ON THE NORTH SHORE CHANNEL

DURING AUGUST 2000 THROUGH DECEMBER 2001

	March and a f	DO 41-		- / (T.)	Percent
Monitoring Dates	Number of DO Values	min	ncentratior max	mean	DO Values Above Standar
07/31/00 - 08/06/00	168	0.3	7.6	4.9	50
08/07/00 - 08/13/00	40	1.0	4.4	2.7	0
08/14/00 - 08/20/00	129	3.1	8.2	6.3	78
08/21/00 - 08/27/00	168	0.4	8.1	6.8	90
08/28/00 - 09/03/00	40	6.3	7.9	7.0	100
09/04/00 - 09/10/00			NO DATA		
09/11/00 - 09/17/00			NO DATA		
09/18/00 - 09/24/00	127	3.5	7.4	5.9	88
09/25/00 - 10/01/00	41	6.4	8.0	7.3	100
10/02/00 - 10/08/00	129	2.5	9.8	6.3	67
10/09/00 - 10/15/00	168	6.7	10.4	9.5	100
10/16/00 - 10/22/00	168	7.0	8.7	8.0	100
10/23/00 - 10/29/00	168	6.8	8.3	7.8	100
10/30/00 - 11/05/00	168	8.1	9.4	8.8	100
11/06/00 - 11/12/00	168	0.3	9.4	5.3	61
11/13/00 - 11/19/00	168	0.4	4.8	3.2	0
11/20/00 - 11/26/00	167	1.7	4.9	3.8	ő .
11/20/00 - 11/20/00	168	1.1	4.9	3.8	0
12/04/00 - 12/10/00	167	2.7	6.2	4.6	41
12/11/00 - 12/17/00	168	0.0	3.4	1.3	0
12/11/00 - 12/11/00 $12/18/00 - 12/24/00$	168		0.4	0.0	0
	168	0.0	0.4	0.0	0
12/25/00 - 12/31/00		0.0			0
01/01/01 - 01/07/01	168	0.0	0.0	0.0	0
01/08/01 - 01/14/01	168	0.0	1.8	0.0	0
01/15/01 - 01/21/01	168	0.0	4.4	1.2	
01/22/01 - 01/28/01	168	0.0	5.9	2.7	21
01/29/01 - 02/04/01	168	0.0	9.1	2.8	8
02/05/01 - 02/11/01	168	0.0	8.2	1.0	7
02/12/01 - 02/18/01	168	0.0	0.9	0.0	0
02/19/01 - 02/25/01	168	0.0	0.1	0.0	0
02/26/01 - 03/04/01	168	0.0	3.5	0.7	0
03/05/01 - 03/11/01	168	1.6	5.3	4.1	4
03/12/01 - 03/18/01	128	4.2	11.6	8.2	99
03/19/01 - 03/25/01	168	0.1	6.1	2.0	7
03/26/01 - 04/01/01	168	3.0	12.9	9.6	84
04/02/01 - 04/08/01	167	1.9	12.6	9.5	84
04/09/01 - 04/15/01	168	3.3	10.4	7.7	90
04/16/01 - 04/22/01	167	3.1	12.0	8.9	91
04/23/01 - 04/29/01	*167	0.3	9.5	5.7	63
04/30/01 - 05/06/01	168	2.8	10.3	8.2	98

TABLE AI-2 (Continued)

WEEKLY DO SUMMARY STATISTICS AT SIMPSON STREET ON THE NORTH SHORE CHANNEL DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Dates	Number of DO Values	DO Co min	ncentration max	mean	Percent DO Values Above Standard
		· · · · · · · · · · · · · · · · · · ·			
05/07/01 - 05/13/01	168	1.4	8.8	6.2	77
05/14/01 - 05/20/01	168	3.3	9.1	7.0	95
05/21/01 - 05/27/01	168	0.7	7.9	5.9	76
05/28/01 - 06/03/01	167	0.2	10.4	4.7	38
06/04/01 - 06/10/01	168	3.7	10.4	7.9	97
06/11/01 - 06/17/01	168	0.0	8.4	4.8	52
06/18/01 - 06/24/01	168	0.4	6.2	2.8	14
06/25/01 - 07/01/01	168	0.5	10.5	7.3	83
07/02/01 - 07/08/01	168	3.3	9.9	7.4	85
07/09/01 - 07/15/01	168	2.7	7.4	5.1	51
07/16/01 - 07/22/01	168	0.5	7.0	4.1	35
07/23/01 - 07/29/01	39	0.0	0.5	0.3	0
07/30/01 - 08/05/01		• • •	NO DATA		•
08/06/01 - 08/12/01	129	0.0	3.9	1.3	0
08/13/01 - 08/19/01	39	1.7	4.9	4.1	0
08/20/01 - 08/26/01	129	0.4	5.6	2.8	5
08/27/01 - 09/02/01	168	0.0	5.4	1.9	4
09/03/01 - 09/09/01	168	0.2	5.3	2.7	2
09/10/01 - 09/16/01	168	1.0	8.7	6.8	89
09/17/01 - 09/23/01	168	0.0	8.0	2.7	25
09/24/01 - 09/30/01	168	0.0	8.0	3.7	45
0/01/01 - 00/07/01	168	0.1	7.8	4.6	64
10/01/01 - 10/01/01 10/08/01 - 10/14/01	167	0.0	6.1	2.1	10
0/05/01 - 10/14/01 0/15/01 - 10/21/01	168	0.0	0.8	0.2	0
0/13/01 - 10/21/01 0/22/01 - 10/28/01	168	0.0	6.4	0.8	1
0/22/01 - 10/28/01 0/29/01 - 11/04/01	168	0.0	9.0	5.6	71
1/05/01 - 11/11/01	168	2.9	9.7	7.7	96
1/12/01 - 11/18/01	168	7.5	9.4	8.7	100
1/12/01 - 11/18/01 1/19/01 - 11/25/01	168	3.3	10.3	8.6	98
1/26/01 - 12/02/01	168	0.2	6.8	2.6	19
$\frac{1}{26} \frac{1}{01} - \frac{12}{02} \frac{10}{01}$	168	0.2	4.9	1.0	0
		0.0	4.9 1.5	0.3	. 0
2/10/01 - 12/16/01	168				0
2/17/01 - 12/23/01	168	0.0	2.5	0.8	
2/24/01 - 12/30/01	168	0.1	3.2	1.3	0
.2/31/01 - 01/06/02	168	0.0	0.1	0.0	0

TABLE AI-3

WEEKLY DO SUMMARY STATISTICS

AT MAIN STREET ON THE NORTH SHORE CHANNEL

DURING AUGUST 2000 THROUGH DECEMBER 2001

					Perce	
Monitoring	Number of		ncentratio	n (mg/L)	DO Val	
Dates	DO Values	min	max	mean	Above Sta	ındard
07/31/00 - 08/06/00	168	2.4	6.4	4.6	45	
08/07/00 - 08/13/00	166	0.4	6.7	4.7	65	
08/14/00 - 08/20/00	164	2.0	7.3	5.4	73	
08/21/00 - 08/27/00	168	2.1	7.7	6.3	89	
08/28/00 - 09/03/00	39	6.2	7.6	7.2	100	
09/04/00 - 09/10/00	128	6.5	8.0	7.5	100	
09/11/00 - 09/17/00	168	0.3	6.9	2.9	24	
09/18/00 - 09/24/00	168	2.3	5.8	3.9	4	
09/25/00 - 10/01/00	41	2.8	7.1	5.2	61	
10/02/00 - 10/08/00	128	0.7	8.0	3.1	21	
10/09/00 - 10/15/00	39	3.4	8.4	6.6	95	
10/16/00 - 10/22/00	128	6.3	8.4	7.3	100	
10/23/00 - 10/29/00	168	5.0	8.4	6.8	100	
10/30/00 - 11/05/00	168	6.7	10.0	8.6	100	
11/06/00 - 11/12/00	168	3.5	9.8	6.8	76	
11/13/00 - 11/19/00	168	2.4	7.3	5.6	68	
11/20/00 - 11/26/00	168	5.8	8.7	7.3	100	
11/27/00 - 12/03/00	167	2.1	6.6	5.0	56	
12/04/00 - 12/10/00	168	3.4	7.5	5.8	83	
12/11/00 - 12/17/00	168	2.8	8.2	5.1	52	
12/18/00 - 12/24/00	168	1.5	6.7	3.4	13	
L2/25/00 - 12/31/00	168	0.2	8.5	2.9	23	
01/01/01 - 01/07/01	168	0.0	6.6	2.0	15	
01/08/01 - 01/14/01	168	0.0	5.8	1.4	3	
01/15/01 - 01/21/01			NO DATA			
01/22/01 - 01/28/01	168	9.9	13.3	11.0	100	
01/29/01 - 02/04/01	168	1.6	10.4	5.1	43	
02/05/01 - 02/11/01	168	0.4	9.3	4.7	44	
02/12/01 - 02/18/01	168	1.5	5.8	3.5	8	
02/19/01 - 02/25/01	168	1.7	9.2	4.9	49	
02/26/01 - 03/04/01	168	1.0	6.4	3.4	7	
03/05/01 - 03/11/01	168	3.1	12.7	8.9	91	
03/12/01 - 03/18/01	168	5.9	12.1	9.4	100	
03/19/01 - 03/25/01	168	4.9	12.0	8.1	99	
03/26/01 - 04/01/01	167	9.9	13.4	11.6	100	
04/02/01 - 04/08/01	168	4.9	13.6	10.9	99	
04/02/01 - 04/05/01 04/09/01 - 04/15/01	168	4.6	9.6	7.1	98	
04/16/01 - 04/13/01	168	2.9	12.2	8.7	93	
04/18/01 - 04/22/01 04/23/01 - 04/29/01	168	0.4	6.9	4.6	47	
04/23/01 - 04/23/01 04/30/01 - 05/06/01	168	3.3	9.3	6.8	88	

TABLE AI-3 (Continued)

WEEKLY DO SUMMARY STATISTICS AT MAIN STREET ON THE NORTH SHORE CHANNEL DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring	Number of	DO Cor	centratio	on (mg/L)	Percent DO Values
Dates	DO Values	min	max	mean	Above Standard
05/07/01 - 05/13/01	168	3.0	8.3	5.8	72
05/14/01 - 05/20/01	168	3.7	8.4	7.6	97
05/21/01 - 05/27/01	168	4.5	8.6	7.0	96
05/28/01 - 06/03/01	167	3.1	7.9	5.5	63
06/04/01 - 06/10/01	168	2.3	10.3	6.8	85
06/11/01 - 06/17/01	168	0.4	9.6	4.2	29
06/18/01 - 06/24/01	168	0.1	8.8	1.7	13
06/25/01 - 07/01/01	40	0.0	0.2	0.1	0
07/02/01 - 07/08/01	153	0.5	9.6	5.6	71
07/09/01 - 07/15/01	167	0.5	5.3	3.3	1
07/16/01 - 07/22/01	168	0.4	4.5	3.0	0
07/23/01 - 07/29/01	168	0.0	5.7	1.5	7
07/30/01 - 08/05/01	168	0.2	6.6	2.6	25
08/06/01 - 08/12/01	154	0.0	1.9	0.1	0
08/13/01 - 08/19/01	168	0.0	4.6	1.3	0
08/20/01 - 08/26/01	168	0.4	5.0	1.4	1
08/27/01 - 09/02/01	168	0.0	5.8	1.2	3.
09/03/01 - 09/09/01	167	0.0	3.9	1.3	0
09/10/01 - 09/16/01	168	0.2	7.5	4.8	67
09/17/01 - 09/23/01	168	0.0	7.5	2.8	36
09/24/01 - 09/30/01	168	0.0	5.6	1.8	8
LO/01/01 - 10/07/01	168	0.2	6.1	3.1	30
10/08/01 - 10/14/01	39	0.3	2.4	0.9	0
10/15/01 - 10/21/01	131	0.0	0.4	0.0	0
10/22/01 - 10/28/01	167	0.0	4.1	0.4	0
10/29/01 - 11/04/01	168	0.1	6.8	3.2	30
1/05/01 - 11/11/01	168	3.7	7.4	5.9	83
1/12/01 - 11/18/01	168	4.5	7.2	5.8	93
1/19/01 - 11/25/01	168	4.1	8.5	6.5	89
1/26/01 - 12/02/01	168	0.3	5.9	3.5	15
2/03/01 - 12/09/01	168	0.2	4.4	2.3	.0
2/10/01 - 12/16/01	168	0.8	4.7	2.8	0
2/17/01 - 12/23/01	168	0.0	5.9	1.7	2
2/24/01 - 12/30/01	168	0.1	3.6	0.5	0
2/31/01 - 01/06/02	168	0.1	0.8	0.1	0

TABLE AI-4

WEEKLY DO SUMMARY STATISTICS

AT DEVON AVENUE ON THE NORTH SHORE CHANNEL

DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring	Number of	DO Cor	centratio	Percent DO Values		
Dates	DO Values	min	max	n (mg/L) mean	Above Sta	
07/31/00 - 08/06/00	168	5.3	6.7	6.1	100	
08/07/00 - 08/13/00	166	5.2	6.7	5.9	100	
08/14/00 - 08/20/00	167	5.5	7.0	6.3	100	
08/21/00 - 08/27/00	168	5.2	7.1	6.6	100	
08/28/00 - 09/03/00	168	6.4	7.3	6.9	100	
09/04/00 - 09/10/00	168	5.9	7.5	6.8	100	
09/11/00 - 09/17/00	168	3.4	6.6	5.4	95	
09/18/00 - 09/24/00	167	3.7	7.5	6.0	93	
09/25/00 - 10/01/00	168	6.2	7.4	6.8	100	
10/02/00 - 10/08/00	168	5.9	8.3	6.9	100	
10/09/00 - 10/15/00	167	6.5	8.3	7.3	100	
10/16/00 - 10/22/00	168	6.2	7.7	6.9	100	
10/23/00 - 10/29/00	168	6.3	7.8	7.1	100	
10/30/00 - 11/05/00	168	6.8	8.2	7.4	100	
11/06/00 - 11/12/00	168	3.3	8.2	6.9	98	
11/13/00 - 11/19/00	168	4.9	8.0	7.2	100	
11/20/00 - 11/26/00	168	5.3	8.7	7.7	100	
11/27/00 - 12/03/00	168	6.7	9.4	8.4	100	
12/04/00 - 12/10/00	168	7.7	8.9	8.1	100	
12/11/00 - 12/17/00	168	7.0	8.9	8.1	100	
12/18/00 - 12/24/00	39	7.3	8.5	7.9	100	
12/25/00 - 12/31/00			NO DATA			
01/01/01 - 01/07/01	81	7.8	8.8	8.2	100	
01/08/01 - 01/14/01	168	7.1	8.8	8.2	100	
01/15/01 - 01/21/01	87	5.8	9.1	7.9	100	

TABLE AI-5

WEEKLY DO SUMMARY STATISTICS AT LAWRENCE AVENUE ON THE NORTH BRANCH OF THE CHICAGO RIVER DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring	Number of	DO Con	centration	(mg/L)	Percent DO Values
Dates	DO Values	min	max	mean	Above Standard
07/31/00 - 08/06/00	168	3.4	7.4	6.6	99
08/07/00 - 08/13/00	168	5.0	6.8	6.1	100
08/14/00 - 08/20/00	168	5.2	7.1	6.3	100
08/21/00 - 08/27/00	168	5.5	7.9	6.8	100
08/28/00 - 09/03/00	168	5.5	7.0	6.4	100
09/04/00 - 09/10/00	168	5.3	7.7	6.4	100
09/11/00 - 09/17/00	168	5.6	7.6	6.6	100
09/18/00 - 09/24/00	168	5.9	8.0	7.1	100
09/25/00 - 10/01/00	168	6.2	7.6	7.0	100
10/02/00 - 10/08/00	167	5.9	8.2	7.0	100
10/09/00 - 10/15/00	168	6.2	8.1	7.0	100
10/16/00 - 10/22/00	168	5.6	7.8	6.8	100
10/23/00 - 10/29/00	168	5.6	8.0	7.0	100
.0/30/00 - 11/05/00	168	6.0	7.9	7.2	100
1/06/00 - 11/12/00	168	5.2	9.5	7.8	100
1/13/00 - 11/19/00	168	6.8	8.8	7.7	100
1/20/00 - 11/26/00	168	4.8	8.6	7.5	100
1/27/00 - 12/03/00	168	6.3	8.9	7.7	100
.2/04/00 - 12/10/00	168	7.2	9.1	7.8	100
.2/11/00 - 12/17/00	168	7.1	9.9	8.6	100
2/18/00 - 12/24/00	168	7.1	9.3	7.8	100
2/25/00 - 12/31/00	168	6.6	8.1	7.3	100
1/01/01 - 01/07/01	168	6.8	8.6	7.7	100
1/08/01 - 01/14/01	168	6.8	9.0	7.9	100
1/15/01 - 01/21/01	86	5.5	9.2	8.1	100

TABLE AI-6

WEEKLY DO SUMMARY STATISTICS

AT ADDISON STREET ON THE NORTH BRANCH OF THE CHICAGO RIVER

DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Dates 07/31/00 - 08/06/00 08/07/00 - 08/13/00	Number of DO Values	min	ncentratio	<u>(169/11)</u>	
			max	mean	DO Values Above Standard
	167	0.5	6.9	5.9	98
/O/U//UU UQ/#3/UU		4.1	5.9	5.3	100
08/14/00 - 08/20/00		4.6	6.7	5.7	100
08/21/00 - 08/27/00		5.0	7.3	6.4	100
08/28/00 - 09/03/00	168	4.8	6.8	5.8	100
09/04/00 - 09/10/00	168	5.1	7.4	6.4	100
9/11/00 - 09/17/00	168	4.8	7.2	6.4	100
09/18/00 - 09/24/00		4.3	8.1	6.1	100
09/25/00 - 10/01/00		5.6	7.1	6.3	100
0/02/00 - 10/08/00		4.9	7.6	6.7	100
0/09/00 - 10/15/00		5.9	7.6	6.7	100
.0/16/00 - 10/22/00		5.3	7.2	6.3	100
.0/23/00 - 10/29/00	168	5.1	7.4	6.4	100
.0/30/00 - 11/05/00	168	5.9	7.4	6.8	100
1/06/00 - 11/12/00	168	5.1	8.3	7.2	100
1/13/00 - 11/19/00	168	6.2	8.3	7.2	100
1/20/00 - 11/26/00	167	4.3	8.1	7.0	100
1/27/00 - 12/03/00	168	6.3	8.1	7.3	100
2/04/00 - 12/10/00	168	6.7	8.1	7.4	100
2/11/00 - 12/17/00	168	5.8	8.1	7.4	100
2/18/00 - 12/24/00	168	3.6	8.2	7.2	98
2/25/00 - 12/31/00	100	• • • • • • • • • • • • • • • • • • • •	NO DATA		
1/01/01 - 01/07/01	168	5.9	8.1	7.3	100
1/08/01 - 01/14/01	168	6.0	8.5	7.4	100
1/15/01 - 01/21/01	168	4.5	8.8	7.8	100
1/22/01 - 01/28/01	168	7.0	8.8	7.9	100
1/29/01 - 02/04/01	167	4.6	9.4	8.3	100
2/05/01 - 02/11/01	167	5.0	11.3	9.0	100
2/12/01 - 02/18/01	168	7.6	10.8	8.8	100
2/12/01 - 02/25/01	168	7.3	10.2	8.1	100
2/26/01 - 03/04/01	168	8.0	10.5	9.0	100
3/05/01 - 03/11/01	168	6.4	9.0	7.8	100
3/03/01 = 03/11/01 3/12/01 = 03/18/01	168	4.5	9.7	7.8	100
3/12/01 - 03/16/01 3/19/01 - 03/25/01	168	7.6	9.9	8.4	100
3/19/01 - 03/23/01 3/26/01 - 04/01/01	168	5.6	8.6	7.6	100
4/02/01 - 04/08/01	167	5.4	8.1	6.9	100
4/02/01 - 04/08/01 $4/09/01 - 04/15/01$		5.4 5.7	7.7	6.6	100
	168	5.7 5.2	8.7	6.6	100
4/16/01 ~ 04/22/01	168		8.7 7.5		
4/23/01 - 04/29/01 4/30/01 - 05/06/01	168 168	5.2 5.0	7.3 7.2	6.2 6.1	100 100

TABLE AI-6 (Continued)

WEEKLY DO SUMMARY STATISTICS AT ADDISON STREET ON THE NORTH BRANCH OF THE CHICAGO RIVER DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring	Number of	DO Cor	centration	(mcr/T.)	Percent DO Values	
Dates	DO Values	min	max	mean	Above Standard	
05/07/01 - 05/13/01	168	4.5	7.6	6.2	100	
05/14/01 - 05/20/01	167	5.3	7.3	6.5	100	
05/21/01 - 05/27/01	168	4.1	8.1	6.3	100	
05/28/01 - 06/03/01	168	5.6	8.0	7.0	100	
06/04/01 - 06/10/01	167	5.6	7.5	6.8	100	
06/11/01 - 06/17/01	168	3.7	6.6	5.6	99	
06/18/01 - 06/24/01	168	5.1	7.2	6.1	100	
06/25/01 - 07/01/01	168	4.6	6.8	5.9	100	
07/02/01 - 07/08/01	168	4.7	7.2	6.0	100	
07/09/01 - 07/15/01	167	5.1	6.7	5.9	100	
07/16/01 - 07/22/01	168	4.8	6.2	5.6	100	
07/23/01 - 07/29/01	168	3.4	6.0	5.4	99	
07/30/01 - 08/05/01	168	4.1	6.2	5.4	100	
08/06/01 - 08/12/01	168	0.9	7.2	5.9	98	
08/13/01 - 08/19/01	168	4.2	6.7	5.5	100	
08/20/01 - 08/26/01	168	2.1	6.7	5.8	99	
08/27/01 - 09/02/01	168	4.6	6.9	5.8	100	
09/03/01 - 09/09/01	168	3.7	6.2	5.3	98	
09/10/01 - 09/16/01	168	3.0	6.2	5.0	92	
9/17/01 - 09/23/01	168	0.3	7.1	5.6	83	
9/24/01 - 09/30/01	168	5.9	7.2	6.7	100	
.0/01/01 - 10/07/01	168	5.4	7.5	6.3	100	
.0/08/01 - 10/14/01	168	4.6	7.5	6.5	100	
0/15/01 - 10/21/01	168	6.9	8.2	7.8	100	
0/22/01 - 10/28/01	168	3.3	8.4	7.3	99	
0/29/01 - 11/04/01	168	6.0	8.3	7.2	100	
1/05/01 - 11/11/01	168	6.0	7.6	6.6	100	
1/12/01 - 11/18/01	168	5.2	7.2	6.1	100	
1/19/01 - 11/25/01	168	4.5	7.3	6.0	100	
1/26/01 - 12/02/01	168	5.1	6.6	5.9	100	
2/03/01 - 12/09/01	168	4.9	7.0	5.9	100	
2/10/01 - 12/16/01	167	5.0	7.7	6.5	100	
2/17/01 - 12/23/01	168	6.0	8.1	7.0	100	
2/24/01 - 12/30/01	168	6.6	8.1	7.3	100	
2/31/01 - 01/06/02	168	6.8	9.1	7.8	100	

TABLE AI-7

WEEKLY DO SUMMARY STATISTICS

AT FULLERTON AVENUE ON THE NORTH BRANCH OF THE CHICAGO RIVER

DURING AUGUST 2000 THROUGH DECEMBER 2001

					Percent
Monitoring	Number of		ncentratio		DO Values
Dates	DO Values	min	max	mean	Above Standard
07/31/00 - 08/06/00	168	4.3	6.3	5.4	100
08/07/00 - 08/13/00	168	1.5	5.5	3.9	36
08/14/00 - 08/20/00	168	3.5	5.8	4.8	90
08/21/00 - 08/27/00	168	4.2	7.3	6.1	100
08/28/00 - 09/03/00	168	4.2	6.8	5.2	100
09/04/00 - 09/10/00	168	4.8	6.5	5.6	100
09/11/00 - 09/17/00	168	2.9	6.6	5.2	95
09/18/00 - 09/24/00	168	3.0	6.8	5.0	85
09/25/00 - 10/01/00	168	4.6	6.5	5.4	100
10/02/00 - 10/08/00	168	4.0	7.1	5.6	99
10/09/00 - 10/15/00		5.0	7.0	5.9	100
10/16/00 - 10/22/00	168	4.3	6.6	5.7	100
10/23/00 - 10/22/00	168	4.3	6.4	5.4	100
10/30/00 - 11/05/00	168	5.1	6.6	6.0	100
11/06/00 - 11/12/00	168	3.8	8.4	6.6	98
11/13/00 - 11/19/00	168	5.3	8.0	6.7	100
11/20/00 - 11/26/00	168	3.7	7.6	6.5	98
11/27/00 - 12/03/00	168	5.0	7.7	6.7	100
12/04/00 - 12/10/00	168	6.4	7.4	6.8	100
12/11/00 - 12/17/00	167	5.8	7.5	6.8	100
12/11/00 - 12/11/00 $12/18/00 - 12/24/00$	168	6.1	8.0	7.2	100
12/25/00 - 12/31/00	168	6.6	7.7	7.0	100
01/01/01 - 01/07/01	167	6.0	7.8	6.9	100
01/01/01 - 01/01/01 01/08/01 - 01/14/01	168	6.3	7.8	6.9	100
01/08/01 - 01/14/01 01/15/01 - 01/21/01	166	4.0	8.6	7.5	99
01/15/01 - 01/21/01 01/22/01 - 01/28/01	167	6.2	7.8	6.8	100
	168	3.7	9.1	7.8	99
01/29/01 - 02/04/01	168	4.5	11.1	8.5	100
02/05/01 - 02/11/01		6.6	10.9	8.0	100
02/12/01 - 02/18/01	168	6.0	8.6	6.7	100
02/19/01 - 02/25/01	168	7.3	9.3	8.3	100
02/26/01 - 03/04/01	167		9.3 8.6	7.1	100
03/05/01 - 03/11/01	168	5.6		6.9	99
03/12/01 - 03/18/01	168	3.8	8.9		
03/19/01 - 03/25/01	168	6.7	8.8	7.7 6.2	100
03/26/01 - 04/01/01	168	4.6	7.7		100 100
04/02/01 - 04/08/01	167	4.4	6.8	5.7	
04/09/01 - 04/15/01	168	4.5	6.3	5.4	100
04/16/01 - 04/22/01	168	4.4	7.3	5.8	100
04/23/01 - 04/29/01	168	4.4	7.6	6.2	100
04/30/01 - 05/06/01	163	3.8	7.8	5.2	96

TABLE AI-7 (Continued)

WEEKLY DO SUMMARY STATISTICS AT FULLERTON AVENUE ON THE NORTH BRANCH OF THE CHICAGO RIVER DURING AUGUST 2000 THROUGH DECEMBER 2001

	Monitoring	Number of	DO Con	centration	(mcr/L)	Percent DO Values
	Dates	DO Values	min	max	mean	Above Standard
05/0	07/01 - 05/13/01	168	3.6	7.1	5.3	95
05/1	4/01 - 05/20/01	168	4.6	7.1	5.8	100
05/2	21/01 - 05/27/01	168	3.4	7.0	5.3	96
05/2	8/01 - 06/03/01	168	5.0	7.4	6.2	100
	4/01 - 06/10/01	167	5.2	6.9	6.1	100
06/1	1/01 - 06/17/01	168	3.0	6.4	4.5	77
	8/01 - 06/24/01	168	3.1	5.9	4.8	91
	5/01 - 07/01/01	168	3.8	5.8	4.8	98
	2/01 - 07/08/01	168	4.0	6.0	5.2	100
	9/01 - 07/15/01	168	4.0	6.5	5.8	100
	6/01 - 07/22/01	166	0.4	6.7	3.6	30
	3/01 - 07/29/01	37	0.1	2.7	0.6	0
	0/01 - 08/05/01	133	3.1	5.8	4.4	86
08/0	6/01 - 08/12/01	168	0.6	5.0	3.7	38
	3/01 - 08/19/01	168	2.3	5.3	3.8	39
	0/01 - 08/26/01	168	2.4	6.2	5.1	98
	7/01 - 09/02/01	168	1.6	6.0	4.5	80
	3/01 - 09/09/01	168	3.4	5.3	4.5	92
	0/01 - 09/16/01	168	3.0	5.3	4.4	80
	7/01 - 09/23/01	168	2.1	6.8	5.1	70
-	4/01 - 09/30/01	168	5.1	6.9	6.1	100
	1/01 - 10/07/01	168	4.3	6.8	5.7	100
	8/01 - 10/14/01	167	4.2	6.6	5.4	100
	5/01 - 10/21/01	168	6.3	7.5	7.1	100
	2/01 - 10/28/01	37	3.6	6.8	6.1	97
	9/01 - 11/04/01	131	4.8	7.3	6.1	100
	5/01 - 11/11/01	168	4.9	6.4	5.6	100
	2/01 - 11/18/01	168	4.2	6.3	5.0	100
	9/01 - 11/25/01	168	3.8	6.0	5.2	99
	6/01 - 12/02/01	168	4.0	6.3	5.5	99
	3/01 - 12/09/01	168	3.9	6.0	5.0	98
-	0/01 - 12/16/01	168	3.9	6.8	5.6	99
	7/01 - 12/23/01	168	5.1	7.5	6.3	100
	4/01 - 12/23/01	168	5.9	7.4	6.9	100
-	1/01 - 01/06/02	168	6.3	7.8	6.9	100

TABLE AI-8

WEEKLY DO SUMMARY STATISTICS
AT DIVISION STREET ON THE NORTH BRANCH OF THE CHICAGO RIVER
DURING AUGUST 2000 THROUGH DECEMBER 2001

	AT - 1	70.6		((T.)	Percent DO Values
Monitoring Dates	Number of DO Values	min	ncentration max	mean	Above Standard
07/31/00 - 08/06/00	168	4.4	7.6	6.2	100
08/07/00 - 08/13/00	168	0.5	8.0	5.4	92
08/14/00 - 08/20/00	167	4.9	6.8	5.9	100
08/21/00 - 08/27/00	168	5.0	7.3	6.5	100
08/28/00 - 09/03/00	168	4.2	7.7	6.1	100
09/04/00 - 09/10/00	168	4.2	7.3	6.1	100
09/11/00 - 09/17/00	168	2.5	6.9	5.4	93
09/18/00 - 09/24/00	167	2.7	7.4	5.6	91
09/25/00 - 10/01/00	168	3.3	7.8	6.0	92
10/02/00 - 10/08/00	168	4.9	7.7	6.4	100
10/09/00 - 10/15/00	168	4.6	8.5	6.3	100
10/16/00 - 10/22/00	168	4.1	7.8	6.0	100
10/23/00 - 10/29/00	168	4.0	8.1	6.4	100
10/30/00 - 11/05/00	168	5.8	8.5	7.5	100
11/06/00 - 11/12/00	168	5.9	8.3	7.3	100
11/13/00 - 11/12/00	168	5.9	8.7	6.7	100
11/20/00 - 11/26/00	168	5.8	7.6	6.5	100
11/20/00 - 11/20/00 11/27/00 - 12/03/00	168	4.2	7.1	5.9	100
		6.4	7.6	6.8	100
12/04/00 - 12/10/00	166				100
12/11/00 - 12/17/00	168	6.5	8.2	7.0	
12/18/00 - 12/24/00	168	6.1	8.8	7.5	100
12/25/00 - 12/31/00	168	6.3	8.2	7.1	100
01/01/01 - 01/07/01	168	6.1	8.1	7.0	100
01/08/01 - 01/14/01	168	6.1	7.5	6.7	100
01/15/01 - 01/21/01	168	5.3	9.1	7.8	100
01/22/01 - 01/28/01	168	6.8	8.4	7.4	100
01/29/01 - 02/04/01	168	4.5	9.1	7.7	100
02/05/01 - 02/11/01	167	3.6	10.7	8.3	99
02/12/01 - 02/18/01	168	6.9	10.6	8.4	100
02/19/01 - 02/25/01	168	6.4	9.4	7.2	100
02/26/01 - 03/04/01	168	6.8	9.9	8.4	100
03/05/01 - 03/11/01	168	5.7	8.6	6.9	100
03/12/01 - 03/18/01	168	4.0	7.8	6.1	99
03/19/01 - 03/25/01	168	6.4	9.6	7.3	100
03/26/01 - 04/01/01	167	4.4	7.0	6.0	100
04/02/01 - 04/08/01	167	3.4	7.6	5.6	96
04/09/01 - 04/15/01	36	4.7	6.5	5.7	100
04/16/01 - 04/22/01	130	4.1	8.3	6.0	100
04/23/01 - 04/29/01	168	4.3	7.6	5.8	100
04/30/01 - 05/06/01	168	2.6	6.9	5.7	95

TABLE AI-8 (Continued)

WEEKLY DO SUMMARY STATISTICS AT DIVISION STREET ON THE NORTH BRANCH OF THE CHICAGO RIVER DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring	Number of	DO Con	Percent DO Values		
Dates	DO Values	min	max	mean	Above Standard
05/07/01 - 05/13/01	168	5.6	7.8	6.6	100
05/14/01 - 05/20/01	168	5.3	7.6	6.4	100
05/21/01 - 05/27/01	168	3.1	7.2	5.6	93
05/28/01 - 06/03/01	168	4.8	7.1	5.9	100
06/04/01 - 06/10/01	168	4.6	7.2	5.6	100
06/11/01 - 06/17/01	168	2.6	6.6	5.3	96
06/18/01 - 06/24/01	168	3.3	6.8	5.3	88
06/25/01 - 07/01/01	168	3.6	7.0	5.8	98
07/02/01 - 07/08/01	168	4.9	7.1	6.2	100
07/09/01 - 07/15/01	168	5.3	7.1	6.3	100
07/16/01 - 07/22/01	168	5.1	6.7	5.9	100
07/23/01 - 07/29/01	168	3.0	6.5	5.5	94
07/30/01 - 08/05/01	168	3.2	6.4	5.5	95
08/06/01 - 08/12/01	167	2.7	7.1	5.7	93
08/13/01 - 08/19/01	168	3.2	6.6	5.3	96
08/20/01 - 08/26/01	168	2.2	6.8	5.7	93
08/27/01 - 09/02/01	168	2.9	6.3	5.2	95
09/03/01 - 09/09/01	168	4.7	6.7	5.7	100
09/10/01 - 09/16/01	168	3.2	6.1	4.9	85
9/17/01 - 09/23/01	168	2.0	6.8	5.3	81
9/24/01 - 09/30/01	168	1.9	7.1	6.2	98
0/01/01 - 10/07/01	168	4.0	7.2	5.9	100
0/08/01 - 10/14/01	168	3.5	7.3	6.0	99
.0/15/01 - 10/21/01	168	4.5	8.4	7.6	100
0/22/01 - 10/28/01	168	1.9	7.5	6.2	94
0/29/01 - 11/04/01	168	3.5	7.3	6.1	98
1/05/01 - 11/11/01	168	3.3	73	5.7	97
1/12/01 - 11/18/01	168	3.2	7.3	5.2	80
1/19/01 - 11/25/01	168	3.9	8.2	6.4	99
1/26/01 - 12/02/01	168	4.1	7.8	6.1	100
2/03/01 - 12/09/01	168	4.1	8.1	5.9	100
2/10/01 - 12/16/01	168	4.4	8.8	6.5	100
2/17/01 - 12/23/01	168	4.2	9.2	6.9	100
2/24/01 - 12/30/01	168	5.6	7.5	6.6	100
2/31/01 - 01/06/02	168	6.1	7.6	6.9	100

TABLE AI-9

WEEKLY DO SUMMARY STATISTICS

AT KINZIE STREET ON THE NORTH BRANCH OF THE CHICAGO RIVER

DURING AUGUST 2000 THROUGH DECEMBER 2001

					Percent
Monitoring	Number of		centratio		DO Values
Dates	DO Values	min	max	mean	Above Standard
07/31/00 - 08/06/00	168	4.0	6.7	5.7	99
08/07/00 - 08/13/00	168	0.6	7.2	5.4	89
08/14/00 - 08/20/00	168	4.8	6.5	5.8	100
08/21/00 - 08/27/00	36	5.5	6.5	6.1	100
08/28/00 - 09/03/00	132	4.4	7.4	6.0	100
09/04/00 - 09/10/00	168	4.7	6.8	5.8	100
09/11/00 - 09/17/00	168	1.8	6.4	5.0	85
09/18/00 - 09/24/00	168	2.9	7.0	5.5	91
09/25/00 - 10/01/00	164	4.4	7.0	5.7	100
10/02/00 - 10/08/00	168	4.6	7.3	6.0	100
10/09/00 - 10/15/00	168	4.3	8.3	5.9	100
10/16/00 - 10/22/00	168	4.0	7.2	5.8	100
10/23/00 - 10/29/00	168	3.9	7.5	5.6	98
10/30/00 - 11/05/00	168	4.5	8.0	7.0	100
11/06/00 - 11/12/00	168	4.8	9.4	7.2	100
11/13/00 - 11/19/00	168	6.0	8.7	7.1	100
11/20/00 - 11/26/00	168	5.6	6.8	6.3	100
11/27/00 - 12/03/00	168	4.2	6.9	6.0	100
12/04/00 - 12/10/00	168	6.0	7.3	6.7	100
12/11/00 - 12/17/00	168	6.1	7.8	6.7	100
12/18/00 - 12/24/00	168	5.3	8.7	5.9	100
12/25/00 - 12/31/00	168	5.3	5.8	5.5	100
01/01/01 - 01/07/01	168	5.0	7.4	6.4	100
01/08/01 - 01/14/01	168	5.3	6.8	5.9	100
01/15/01 - 01/21/01	168	5.0	9.2	7.3	100
01/22/01 - 01/28/01	168	6.6	8.2	7.2	100
01/29/01 - 02/04/01	168	4.8	8.9	7.6	100
02/05/01 - 02/11/01	168	3.8	10.5	8.1	99
02/12/01 - 02/18/01	168	7.2	10.3	8.7	100
02/19/01 - 02/25/01	167	6.1	8.6	7.0	100
02/26/01 - 03/04/01	168	6.6	9.5	8.2	100
03/05/01 - 03/11/01	167	5.6	8.3	6.8	100
03/12/01 - 03/18/01	168	4.1	8.3	6.1	100
03/19/01 - 03/25/01	168	6.4	9.7	7.5	100
03/26/01 - 04/01/01	168	4.9	7.2	5.8	100
04/02/01 - 04/08/01	167	3.8	7.0	5.4	99
04/09/01 - 04/15/01	168	4.3	6.8	5.6	100
04/16/01 - 04/22/01	168	4.1	7.7	5.9	100
04/23/01 - 04/29/01	168	4.0	7.1	5.7	100
04/30/01 - 05/06/01	167	4.0	7.1	5.7	100

TABLE AI-9 (Continued)

WEEKLY DO SUMMARY STATISTICS AT KINZIE STREET ON THE NORTH BRANCH OF THE CHICAGO RIVER DURING AUGUST 2000 THROUGH DECEMBER 2001

					Percent
Monitoring	Number of			on (mg/L)	DO Values
Dates	DO Values	min	max	mean	Above Standard
05/07/01 - 05/13/01	167	5.2	7.3	6.4	100
05/14/01 - 05/20/01	168	5.6	7.4	6.5	100
05/21/01 - 05/27/01	168	3.1	7.4	5.7	96
05/28/01 - 06/03/01	168	4.8	7.3	5.9	100
06/04/01 - 06/10/01	168	4.7	7.0	5.7	100
06/11/01 - 06/17/01	168	2.4	6.3	5.0	91
06/18/01 - 06/24/01	168	3.5	6.7	5.1	86
06/25/01 - 07/01/01	168	4.9	6.7	5.8	100
07/02/01 - 07/08/01	168	3.7	6.8	5.8	97
07/09/01 - 07/15/01	168	5.4	6.9	5.9	100
07/16/01 - 07/22/01	168	4.5	6.2	5.4	100
07/23/01 - 07/29/01	167	2.6	5.8	4.6	88
07/30/01 - 08/05/01	168	2.8	6.0	4.8	76
08/06/01 - 08/12/01	168	0.2	5.9	4.0	70
08/13/01 - 08/19/01	168	3.4	5.9	4.8	90
08/20/01 - 08/26/01	168	2.1	6.4	5.3	88
08/27/01 - 09/02/01	168	2.3	5.7	4.8	89
09/03/01 - 09/09/01	168	4.1	5.7	5.1	100
09/10/01 - 09/16/01	168	3.6	5.8	5.0	92
09/17/01 - 09/23/01	168	3.0	6.4	5.2	95
09/24/01 - 09/30/01	168	1.2	6.9	5.6	94
10/01/01 - 10/07/01	168	3.7	6.4	5.6	98
10/01/01 - 10/01/01	168	3.5	7.1	5.5	93
10/05/01 - 10/14/01	168	4.9	7.9	7.3	100
10/13/01 - 10/21/01 10/22/01 - 10/28/01	168	2.4	7.3	5.9	88
10/22/01 - 10/28/01 10/29/01 - 11/04/01	168	3.9	6.8	5.9	97
11/05/01 - 11/11/01	168	3.7	6.7	5.3	97
11/12/01 - 11/11/01	168	3.7	6.5	4.7	66
11/12/01 - 11/15/01	168	3.7	7.2	5.7	97
11/19/01 - 11/23/01 11/26/01 - 12/02/01	168	3.7	6.5	5.3	90
11/26/01 - 12/02/01 12/03/01 - 12/09/01	168	3.4	6.9	5.2	91
12/03/01 - 12/09/01 $12/10/01 - 12/16/01$	168	4.0	7.7	5.8	99
			8.6	5.8 6.7	100
12/17/01 - 12/23/01	168	4.5		6.7	100
12/24/01 - 12/30/01	168	5.8	7.4		100
12/31/01 - 01/06/02	168	6.3	7.1	6.7	TOO.

TABLE AI-10

WEEKLY DO SUMMARY STATISTICS AT THE CHICAGO RIVER CONTROLLING WORKS ON THE CHICAGO RIVER DURING AUGUST 2000 THROUGH DECEMBER 2001

	_				Percent
Monitoring	Number of		centration	(mg/L) mean	DO Values Above Standard
Dates	DO Values	min	max	mean	Above beamaze
07/31/00 - 08/06/00	168	7.1	7.9	7.5	100
08/07/00 - 08/13/00	168	7.0	7.9	7.5	100
08/14/00 - 08/20/00	168	7.2	7.9	7.6	100
08/21/00 - 08/27/00	168	7.6	8.4	8.0	100
08/28/00 - 09/03/00	168	7.8	8.3	8.1	100
09/04/00 - 09/10/00	168	7.5	8.2	7.9	100
09/11/00 - 09/17/00	168	6.7	8.2	7.8	100
09/18/00 - 09/24/00	168	7.7	8.7	8.3	100
09/25/00 - 10/01/00	168	8.6	9.4	9.0	100
10/02/00 - 10/08/00	167	8.7	9.5	9.1	100
10/02/00 = 10/08/00	168	8.7	9.9	9.6	100
10/09/00 - 10/13/00 10/16/00 - 10/22/00	168	8.5	10.0	9.2	100
10/18/00 - 10/22/00 10/23/00 - 10/29/00	168	7.3	9.3	8.6	100
10/23/00 - 10/23/00 10/30/00 - 11/05/00	168	8.0	9.5	8.8	100
11/06/00 - 11/03/00	168	8.3	9.2	8.7	100
11/13/00 - 11/12/00 11/13/00 - 11/19/00	168	8.9	11.2	10.4	100
	168	10.6	11.3	11.0	100
11/20/00 - 11/26/00	168	10.6	11.9	11.2	100
11/27/00 - 12/03/00	168	10.6	11.7	11.2	100
12/04/00 - 12/10/00	167	8.3	11.0	9.8	100
12/11/00 - 12/17/00	and the second s		11.7	10.6	100
12/18/00 - 12/24/00	168	9.0 10.1	13.6	11.9	100
12/25/00 - 12/31/00	168		12.7	11.0	100
01/01/01 - 01/07/01	168	9.3	9.9	9.5	100
01/08/01 - 01/14/01	37	8.9	10.3	9.8	100
01/15/01 - 01/21/01	83	8.3		11.5	100
01/22/01 - 01/28/01	168	8.9	14.1	10.0	100
01/29/01 - 02/04/01	168	8.0	12.3	9.0	100
02/05/01 - 02/11/01	168	7.8	10.1		100
02/12/01 - 02/18/01	168	7.5	10.8	9.2	100
02/19/01 - 02/25/01	168	8.7	10.7	9.9	100
02/26/01 - 03/04/01	168	7.6	10.9	9.8	100
03/05/01 - 03/11/01	168	9.5	12.0	11.1	100
03/12/01 - 03/18/01	168	8.7	11.2	10.4	
03/19/01 - 03/25/01	168	7.1	11.1	9.8	100
03/26/01 - 04/01/01	167	6.8	10.9	9.4	100
04/02/01 - 04/08/01	168	4.6	9.8	7.4	98
04/09/01 - 04/15/01	168	3.1	8.7	6.2	91
04/16/01 - 04/22/01	168	5.9	9.8	7.9	100
04/23/01 - 04/29/01	168	5.9	8.3	6.9	100
04/30/01 - 05/06/01	167	6.0	8.9	7.6	100

TABLE AI-10 (Continued)

WEEKLY DO SUMMARY STATISTICS AT THE CHICAGO RIVER CONTROLLING WORKS ON THE CHICAGO RIVER DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring	Number of		ncentratio		Percent DO Values Above Standaro
Dates	DO Values	min	max	mean	Above Standar
05/07/01 - 05/13/01	167	5.8	9.7	7.8	100
05/14/01 - 05/20/01	168	7.5	10.7	9.3	100
05/21/01 - 05/27/01	168	8.1	10.6	9.3	100
05/28/01 - 06/03/01	168	7.6	9.5	8.7	100
06/04/01 - 06/10/01	168	7.2	9.7	8.8	100
06/11/01 - 06/17/01	168	7.9	10.2	9.2	100
06/18/01 - 06/24/01	168	8.2	10.2	9.3	100
06/25/01 - 07/01/01	168	8.1	11.4	9.7	100
07/02/01 - 07/08/01	168	7.4	11.4	9.2	100
07/09/01 - 07/15/01	168	7.0	8.7	8.0	100
07/16/01 - 07/22/01	167	7.1	9.0	8.0	100
07/23/01 - 07/29/01	168	7.3	9.3	8.3	100
07/30/01 - 08/05/01	168	1.3	7.9	5.4	58
08/06/01 - 08/12/01	168	5.5	10.1	7.8	100
08/13/01 - 08/19/01	168	6.1	7.9	6.8	100
08/20/01 - 08/26/01	168	6.1	7.4	6.9	100
08/27/01 - 09/02/01	168	6.4	7.6	7.0	100
09/03/01 - 09/09/01	168	6.2	7.7	7.0	100
09/10/01 - 09/16/01	168	6.8	8.3	7.7	100
09/17/01 - 09/23/01	168	7.1	8.4	7.8	100
09/24/01 - 09/30/01	38	7.6	8.2	7.9	100
10/01/01 - 09/30/01	36	7.0	NO DATA	1.3	100
10/01/01 - 10/07/01 10/08/01 - 10/14/01	131	3.6	9.2	8.2	93
10/08/01 - 10/14/01 10/15/01 - 10/21/01	167	3.5	7.7	6.3	81
10/13/01 - 10/21/01 10/22/01 - 10/28/01	168	6.9	8.9	8.2	100
10/22/01 - 10/28/01 10/29/01 - 11/04/01	168	8.1	10.0	9.1	100
10/29/01 - 11/04/01 11/05/01 - 11/11/01	168	8.2	9.9	9.0	100
11/03/01 - 11/11/01 11/12/01 - 11/18/01	168	7.0	10.1	9.4	100
					100
1/19/01 - 11/25/01	168	5.6	8.9	7.5	100
1/26/01 - 12/02/01	168	7.6	9.2	8.3 8.1	100
2/03/01 - 12/09/01	168	7.2	9.3		
2/10/01 - 12/16/01	167	7.6	10.0	9.0	100
2/17/01 - 12/23/01	168	7.9	10.6	9.2	100
2/24/01 - 12/30/01	168	10.2	12.2	11.2	100
2/31/01 - 01/06/02	168	10.5	12.5	11.7	100

TABLE AI-11

WEEKLY DO SUMMARY STATISTICS

AT MICHIGAN AVENUE ON THE CHICAGO RIVER

DURING AUGUST 2000 THROUGH DECEMBER 2001

				, ,-,	Percent
Monitoring	Number of		centration		DO Values
Dates	DO Values	min	max	mean	Above Standard
07/31/00 - 08/06/00	168	7.1	7.7	7.4	100
08/07/00 - 08/13/00	168	6.7	7.9	7.5	100
08/14/00 - 08/20/00	168	7.2	8.6	8.1	100
08/21/00 - 08/27/00	168	7.6	8.5	8.0	100
08/28/00 - 09/03/00	168	7.6	8.1	7.8	100
09/04/00 - 09/10/00	168	7.6	8.1	7.9	100
09/11/00 - 09/17/00	168	6.7	8.1	7.7	100
09/18/00 - 09/24/00	168	7.9	8.5	8.3	100
09/25/00 - 10/01/00	168	8.4	9.2	8.8	100
10/02/00 - 10/08/00	168	8.3	9.2	8.8	100
10/09/00 - 10/15/00	168	6.5	9.7	9.2	100
10/16/00 - 10/22/00	168	8.1	9.7	9.0	100
10/23/00 - 10/29/00	168	7.0	8.8	8.1	100
10/30/00 - 11/05/00	168	7.9	9.2	8.4	100
11/06/00 - 11/12/00	168	7.0	8.7	8.0	100
11/13/00 - 11/19/00	168	8.0	10.6	9.7	100
11/20/00 - 11/26/00	168	7.2	10.7	9.7	100
11/27/00 - 12/03/00	168	6.8	9.3	7.8	100
12/04/00 - 12/10/00	168	6.9	9.9	7.9	100
12/11/00 - 12/17/00	168	7.8	10.6	9.4	100
12/18/00 - 12/24/00	168	8.7	11.0	9.9	100
12/25/00 - 12/31/00	168	10.0	13.1	11.6	100
01/01/01 - 01/07/01	168	7.2	12.6	10.5	100
01/08/01 - 01/14/01	168	6.9	9.8	7.9	100
01/15/01 - 01/21/01	168	6.9	9.8	8.3	100
01/22/01 - 01/28/01	168	7.5	11.2	9.5	100
01/29/01 - 02/04/01	168	7.6	10.9	9.1	100
02/05/01 - 02/11/01	167	7.4	9.9	8.3	100
02/12/01 - 02/18/01	168	7.6	9.8	8.3	100
02/19/01 - 02/25/01	168	8.5	10.5	9.3	100
02/26/01 - 03/04/01	168	8.3	10.8	9.1	100
03/05/01 - 03/11/01	168	8.8	11.0	9.6	100
03/12/01 - 03/18/01	168	6.1	9.5	7.4	100
03/19/01 - 03/25/01	168	6.7	9.3	7.9	100
03/26/01 - 04/01/01	168	6.1	7.8	7.1	100
04/02/01 - 04/08/01	167	4.3	7.4	6.2	90
04/09/01 - 04/15/01	168	4.6	6.3	5.5	88
04/16/01 - 04/22/01	168	5.1	7.3	6.1	100
04/23/01 - 04/29/01	168	4.7	6.6	5.9	98
04/30/01 - 05/06/01	168	4.1	7.3	6.1	93

TABLE AI-11 (Continued)

WEEKLY DO SUMMARY STATISTICS AT MICHIGAN AVENUE ON THE CHICAGO RIVER DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring	Number of		oncentration	n (mg/L)	Percent DO Values
Dates	DO Values	min	max	mean	Above Standard
05/07/01 - 05/13/01	168	4.6	8.9	6.9	99
05/14/01 - 05/20/01	168	7.9	10.9	9.3	100
05/21/01 - 05/27/01	36	7.4	9.9	8.7	100
06/11/01 - 06/17/01			NO DATA		
06/18/01 - 06/24/01			NO DATA	* N	
06/25/01 - 07/01/01			NO DATA		
07/02/01 - 07/08/01			NO DATA		
07/09/01 - 07/15/01			NO DATA		
07/16/01 - 07/22/01			NO DATA		
07/23/01 - 07/29/01			NO DATA		
07/30/01 - 08/05/01			NO DATA		
08/06/01 - 08/12/01			NO DATA		
08/13/01 - 08/19/01			NO DATA		
08/20/01 - 08/26/01			NO DATA		
08/27/01 - 09/02/01			NO DATA		
09/03/01 - 09/09/01			NO DATA		
09/10/01 - 09/16/01			NO DATA		
09/17/01 - 09/23/01			NO DATA		
09/24/01 - 09/30/01			NO DATA		
10/01/01 - 10/07/01			NO DATA		
10/08/01 - 10/14/01			NO DATA		
10/15/01 - 10/21/01			NO DATA		
10/22/01 - 10/28/01			NO DATA		
10/29/01 - 11/04/01			NO DATA		
11/05/01 - 11/11/01			NO DATA		
11/12/01 - 11/18/01			NO DATA		
11/19/01 - 11/25/01			NO DATA		
11/26/01 - 12/02/01			NO DATA		
12/03/01 - 12/09/01			NO DATA		
12/10/01 - 12/16/01			NO DATA		
12/17/01 - 12/23/01			NO DATA		
12/24/01 - 12/30/01			NO DATA		
12/31/01 - 01/06/02	109	10.2	12.3	11.0	100

TABLE AI-12

WEEKLY DO SUMMARY STATISTICS AT CLARK STREET ON THE CHICAGO RIVER

DURING AUGUST 2000 THROUGH DECEMBER 2001

				4 4- >	Percent
Monitoring Dates	Number of DO Values	DO Cor min	ncentrati max	on (mg/L) mean	DO Values Above Standard
07/31/00 - 08/06/00	166	5.9	7.6	7.2	100
08/07/00 - 08/13/00	168	5.1	7.7	7.2	100
08/14/00 - 08/20/00	168	6.7	7.7	7.3	100
08/21/00 - 08/27/00	168	6.5	8.0	7.4	100
08/28/00 - 09/03/00	168	6.2	8.5	7.9	100
09/04/00 - 09/10/00	168	6.9	8.3	7.7	100
09/11/00 - 09/17/00		4.8	8.1	7.2	98
09/18/00 - 09/24/00	94	5.6	8.0	7.6	100
09/25/00 - 10/01/00	132	7.6	9.2	8.7	100
10/02/00 - 10/08/00	168	7.0	9.2	8.2	100
10/02/00 - 10/05/00	168	5.4	9.6	8.5	100
10/16/00 - 10/22/00		6.4	9.2	8.1	100
				7.5	
10/23/00 - 10/29/00	167	6.6	8.4		100
10/30/00 - 11/05/00	168	7.1	8.8	8.1	100
11/06/00 - 11/12/00	168	6.9	8.8	7.9	100
11/13/00 - 11/19/00	167	6.9	9.1	8.5	100
11/20/00 - 11/26/00	168	6.0	9.6	8.8	100
11/27/00 - 12/03/00	168	6.1	7.5	6.7	100
12/04/00 - 12/10/00	168	6.6	11.9	9.0	100
12/11/00 - 12/17/00	168	8.2	11.9	9.6	100
12/18/00 - 12/24/00	168	7.3	10.4	9.1	100
12/25/00 - 12/31/00	168	9.0	12.3	10.5	100
01/01/01 - 01/07/01	168	6.8	11.5	9.6	100
01/08/01 - 01/14/01	167	6.4	7.3	7.0	100
01/15/01 - 01/21/01	168	6.5	8.4	7.8	100
01/22/01 - 01/28/01	168	7.0	10.6	8.0	100
01/29/01 - 02/04/01	168	6.9	10.6	8.7	100
02/05/01 - 02/11/01	167	7.1	11.0	8.7	100
02/12/01 - 02/18/01	168	7.6	9.2	8.4	100
02/19/01 - 02/25/01	167	7.8	10.4	8.9	100
02/26/01 - 03/04/01	168	7.3	10.7	8.2	100
03/05/01 - 03/04/01	168	6.3	9.7	7.8	100
03/03/01 - 03/11/01 03/12/01 - 03/18/01	168	5.8	11.2	7.0	100
03/12/01 - 03/18/01 $03/19/01 - 03/25/01$					
03/19/01 - 03/23/01 $03/26/01 - 04/01/01$	168	б.2	11.0	8.0	100
	168	5.2	7.5	6.4	100
04/02/01 - 04/08/01	167	3.8	7.2	5.7	84
04/09/01 - 04/15/01	168	3.8	5.8	5.0	52
04/16/01 - 04/22/01	168	4.0	6.7	5.2	61
04/23/01 - 04/29/01	168	4.1	5.9	5.2	70
04/30/01 - 05/06/01	168	3.6	5.9	5.0	58

TABLE AI-12 (Continued)

WEEKLY DO SUMMARY STATISTICS AT CLARK STREET ON THE CHICAGO RIVER DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring	Number of	Number of DO Concentration (mg/L)					
Dates	DO Values	min	max	mean	DO Values Above Standard		
05/07/01 - 05/13/01	168	4.0	8.4	5.8	72		
05/07/01 = 05/13/01 05/14/01 = 05/20/01	168	6.3	10.3	8.2	100		
05/14/01 - 05/20/01 05/21/01 - 05/27/01	168	6.6	10.0	8.7	100		
	168	7.6	9.2	8.4	100		
05/28/01 - 06/03/01			9.2	8.6	100		
06/04/01 - 06/10/01	168	7.5 6.9	9.2	8.5	100		
06/11/01 - 06/17/01	167				100		
06/18/01 - 06/24/01	167	5.5	10.2	7.7			
06/25/01 - 07/01/01	168	5.5	10.5	8.4	100		
07/02/01 - 07/08/01	168	6.6	10.9	8.9	100		
07/09/01 - 07/15/01	168	7.1	8.6	8.0	100		
07/16/01 - 07/22/01	168	6.5	8.4	7.7	100		
07/23/01 - 07/29/01	168	6.0	9.1	7.9	100		
07/30/01 - 08/05/01	168	1.1	7.8	5.0	57		
08/06/01 - 08/12/01	168	5.0	8.9	7.2	100		
08/13/01 - 08/19/01	168	5.8	7.9	7.0	100		
08/20/01 - 08/26/01	168	6.2	7.4	7.0	100		
08/27/01 - 09/02/01	168	5.5	7.8	7.0	.100		
09/03/01 - 09/09/01	168	5.8	7.5	6.9	100		
9/10/01 - 09/16/01	168	6.8	8.3	7.6	100		
9/17/01 - 09/23/01	168	6.1	8.7	7.7	100		
9/24/01 - 09/30/01	168	6.6	8.8	8.0	100		
0/01/01 - 10/07/01	168	7.5	8.6	8.2	100		
0/08/01 - 10/14/01	167	3.0	8.7	7.2	86		
0/15/01 - 10/21/01	168	3.7	6.1	5.3	79		
0/22/01 - 10/28/01	168	5.7	9.1	7.1	100		
0/22/01 - 10/20/01 0/29/01 - 11/04/01	168	4.4	8.7	7.3	93		
1/05/01 - 11/11/01	168	4.8	8.2	7.2	99		
	168	3.6	9.8	7.3	90		
1/12/01 - 11/18/01		=	7.5	6.5	98		
1/19/01 - 11/25/01	168	3.9	7.3	6.8	100		
1/26/01 - 12/02/01	168	5.5		6.7	100		
2/03/01 - 12/09/01	168	5.7	7.5				
2/10/01 - 12/16/01	168	5.7	7.8	6.8	100		
.2/17/01 - 12/23/01	168	6.6	8.6	7.6	100		
2/24/01 - 12/30/01	168	8.1	11.2	9.6	100		
2/31/01 - 01/06/02	59	10.6	13.2	11.8	100		

TABLE AI-13

WEEKLY DO SUMMARY STATISTICS

AT JACKSON BOULEVARD ON THE SOUTH BRANCH OF THE CHICAGO RIVER

DURING AUGUST 2000 THROUGH DECEMBER 2001

	Mumber of	DO 00-	gont-rotic	Percent DO Values	
Monitoring Dates	Number of DO Values	min	centration max	mean	Above Standard
05/21/20 00/06/00	1.00	A =	6 0	6.0	100
07/31/00 - 08/06/00	168	4.5 2.2	6.8 6.5	6.0 5.5	92
08/07/00 - 08/13/00	168	3.9	6.7	6.1	99
08/14/00 - 08/20/00	168		7.0	6.4	100
08/21/00 - 08/27/00	167	5.6			100
08/28/00 - 09/03/00	168	5.2	7.0	6.5 7.1	
09/04/00 - 09/10/00	168	6.3	7.7		100
09/11/00 - 09/17/00	168	3.5	7.5	5.9	98
09/18/00 - 09/24/00	168	4.8	7.7	6.4	100
09/25/00 - 10/01/00	168	5.1	7.9	6.8	100
10/02/00 - 10/08/00	168	4.7	7.0	5.9	100
10/09/00 - 10/15/00	168	4.7	8.4	6.5	100
10/16/00 - 10/22/00	168	4.6	6.9	6.0	100
10/23/00 - 10/29/00	168	4.4	7.0	5.6	100
10/30/00 - 11/05/00	168	4.6	8.1	6.8	100
11/06/00 - 11/12/00	168	4.4	8.4	6.5	100
11/13/00 - 11/19/00	167	5.9	8.7	7.2	100
11/20/00 - 11/26/00	168	5.3	7.7	6.6	100
11/27/00 - 12/03/00	36	4.8	7.4	6.0	100
12/04/00 - 12/10/00	132	6.0	8.8	6.7	100
12/11/00 - 12/17/00	168	6.1	9.9	7.8	100
12/18/00 - 12/24/00	168	6.6	9.0	7.5	100
12/25/00 - 12/31/00	168	6.2	9.6	7.2	100
01/01/01 - 01/07/01	168	5.7	9.9	7.7	100
01/08/01 - 01/14/01	168	4.9	6.7	5.9	100
01/15/01 - 01/21/01	168	4.5	8.2	6.5	100
01/22/01 - 01/28/01	168	5.8	7.4	6.8	100
01/22/01 - 01/20/01 01/29/01 - 02/04/01	167	5.9	8.7	7.3	100
02/05/01 - 02/11/01	167	4.2	9.9	7.4	100
02/03/01 = 02/11/01 02/12/01 = 02/18/01	167	5.0	9.7	7.6	100
		4.7	7.9	6.4	100
02/19/01 - 02/25/01	168			7.5	100
02/26/01 - 03/04/01	168	4.6	9.3	6.1	
03/05/01 - 03/11/01	167	4.4	7.7		100
03/12/01 - 03/18/01	168	3.3	9.1	• • •	93
03/19/01 - 03/25/01	168	4.6	8.6	6.4	100
03/26/01 - 04/01/01	168	3.8	6.7	5.2	99
04/02/01 - 04/08/01	167	3.0	6.4	4.7	85
04/09/01 - 04/15/01	168	2.7	6.0	4.5	74
04/16/01 - 04/22/01	168	3.0	7.0	4.8	90
04/23/01 - 04/29/01	168	2.5	6.1	4.6	80
04/30/01 - 05/06/01	168	3.2	5.9	4.9	92

TABLE AI-13 (Continued)

WEEKLY DO SUMMARY STATISTICS AT JACKSON BOULEVARD ON THE SOUTH BRANCH OF THE CHICAGO RIVER DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring	Number of	DO CON	centratio	n (mcr/T.)	Percent DO Values
Dates	DO Values	min	max	mean	Above Standard
05/07/01 - 05/13/01	168	3.8	6.6	5.3	99
05/14/01 - 05/20/01	167	4.7	7.1	5.9	100
05/21/01 - 05/27/01	168	3.6	6.6	5.6	99
05/28/01 - 06/03/01	168	3.4	7.0	5.7	98
06/04/01 - 06/10/01	168	4.6	6.8	5.8	100
06/11/01 - 06/17/01	168	2.2	7.8	5.2	90
06/18/01 - 06/24/01	168	3.4	7.0	5.3	93
06/25/01 - 07/01/01	168	4.2	7.6	5.9	100
07/02/01 - 07/08/01	168	5.0	7.8	6.4	100
07/09/01 - 07/15/01	153	4.5	7.0	6.1	100
07/16/01 - 07/22/01	168	4.2	6.6	5.7	100
07/23/01 - 07/29/01	168	3.6	6.9	5.7	96
07/30/01 - 08/05/01	168	1.2	7.0	4.3	57
08/06/01 - 08/12/01	167	0.8	6.6	4.0	59
08/13/01 - 08/19/01	168	3.3	6.3	4.9	94
08/20/01 - 08/26/01	168	0.9	6.1	4.8	89
08/27/01 - 09/02/01	168	2.0	6.0	4.8	86
09/03/01 - 09/09/01	168	3.7	6.0	4.9	96
09/10/01 - 09/16/01	168	4.3	6.7	5.5	100
09/17/01 - 09/23/01	168	2.6	7.3	5.3	95
09/24/01 - 09/30/01	168	1.5	7.6	5.7	91
10/01/01 - 10/07/01	168	2.9	6.9	5.5	92
10/08/01 - 10/14/01	168	2.9	6.7	5.2	95
.0/15/01 - 10/21/01	167	2.9	7.6	6.4	97
0/22/01 - 10/28/01	168	2.5	8.0	5.3	82
0/29/01 - 11/04/01	168	2.6	6.5	5.1	89
1/05/01 - 11/11/01	168	2.8	6.1	4.3	65
1/12/01 - 11/18/01	168	2.5	7.9	4.8	77
1/19/01 - 11/25/01	168	3.2	6.5	4.9	92
1/26/01 - 12/02/01	168	3.1	6.3	4.9	86
2/03/01 - 12/09/01	168	2.8	6.2	4.6	73
.2/10/01 - 12/16/01	168	2.8	7.3	5.0	82
2/17/01 - 12/23/01	168	3.9	8.0	6.1	99
2/24/01 - 12/30/01	168	5.6	7.9	7.0	100
2/31/01 - 01/06/02	168	6.3	9.0	7.4	100

TABLE AI-14

WEEKLY DO SUMMARY STATISTICS
AT LOOMIS STREET ON THE SOUTH BRANCH OF THE CHICAGO RIVER
DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Dates	Number of DO Values				Percent
		DO Concentration		(mg/L)	DO Values Above Standard
		min	max	mean	Above Standard
07/31/00 - 08/06/00	168	5.3	6.8	6.3	100
08/07/00 - 08/13/00	168	3.0	7.8	5.8	95
08/14/00 - 08/20/00	168	5.5	6.8	6.1	100
08/21/00 - 08/27/00	168	5.8	6.6	6.2	100
08/28/00 - 09/03/00	168	6.0	7.3	6.7	100
09/04/00 - 09/10/00	168	6.3	9.6	7.3	100
09/11/00 - 09/17/00	168	2.1	7.1	5.3	83
09/18/00 - 09/24/00	168	5.6	7.9	7.1	100
09/25/00 - 10/01/00	168	7.0	8.2	7.5	100
10/02/00 - 10/08/00	168	4.8	9.8	6.9	100
10/09/00 - 10/15/00	168	6.1	8.3	7.2	100
10/16/00 - 10/22/00	168	5.4	7.1	6.4	100
10/23/00 - 10/29/00	168	5.1	9.5	6.2	100
10/30/00 - 11/05/00	168	6.2	7.8	7.3	100
11/06/00 - 11/12/00	168	4.1	8.2	6.4	100
11/13/00 - 11/19/00	168	6.0	8.8	7.0	100
11/20/00 - 11/26/00	168	6.0	9.5	7.0	100
11/27/00 - 12/03/00	168	6.0	7.4	6.7	100
12/04/00 - 12/10/00	168	6.6	7.9	7.3	100
12/11/00 - 12/17/00	168	6.9	8.6	7.6	100
12/18/00 - 12/24/00	168	7.4	9.0	8.2	100
12/25/00 - 12/31/00	168	7.6	9.5	8.3	100
01/01/01 - 01/07/01	168	6.8	9.2	8.2	100
01/08/01 - 01/14/01	168	6.3	7.3	6.8	100
01/15/01 - 01/21/01	83	5.5	6.5	6.1	100

TABLE AI-15

WEEKLY DO SUMMARY STATISTICS AT INTERSTATE HIGHWAY 55 ON BUBBLY CREEK DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Dates	Number of DO Values	DO Con	centratio	Percent DO Values	
		min	max	n (mg/L) mean	Above Standard
07/31/00 - 08/06/00	168	0.3	4.7	2.5	10
08/07/00 - 08/13/00	168	0.1	4.7	1.6	3
08/14/00 - 08/20/00	168	0.8	5.4	2.6	15
08/21/00 - 08/27/00	168	0.5	9.1	3.7	47
08/28/00 - 09/03/00	167	0.6	6.2	3.7	46
09/04/00 - 09/10/00	168	2.2	7.7	5.2	79
09/11/00 - 09/17/00	168	1.1	8.5	3.2	24
09/18/00 - 09/24/00	168	0.3	5.2	2.7	12
09/25/00 - 10/01/00	168	0.2	6.6	3.3	45
10/02/00 - 10/08/00	168	0.3	6.0	3.2	45
10/09/00 - 10/15/00	168	0.3	5.9	3.2	40
10/16/00 - 10/22/00	168	1.6	6.2	4.0	54
10/23/00 - 10/29/00	168	0.8	6.8	4.1	57
10/30/00 - 11/05/00	168	2.8	6.9	5.6	94
11/06/00 - 11/12/00	168	0.8	6.4	4.2	67
11/13/00 - 11/19/00	168	0.1	7.1	2.6	31
11/20/00 - 11/26/00	168	1.0	7.3	5.4	80
11/27/00 - 12/03/00	168	4.0	6.7	6.0	99
12/04/00 - 12/10/00	167	4.7	7.2	6.3	100
12/11/00 - 12/17/00	168	6.0	9.0	7.4	100
12/18/00 - 12/24/00	168	4.2	7.3	5.5	100
12/25/00 - 12/31/00	168	2.9	7.5	5.9	79
01/01/01 - 01/07/01	168	5.4	8.2	6.8	100
01/08/01 - 01/14/01	168	6.1	6.9	6.5	100
01/15/01 - 01/21/01	83	4.3	6.2	5.3	100

TABLE AI-16

WEEKLY DO SUMMARY STATISTICS AT CICERO AVENUE ON THE CHICAGO SANITARY & SHIP CANAL DURING AUGUST 2000 THROUGH DECEMBER 2001

'		70.0		(()	Percent
Monitoring Dates	Number of DO Values	DO Con	centration max	on (mg/L) mean	DO Values Above Standard
					* 1
07/31/00 - 08/06/00	168	4.1	6.1	5.2	100
08/07/00 - 08/13/00	168	1.3	5.6	4.4	. 80
08/14/00 - 08/20/00	168	2.1	5.7	4.4	80
08/21/00 - 08/27/00	168	4.8	6.3	5.5	100
08/28/00 - 09/03/00	168	5.0	6.3	5.6	100
09/04/00 - 09/10/00	168	5.4	7.4	6.6	100
09/11/00 - 09/17/00	168	0.7	7.1	3.8	51
09/18/00 - 09/24/00	168	3.7	6.7	5.7	97
09/25/00 - 10/01/00	168	5.2	7.2	6.5	100
10/02/00 - 10/08/00	168	2.4	6.9	4.9	79
10/09/00 - 10/15/00	167	4.7	6.7	5.6	100
10/16/00 - 10/22/00	168	3.3	6.1	4.2	75
10/23/00 - 10/29/00	168	2.8	4.8	3.7	21
10/30/00 - 11/05/00	168	4.1	5.7	4.8	100
11/06/00 - 11/12/00	168	2.1	5.9	4.7	86
11/13/00 - 11/19/00	168	1.3	7.7	6.4	93
11/20/00 - 11/25/00	168	5.4	8.6	7.0	100
11/20/00 - 11/20/00	168	5.9	6.6	6.3	100
11/2//00 = 12/03/00 12/04/00 = 12/10/00	168	5.7	7.1	6.6	100
12/04/00 - 12/13/00 $12/11/00 - 12/17/00$	168	6.3	8.1	7.1	100
12/11/00 - 12/11/00 $12/18/00 - 12/24/00$	168	7.5	8.6	8.0	100
	168	7.3	8.5	7.8	100
12/25/00 - 12/31/00		7.1	9.0	8.2	100
01/01/01 - 01/07/01	168	6.0		6.9	100
01/08/01 - 01/14/01	167		8.4	6.5	100
01/15/01 - 01/21/01	168	5.9	7.9		
01/22/01 - 01/28/01	168	5.5	8.1	7.1	100
01/29/01 - 02/04/01	168	5.6	7.5	6.9	100
02/05/01 - 02/11/01	167	4.2	8.4	7.0	100
02/12/01 - 02/18/01	168	6.4	9.2	7.8	100
02/19/01 - 02/25/01	168	5.8	7.5	6.9	100
02/26/01 - 03/04/01	168	4.7	7.8	6.8	100
03/05/01 - 03/11/01	168	5.2	7.7	6.1	100
03/12/01 - 03/18/01	168	4.7	6.4	5.3	100
03/19/01 - 03/25/01	168	5.1	7.8	6.7	100
03/26/01 - 04/01/01	168	5.0	8.0	6.2	100
04/02/01 - 04/08/01	167	0.6	6.9	5.1	83
04/09/01 - 04/15/01	168	3.0	5.9	4.9	92
04/16/01 - 04/22/01	168	3.9	7.0	5.1	99
04/23/01 - 04/29/01	166	3.2	6.1	4.7	86
04/30/01 - 05/06/01	168	1.7	5.5	3.9	46

TABLE AI-16 (Continued)

WEEKLY DO SUMMARY STATISTICS AT CICERO AVENUE ON THE CHICAGO SANITARY & SHIP CANAL DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Dates	Number of DO Values	DO Con min	centration	on (mg/L) mean	Percent DO Values Above Standard
05/07/01 - 05/13/01	168	0.8	5.1	3.2	18
05/14/01 - 05/20/01	168	1.5	5.5	4.0	56
05/21/01 - 05/27/01	168	2.6	5.6	4.2	67
05/28/01 - 06/03/01	168	3.6	5.6	4.8	92
06/04/01 - 06/10/01	168	4.0	6.1	5.0	99
06/11/01 - 06/17/01	168	1.0	6.1	3.6	25
06/18/01 - 06/24/01	167	0.5	4.9	3.0	11
06/25/01 - 07/01/01	168	2.7	6.2	4.1	48
07/02/01 - 07/08/01	168	3.5	6.9	5.1	94
07/09/01 - 07/15/01	168	3.2	6.0	4.7	90
07/16/01 - 07/22/01	168	1.2	5.6	4.1	63
07/23/01 - 07/29/01	168	0.6	4.5	2.3	4
07/30/01 - 08/05/01	168	0.6	6.3	2.8	34
08/06/01 - 08/12/01	168	0.4	6.3	2.7	15
08/13/01 - 08/19/01	168	0.9	4.8	3.4	18
08/20/01 - 08/26/01	168	1.1	5.6	4.5	86
08/27/01 - 09/02/01	168	0.6	4.7	3.3	18
09/03/01 - 09/09/01	167	1.9	5.3	3.7	32
09/10/01 - 09/16/01	167	1.3	6.1	4.5	69
09/17/01 - 09/23/01	168	0.0	5.4	3.9	51
0.9/24/01 - 0.9/30/01	168	0.0	6.5	4.3	66
10/01/01 - 10/07/01	168	2.3	6.3	5.1	93
10/01/01 - 10/01/01	168	1.0	5.6	3.9	55
10/08/01 - 10/14/01 10/15/01 - 10/21/01	168	2.2	5.8	4.8	86
10/22/01 - 10/28/01	168	0.0	5.8	3.9	64
10/22/01 - 10/20/01 10/29/01 - 11/04/01	168	3.3	5.7	4.9	83
11/05/01 - 11/11/01	168	2.8	4.1	3.4	2
1/12/01 - 11/11/01	168	2.2	4.3	3.0	1
1/12/01 - 11/15/01 1/19/01 - 11/25/01	168	2.0	4.8	3.7	22
1/26/01 - 11/23/01	168	3.9	5.4	4.5	96
$\frac{11}{26}/01 - \frac{12}{02}/01$ $\frac{2}{03}/01 - \frac{12}{09}/01$	168	3.2	4.9	4.2	80
12/03/01 - 12/09/01 12/10/01 - 12/16/01	168	3.5	5.2	4.3	73
12/10/01 - 12/16/01 12/17/01 - 12/23/01	168	4.4	6.3	5.2	100
12/17/01 - 12/23/01 12/24/01 - 12/30/01	168	6.2	7.6	6.8	100
12/24/01 - 12/30/01 12/31/01 - 01/06/02	167	6.8	7.4	7.1	100

TABLE AI-17

WEEKLY DO SUMMARY STATISTICS
AT B&O CENTRAL RAILROAD ON THE CHICAGO SANITARY AND SHIP CANAL

DURING AUGUST 2000 THROUGH DECEMBER 2001

					Percent
Monitoring	Number of	DO Cor	ncentratio	on (mg/L)	DO Values
Dates	DO Values	min	max	mean	Above Standard
07/31/00 - 08/06/00	168	4.3	6.2	5.1	100
08/07/00 - 08/13/00	168	4.3	6.1	5.2	100
08/14/00 - 08/20/00	168	4.7	6.3	5.5	100
08/21/00 - 08/27/00	168	5.6	6.7	6.2	100
08/28/00 - 09/03/00	168	5.6	6.7	6.1	100
09/04/00 - 09/10/00	168	5.7	7.0	6.4	100
09/11/00 - 09/17/00	168	2.8	6.8	5.0	80
09/18/00 - 09/24/00	168	5.0	7.1	6.0	100
09/25/00 - 10/01/00	58	6.1	7.1	6.6	100
10/02/00 - 10/08/00	110	5.8	7.5	7.0	100
10/09/00 - 10/15/00	168	6.1	7.7	6.9	100
10/16/00 - 10/22/00	168	5.7	6.7	6.2	100
10/23/00 - 10/29/00	167	5.2	6.8	5.9	100
10/30/00 - 11/05/00	167	4.9	6.8	6.1	100
11/06/00 - 11/12/00	168	5.3	8.2	6.8	100
11/13/00 - 11/19/00	168	5.3	8.0	7.1	100
11/20/00 - 11/26/00	168	6.5	9.1	8.0	100
11/27/00 - 12/03/00	168	6.5	8.3	7.6	100
12/04/00 - 12/10/00	168	6.8	8.2	7.5	100
12/11/00 - 12/17/00	168	7.3	8.5	7.9	100
12/18/00 - 12/24/00	168	8.0	8.8	8.5	100
12/25/00 - 12/31/00	168	7.0	9.6	8.7	100
01/01/01 - 01/07/01	168	7.0	9.4	8.6	100
01/08/01 - 01/14/01	168	7.5	9.3	8.3	100
01/15/01 - 01/21/01	168	7.1	9.1	7.9	100
01/22/01 - 01/28/01	168	7.4	8.9	8.3	100
01/29/01 - 02/04/01	168	7.5	9.0	8.3	100
02/05/01 - 02/11/01	168	6.7	8.6	7.9	100
02/12/01 - 02/18/01	168	8.4	11.5	9.3	100
02/19/01 - 02/25/01	168	7.0	10.1	8.5	100
02/26/01 - 03/04/01	167	7.5	9.2	8.4	100
03/05/01 - 03/11/01	168	6.7	9.7	8.1	100
03/12/01 - 03/18/01	168	6.3	8.3	7.5	100
03/19/01 - 03/25/01	168	6.5	8.6	7.7	100
03/26/01 - 04/01/01	167	6.6	9.2	7.6	100
04/02/01 - 04/08/01	167	5.5	8.0	7.0	100
04/09/01 - 04/15/01	168	5.6	7.7	6.7	100
04/16/01 - 04/22/01	167	6.1	8.2	7.0	100
04/23/01 - 04/29/01	168	5.3	7.6	6.6	100
04/30/01 - 05/06/01	168	4.7	6.8	5.9	100

TABLE AI-17 (Continued)

WEEKLY DO SUMMARY STATISTICS AT B&O CENTRAL RAILROAD ON THE CHICAGO SANITARY AND SHIP CANAL DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Dates	Number of DO Values	DO Con min	centratio	n (mg/L) mean	Percent DO Values Above Standard
	DO VATACE	*******			Above beardare
05/07/01 - 05/13/01	168	4.3	6.8	5.6	100
05/14/01 - 05/20/01	168	4.3	6.6	5.2	100
05/21/01 - 05/27/01	167	4.4	6.5	5.4	100
05/28/01 - 06/03/01	168	4.9	7.4	6.3	100
06/04/01 - 06/10/01	168	5.2	7.3	5.9	100
06/11/01 - 06/17/01	168	2.6	7.0	4.8	77
06/18/01 - 06/24/01	168	4.1	6.1	5.1	100
06/25/01 - 07/01/01	168	3.3	6.6	5.1	99
07/02/01 - 07/08/01	168	4.6	6.5	5.7	100
07/09/01 - 07/15/01	168	4.5	6.8	5.5	100
07/16/01 - 07/22/01	168	4.0	6.2	5.0	100
07/23/01 - 07/29/01	168	2.5	5.9	4.4	77
07/30/01 - 08/05/01	168	2.2	6.0	4.3	59
08/06/01 - 08/12/01	168	2.8	6.7	4.9	83
08/13/01 - 08/19/01	168	3.8	6.8	5.0	93
08/20/01 - 08/26/01	167	1.6	6.2	5.2	96
08/27/01 - 09/02/01	168	2.1	5.9	4.3	69
09/03/01 - 09/09/01	168	4.2	6.7	5.5	100
09/10/01 - 09/16/01	58	5.0	6.3	5.7	100
09/17/01 - 09/23/01	86	4.0	6.6	5.5	100
09/24/01 - 09/30/01	168	4.2	7.3	6.1	100
10/01/01 - 10/07/01	168	2.9	7.2	6.2	95
10/08/01 - 10/14/01	168	3.5	7.0	5.6	93
10/15/01 - 10/21/01	144	3.8	6.9	6.0	96
10/22/01 - 10/28/01	168	2.1	7.1	5.5	90
10/29/01 - 11/04/01	167	4.6	7.4	6.4	100
11/05/01 - 11/11/01	168	4.3	6.6	5.4	100
11/12/01 - 11/18/01	167	3.4	6.8	5.5	96
11/19/01 - 11/25/01	168	4.8	6.8	5.7	100
11/26/01 - 12/02/01	168	4.8	7.6	6.2	100
12/03/01 - 12/09/01	168	4.2	7.2	5.6	100
12/10/01 - 12/16/01	168	4.2	7.8	5.9	100
12/17/01 - 12/23/01	168	5.9	7.9	6.7	100
12/24/01 - 12/30/01	168	6.5	8.2	7.6	100
12/24/01 - 12/30/01 12/31/01 - 01/06/02	168	7.0	8.7	8.0	100

WEEKLY DO SUMMARY STATISTICS AT ROUTE 83 ON THE CHICAGO SANITARY & SHIP CANAL DURING AUGUST 2000 THROUGH DECEMBER 2001

TABLE AI-18

					Percent
Monitoring	Number of	-	centration		DO Values
Dates	DO Values	min	max	mean	Above Standard
07/31/00 - 08/06/00	168	3.2	5.1	4.5	89
08/07/00 - 08/13/00	168	0.8	5.5	4.2	79
08/14/00 - 08/20/00	59	1.5	5.0	2.9	10
08/21/00 - 08/27/00	109	5.9	6.6	6.2	100
08/28/00 - 09/03/00	168	5.6	6.3	5.9	100
09/04/00 - 09/10/00	168	5.2	6.4	5.8	100
09/11/00 - 09/17/00	168	0.2	5.7	3.8	62
09/18/00 - 09/24/00	168	4.3	7.6	5.3	100
09/25/00 - 10/01/00	168	6.0	6.8	6.3	100
10/02/00 - 10/08/00	168	3.8	6.8	5.9	98
10/02/00 - 10/05/00	168	5.6	7.2	6.2	100
10/16/00 - 10/22/00	168	4.5	6.0	5.2	100
10/13/00 - 10/22/00	167	4.2	5.7	4.9	100
10/25/00 - 11/05/00	162	4.2	5.7	5.1	100
11/06/00 - 11/12/00	168	2.9	7.7	5.8	99
11/13/00 - 11/12/00	168	5.0	7.6	6.8	100
11/13/00 - 11/13/00 $11/20/00 - 11/26/00$	168	6.6	7.7	7.1	100
11/20/00 - 11/20/00 $11/27/00 - 12/03/00$	168	5.9	7.4	6.8	100
11/27/00 = 12/03/00 $12/04/00 = 12/10/00$	168	6.5	7.8	7.2	100
12/04/00 = 12/10/00 $12/11/00 = 12/17/00$	168	6.6	8.4	7.7	100
12/11/00 - 12/11/00 $12/18/00 - 12/24/00$	168	7.3	8.7	8.2	100
12/18/00 = 12/24/00 $12/25/00 = 12/31/00$	168	7.5	8.9	8.4	100
	168	4.7	8.9	7.7	100
01/01/01 - 01/07/01	168	6.8	8.7	7.8	100
01/08/01 - 01/14/01		6.5	8.5	7.8	100
01/15/01 - 01/21/01	168		8.3	7.2	100
01/22/01 - 01/28/01	168	6.9 7.2		7.7	100
01/29/01 - 02/04/01	168		8.5	7.9	100
02/05/01 - 02/11/01	168	5.6	8.0		100
02/12/01 - 02/18/01	168	6.2	8.6	8.0	
02/19/01 - 02/25/01	168	5.6	9.2	8.0	100
02/26/01 - 03/04/01	168	6.6	9.1	7.7	100
03/05/01 - 03/11/01	168	5.6	8.2	7.0	100
03/12/01 - 03/18/01	168	5.8	7.4	6.7	100
03/19/01 - 03/25/01	168	5.7	7.5	6.7	100
03/26/01 - 04/01/01	167	5.6	7.9	6.6	100
04/02/01 - 04/08/01	167	4.3	6.9	5.8	100
04/09/01 - 04/15/01	168	0.9	6.3	5.0	92
04/16/01 - 04/22/01	166	4.1	6.6	5.8	100
04/23/01 - 04/29/01	167	3.8	6.7	5.3	95
04/30/01 - 05/06/01	168	2.6	5.0	4.0	50

TABLE AI-18 (Continued)

WEEKLY DO SUMMARY STATISTICS AT ROUTE 83 ON THE CHICAGO SANITARY & SHIP CANAL DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Dates	Number of DO Values	DO Con	centratio	on (mg/L) mean	Percent DO Values Above Standard
05/07/01 - 05/13/01	168	3.3	5.0	4.3	82
05/14/01 - 05/20/01	168	3.1	5.0	4.0	43
05/21/01 - 05/27/01	168	2.9	5.9	4.6	80
05/28/01 - 06/03/01	168	1.8	6.5	5.2	89
06/04/01 - 06/10/01	168	3.7	6.0	4.8	92
06/11/01 - 06/17/01	168	1.5	5.1	3.2	18
06/18/01 - 06/24/01	168	2.8	5.0	4.0	53
06/25/01 - 07/01/01	168	3.1	5.7	4.6	83
07/02/01 - 07/08/01	168	3.6	5.6	4.6	95
07/09/01 - 07/15/01	168	3.5	5.4	4.4	80
07/16/01 - 07/22/01	168	3.1	5.4	4.3	67
07/23/01 - 07/29/01	168	1.0	4.8	3.4	31
07/30/01 - 08/05/01	168	0.4	4.9	2.8	34
08/06/01 - 08/12/01	168	0.8	7.2	3.9	49
08/13/01 - 08/19/01	168	3.7	7.1	5.1	77
08/20/01 - 08/26/01	168	0.7	5.2	4.2	81
08/27/01 - 09/02/01	168	1.6	5.2	3.5	35
09/03/01 - 09/09/01	168	3.8	6.2	5.2	96
09/10/01 - 09/16/01	168	4.0	5.9	4.8	100
09/17/01 - 09/23/01	168	0.4	5.2	3.7	51
09/24/01 - 09/30/01	168	1.4	6.8	4.3	61
10/01/01 - 10/07/01	168	1.3	6.4	5.2	85
10/08/01 - 10/14/01	168	2.2	6.2	5.0	80
10/15/01 - 10/21/01	144	2.1	6.4	4.7	69
10/22/01 - 10/28/01	168	0.0	6.9	2.6	27
10/29/01 - 11/04/01	167	1.1	6.2	5.0	88
11/05/01 - 11/11/01	168	4.1	5.7	4.8	100
11/12/01 - 11/18/01	166	3.5	5.8	4.7	89
1/19/01 - 11/25/01	168	4.2	5.6	4.9	100
1/26/01 - 12/02/01	168	4.5	6.4	5.4	100
12/03/01 - 12/09/01	168	4.3	6.4	5.3	100
12/10/01 - 12/16/01	168	4.5	6.4	5.4	100
12/17/01 - 12/23/01	168	5.3	6.9	6.1	100
12/24/01 - 12/30/01	168	6.3	7.9	7.2	100
12/31/01 - 01/06/02	168	7.1	8.3	7.7	100

TABLE AI-19

WEEKLY DO SUMMARY STATISTICS AT RIVER MILE 302.6 ON THE CHICAGO SANITARY & SHIP CANAL DURING AUGUST 2000 THROUGH DECEMBER 2001

	37l £	DO 000		((T.)	Percent DO Values
Monitoring Dates	Number of DO Values	min	centratio max	mean	Above Standard
07/31/00 - 08/06/00	168	3.3	5.2	4.2	64
08/07/00 - 08/13/00	168	3.8	5.1	4.5	92
08/07/00 = 08/13/00 $08/14/00 = 08/20/00$	168	3.3	5.0	4.4	84
08/14/00 - 08/20/00 $08/21/00 - 08/27/00$	168	3.8	5.6	4.8	96
08/21/00 - 08/27/00 $08/28/00 - 09/03/00$	168	4.0	6.6	5.6	99
08/28/00 - 09/03/00	168	4.9	6.7	5.5	100
	168	1.9	5.5	3.9	46
09/11/00 - 09/17/00			6.2	5.4	100
09/18/00 - 09/24/00	166	4.7		6.4	100
09/25/00 - 10/01/00	168	5.7	6.8		98
10/02/00 - 10/08/00	168	4.0	6.8	5.9	
10/09/00 - 10/15/00	168	6.0	7.1	6.5	100
10/16/00 - 10/22/00	168	5.4	6.5	5.9	100
10/23/00 - 10/29/00	168	4.0	5.7	5.1	99
10/30/00 - 11/05/00	168	4.6	6.1	5.3	100
11/06/00 - 11/12/00	168	5.3	7.2	6.1	100
L1/13/00 - 11/19/00	167	6.1	7.8	7.0	100
L1/20/00 - 11/26/00	167	5.6	8.3	7.1	100
L1/27/00 - 12/03/00	138	4.3	7.0	6.3	100
L2/04/00 - 12/10/00	59	6.7	7.6	7.2	100
12/11/00 - 12/17/00	85	7.3	8.5	8.1	100
12/18/00 - 12/24/00	168	7.5	8.9	8.3	100
12/25/00 - 12/31/00	168	7.8	8.8	8.4	100
01/01/01 - 01/07/01	168	5.7	8.7	7.8	100
01/08/01 - 01/14/01	168	7.1	8.6	8.0	100
01/15/01 - 01/21/01	167	7.0	8.4	7.5	100
01/22/01 - 01/28/01	168	7.2	8.3	7.8	100
01/29/01 - 02/04/01	168	6.9	8.3	7.5	100
02/05/01 - 02/11/01	167	6.6	8.4	7.6	100
02/12/01 - 02/18/01	168	6.4	9.1	7.4	100
$\frac{02}{12} = \frac{02}{10} = 02$	167	6.6	8.2	7.3	100
02/26/01 - 03/04/01	168	7.7	8.5	8.1	100
3/05/01 - 03/04/01	168	7.4	8.9	8.1	100
	168	6.3	8.0	7.2	100
3/12/01 - 03/18/01		5.9	8.4	7.2	100
3/19/01 - 03/25/01	167		8.2	7.1	100
3/26/01 - 04/01/01	168	6.0			
04/02/01 - 04/08/01	167	5.1	7.5	6.5	100
4/09/01 - 04/15/01	167	4.5	6.5	5.4	100
4/16/01 - 04/22/01	168	5.6	7.3	6.1	100
4/23/01 - 04/29/01	168	4.4	6.4	5.5	100
4/30/01 - 05/06/01	168	3.6	5.1	4.4	88

TABLE AI-19 (Continued)

WEEKLY DO SUMMARY STATISTICS AT RIVER MILE 302.6 ON THE CHICAGO SANITARY & SHIP CANAL DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Dates	Number of DO Values	DO Cor	centratio	on (mg/L) mean	Percent DO Values Above Standard
Dates	50 (4143)				
05/07/01 - 05/13/01	168	3.3	4.9	4.3	82
05/14/01 - 05/20/01	168	3.3	4.6	4.0	51
05/21/01 - 05/27/01	168	3.0	5.7	4.2	66
05/28/01 - 06/03/01	168	4.4	13.6	6.6	100
06/04/01 - 06/10/01	168	4.6	7.7	5.8	100
06/11/01 - 06/17/01	168	2.6	6.0	4.1	49
06/18/01 - 06/24/01	168	3.3	4.9	4.3	72
06/25/01 - 07/01/01	168	3.7	5.7	4.6	91
07/02/01 - 07/08/01	168	4.4	6.6	5.4	100
07/09/01 - 07/15/01	168	3.5	6.7	4.6	86
07/16/01 - 07/22/01	168	3.2	7.9	6.0	98
07/23/01 - 07/29/01	168	1.6	5.0	3.4	27
07/30/01 - 08/05/01	168	0.3	4.5	2.7	26
08/06/01 - 08/12/01	168	1.8	6.7	4.1	55
08/13/01 - 08/19/01	167	2.5	5.7	4.8	. 83
08/20/01 - 08/26/01	168	1.2	6.1	4.7	89
08/27/01 - 09/02/01	168	2.2	5.2	3.6	26
09/03/01 - 09/09/01	167	4.1	6.8	5.4	100
09/10/01 - 09/16/01	168	4.6	5.6	5.0	100
09/17/01 - 09/23/01	168	1.1	5.5	4.2	61
09/24/01 - 09/30/01	168	2.5	6.4	4.8	83
0/01/01 - 10/07/01	168	0.0	6.4	5.4	90
10/08/01 - 10/14/01	168	0.5	6.4	5.2	86
10/15/01 - 10/21/01	144	0.4	6.5	3.8	58
0/22/01 - 10/28/01	168	1.9	6.3	4.9	80
0/29/01 - 11/04/01	168	5.4	6.8	6.2	100
1/05/01 - 11/11/01	168	4.3	5.8	4.9	100
1/12/01 - 11/18/01	168	4.3	5.9	5.1	100
1/19/01 - 11/25/01	168	4.2	5.9	5.2	100
1/26/01 - 12/02/01	168	4.5	6.3	5.6	100
2/03/01 - 12/09/01	168	4.7	6.6	5.7	100
2/10/01 - 12/16/01	168	4.9	6.1	5.5	100
12/17/01 - 12/23/01	168	5.3	7.0	6.2	100
12/24/01 - 12/30/01	168	6.6	8.4	7.6	100
12/31/01 - 01/06/02	168	7.2	8.7	7.9	100

TABLE AI-20

WEEKLY DO SUMMARY STATISTICS AT ROMEOVILLE ROAD ON THE CHICAGO SANITARY & SHIP CANAL DURING AUGUST 2000 THROUGH DECEMBER 2001

					Percent
Monitoring	Number of		centratio		DO Values
Dates	DO Values	min	max	mean	Above Standard
07/31/00 - 08/06/00	168	2.9	4.4	3.7	8
08/07/00 - 08/13/00	168	3.4	4.9	4.1	56
08/14/00 - 08/20/00	168	3.9	5.3	4.5	93
08/21/00 - 08/27/00	168	4.6	8.9	5.5	100
08/28/00 - 09/03/00	168	4.4	5.5	4.9	100
09/04/00 - 09/10/00	168	4.9	5.8	5.3	100
09/11/00 - 09/17/00	167	1.2	5.3	3.4	37
09/18/00 - 09/24/00	168	4.4	5.5	4.8	100
09/25/00 - 10/01/00	167	5.3	6.9	6.2	100
10/02/00 - 10/08/00	168	4.5	7.0	6.1	100
10/09/00 - 10/15/00	163	6.0	6.8	6.4	100
10/16/00 - 10/22/00	76	5.6	7.8	6.0	100
10/23/00 - 10/29/00	87	4.4	5.2	4.8	100
10/30/00 - 11/05/00	167	4.2	5.4	4.9	100
11/06/00 - 11/12/00	168	5.3	6.9	6.1	100
11/13/00 - 11/19/00	168	5.6	7.3	6.8	100
11/20/00 - 11/26/00	168	6.0	8.1	7.1	100
11/27/00 - 12/03/00	167	5.9	7.8	7.0	100
12/04/00 - 12/10/00	168	7.1	8.3	7.8	100
12/11/00 - 12/17/00	168	7.2	8.1	7.8	100
12/18/00 - 12/24/00	168	7.5	10.4	8.9	100
12/25/00 - 12/31/00	168	8.7	10.0	9.5	100
01/01/01 - 01/07/01	168	5.8	9.0	7.5	100
01/08/01 - 01/14/01	168	6.7	8.1	7.2	100
01/15/01 - 01/21/01	168	6.3	7.7	6.9	100
01/22/01 - 01/28/01	168	6.4	8.9	7.5	100
01/29/01 - 02/04/01	168	7.8	9.2	8.4	100
02/05/01 - 02/11/01	168	6.7	8.7	7.5	100
02/12/01 - 02/18/01	168	7.1	8.7	7.9	100
02/19/01 - 02/25/01	168	7.7	8.8	8.2	100
02/26/01 - 03/04/01	167	6.1	9.1	7.5	100
03/05/01 - 03/11/01	168	6.1	7.6	6.8	100
03/12/01 - 03/18/01	168	6.1	6.9	6.6	100
03/19/01 - 03/25/01	168	5.9	7.1	6.7	100
03/26/01 - 04/01/01	168	6.1	7.7	6.9	100
04/02/01 - 04/08/01	167	4.8	6.7	6.0	100
04/09/01 - 04/15/01	168	4.2	5.6	4.9	100
04/16/01 - 04/22/01	168	5.1	6.2	5.7	100
04/23/01 - 04/29/01	168	4.1	6.1	5.2	100

TABLE AI-20 (Continued)

WEEKLY DO SUMMARY STATISTICS AT ROMEOVILLE ROAD ON THE CHICAGO SANITARY & SHIP CANAL DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Dates	Number of DO Values	DO Cor	ncentration max	on (mg/L) mean	Percent DO Values Above Standard
		····			· · · · · · · · · · · · · · · · · · ·
05/07/01 - 05/13/01	168	3.3	4.7	4.2	78
05/14/01 - 05/20/01	168	3.1	4.7	3.9	44
05/21/01 - 05/27/01	167	3.1	5.2	3.8	23
05/28/01 - 06/03/01	168	4.0	5.7	4.8	99
06/04/01 - 06/10/01	168	4.4	5.4	4.9	100
06/11/01 - 06/17/01	168	2.2	5.5	3.7	38
06/18/01 - 06/24/01	168	3.2	4.4	3.7	26
06/25/01 - 07/01/01	168	3.2	5.1	4.0	52
07/02/01 - 07/08/01	168	3.7	5.9	4.6	89
07/09/01 - 07/15/01	168	3.0	4.8	3.8	25
07/16/01 - 07/22/01	168	3.8	6.2	4.9	99
07/23/01 - 07/29/01	168	0.8	3.9	2.5	. 0
07/30/01 - 08/05/01	168	0.7	4.4	2.7	7
08/06/01 - 08/12/01	168	2.1	6.0	3.8	38
08/13/01 - 08/19/01	168	3.3	5.1	4.2	60
08/20/01 - 08/26/01	168	0.8	5.1	4.0	46
08/27/01 - 09/02/01	167	0.8	4.9	3.1	10
09/03/01 - 09/09/01	168	3.0	5.6	4.7	86
09/10/01 - 09/16/01	168	3.8	4.9	4.3	96
09/17/01 - 09/23/01	168	1.3	5.3	3.8	49
09/24/01 - 09/30/01	61	2.9	4.8	3.9	52
10/01/01 - 10/07/01			NO DATA		
10/08/01 - 10/14/01	109	3.3	6.3	5.2	85
10/15/01 - 10/21/01	168	2.4	6.0	4.6	68
10/22/01 - 10/28/01	168	1.8	6.1	4.4	74
10/29/01 - 11/04/01	168	5.0	6.3	5.8	100
11/05/01 - 11/11/01	168	4.5	5.7	4.9	100
11/12/01 - 11/18/01	168	3.9	5.7	4.9	98
11/19/01 - 11/25/01	168	4.0	5.8	4.9	99
11/26/01 - 12/02/01	168	5.1	6.0	5.5	100
12/03/01 - 12/09/01	168	4.9	6.4	5.6	100
12/10/01 - 12/16/01	168	4.8	5.9	5.2	100
12/17/01 - 12/23/01	168	5.2	6.9	6.1	100
12/24/01 - 12/30/01	168	6.5	8.5	7.6	100
12/31/01 - 01/06/02	168	7.8	9.1	8.4	100

TABLE AI-21

WEEKLY DO SUMMARY STATISTICS

AT LOCKPORT POWERHOUSE ON THE CHICAGO SANITARY & SHIP CANAL DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring	Number of	Percent DO Values			
Dates	DO Values	min	max	mean	Above Standard
07/31/00 - 08/06/00	168	2.8	4.2	3.7	10
08/07/00 - 08/13/00	136	3.1	4.2	3.6	10
08/14/00 - 08/20/00	151	2.7	4.5	3.9	53
08/21/00 - 08/27/00	167	3.4	5.4	4.3	59
08/28/00 - 09/03/00	168	4.3	5.3	4.7	100
09/04/00 - 09/10/00	84	4.0	5.0	4.6	98
09/11/00 - 09/17/00	85	2.0	4.6	3.4	25
09/18/00 - 09/24/00	168	3.9	5.3	4.8	98
09/25/00 - 10/01/00	168	5.4	6.2	5.8	100
10/02/00 - 10/08/00	168	3.6	9.8	5.3	93
10/09/00 - 10/15/00	167	5.3	6.9	6.1	100
0/16/00 - 10/22/00	168	4.6	6.4	5.7	100
0/23/00 - 10/29/00	168	4.5	5.9	5.3	100
10/30/00 - 11/05/00	168	4.0	5.2	4.7	99
1/06/00 - 11/12/00	166	4.1	6.8	5.8	100
1/13/00 - 11/19/00	168	5.5	7.4	6.7	100
1/20/00 - 11/26/00	168	6.8	8.4	7.7	100
1/27/00 - 12/03/00	168	6.3	7.9	7.2	100
12/04/00 - 12/10/00	168	6.6	7.7	7.3	100
2/11/00 - 12/17/00	168	6.9	8.6	7.7	100
12/18/00 - 12/24/00	168	7.9	9.0	8.4	100
12/25/00 - 12/31/00	168	7.7	8.7	8.3	100
01/01/01 - 01/07/01	168	5.2	8.0	7.1	100
01/08/01 - 01/04/01	168	7.2	7.9	7.5	100
01/15/01 - 01/14/01	167	6.4	7.7	7.0	100
01/22/01 - 01/28/01	168	6.4	7.7	7.1	100
01/29/01 - 01/28/01	168	7.3	8.0	7.7	100
02/05/01 - 02/04/01 02/05/01 - 02/11/01	166	7.1	8.7	7.7	100
02/03/01 - 02/11/01 02/12/01 - 02/18/01	168	7.4	8.8	8.1	100
02/12/01 - 02/13/01 02/19/01 - 02/25/01	168	8.0	9.4	8.5	100
02/19/01 - 02/23/01 02/26/01 - 03/04/01	168	7.6	9.4	8.4	100
03/05/01 - 03/04/01 $03/05/01 - 03/11/01$	168	6.7	7.7	7.4	100
	168	5.8	6.9	6.4	100
03/12/01 - 03/18/01	167	5.5	7.0	6.4	100
03/19/01 - 03/25/01	168	6.0	8.5	6.7	100
03/26/01 - 04/01/01	167	5.2	6.4	5.7	100
04/02/01 - 04/08/01		3.8	5.9	4.6	96
04/09/01 - 04/15/01	168	3.8 4.8	6.3	5.6	100
04/16/01 - 04/22/01	168		5.8	5.1	99
04/23/01 - 04/29/01	167	4.0 3.6	J.0	4.2	81

TABLE AI-21 (Continued)

WEEKLY DO SUMMARY STATISTICS AT LOCKPORT POWERHOUSE ON THE CHICAGO SANITARY & SHIP CANAL DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Dates	Number of DO Values	DO Com	ncentration max	(mg/L) mean	Percent DO Values Above Standard
05/07/01 - 05/13/01	168	3.2	4.7	3.8	23
05/14/01 - 05/20/01	168	1.9	4.1	3.1	1
05/21/01 - 05/27/01	168	2.7	4.8	3.4	14
05/28/01 - 06/03/01	168	3.8	5.6	4.7	97
06/04/01 - 06/10/01	168	4.3	5.7	5.0	100
06/11/01 - 06/17/01	165	2.6	5.6	4.0	48
06/18/01 - 06/24/01	168	2.4	4.3	3.6	7
06/25/01 - 07/01/01	166	3.1	5.3	3.9	41
07/02/01 - 07/08/01	168	3.9	7.5	4.9	99
07/09/01 - 07/15/01	168	3.0	6.3	4.5	57
07/16/01 - 07/22/01	84	5.1	7.6	5.7	100
07/23/01 - 07/29/01	84	2.0	3.4	2.5	0
07/30/01 - 08/05/01	168	0.3	4.2	2.3	2
08/06/01 - 08/12/01	168	1.1	5.8	3.0	25
08/13/01 - 08/19/01	168	2.5	5.2	3.8	28
08/20/01 - 08/26/01	168	3.2	4.8	4.0	47
08/27/01 - 09/02/01	83	1.2	4.0	2.8	0
09/03/01 - 09/09/01	86	3.6	6.1	4.9	92
09/10/01 - 09/16/01	168	3.8	5.3	4.4	94
09/17/01 - 09/23/01	168	1.6	5.3	3.9	56
09/24/01 - 09/30/01	168	2.9	6.0	4.5	71
0/01/01 - 10/07/01	168	3.8	6.6	5.9	98
.0/08/01 - 10/14/01	59	3.9	6.4	5.5	95
0/15/01 - 10/21/01	33	3.5	NO DATA		
0/22/01 - 10/28/01	109	1.7	5.4	4.0	60
0/22/01 - 11/04/01	168	4.5	7.5	5.8	100
1/05/01 - 11/11/01	168	4.6	5.8	5.2	100
1/12/01 - 11/18/01	168	4.1	5.5	5.0	100
1/19/01 - 11/25/01	168	3.7	5.7	4.8	95
1/26/01 - 12/02/01	168	3.6	6.0	5.4	99
2/03/01 - 12/09/01	168	4.7	6.2	5.4	100
2/10/01 - 12/16/01	168	4.6	5.5	5.1	100
2/17/01 - 12/23/01	168	5.0	6.6	5.8	100
2/24/01 - 12/30/01	168	6.3	8.1	7.2	100
2/31/01 - 01/06/02	168	7.5	8.7	8.1	100

TABLE AI-22

WEEKLY DO SUMMARY STATISTICS AT ROUTE 83 ON THE CALUMET-SAG CHANNEL DURING AUGUST 2000 THROUGH DECEMBER 2001

Dates DO Values min max mean Above Standar						Percent
07/31/00 - 08/06/00	Monitoring		DO Cor	ncentratio	n (mg/L)	DO Values
08/07/00 - 08/13/00	Dates	DO Values	min	max	mean	Above Standard
08/07/00 - 08/13/00	07/31/00 - 08/06/00	168	3.1	5.4	4.3	100
08/14/00 - 08/20/00				7.1	5.3	100
08/21/00 - 08/27/00						100
09/04/00 - 09/10/00 168 4.4 5.8 5.1 100 09/11/00 - 09/17/00 168 1.4 5.4 3.8 71 09/18/00 - 09/24/00 168 4.4 5.7 5.0 100 09/25/00 - 10/01/00 168 5.2 6.4 5.8 100 10/02/00 - 10/15/00 168 5.2 6.4 5.8 100 10/02/00 - 10/15/00 168 6.2 7.1 6.6 100 10/09/00 - 10/15/00 168 6.2 7.1 6.6 100 10/16/00 - 10/22/00 167 5.7 7.0 6.4 100 10/23/00 - 10/29/00 168 4.6 6.6 5.6 100 10/30/00 - 11/05/00 168 4.6 6.6 5.6 100 11/03/00 - 11/12/00 168 4.5 6.9 5.9 100 11/13/00 - 11/12/00 168 4.3 7.9 6.5 100 11/20/00 - 11/26/00 168 7.9 10.5 9.5 100 11/27/00 - 12/03/00 167 7.2 8.7 7.8 100 11/27/00 - 12/10/00 168 7.2 8.6 8.1 100 12/12/100 - 12/17/00 168 6.8 7.9 7.2 100 12/18/00 - 12/17/00 168 7.3 7.8 7.5 100 12/25/00 - 12/31/00 168 7.3 7.8 7.5 100 12/18/00 - 12/24/00 168 7.3 7.8 7.5 100 11/20/00 - 10/07/01 168 6.4 7.5 7.1 100 01/01/01 - 01/07/01 168 6.5 7.1 6.8 100 01/08/01 - 01/14/01 168 6.5 7.1 6.8 100 01/02/01 - 01/28/01 168 7.9 9.0 8.3 100 01/22/01 - 01/28/01 168 7.9 9.0 8.3 100 01/22/01 - 02/24/01 168 7.9 9.0 8.3 100 01/22/01 - 02/24/01 168 7.9 9.0 8.3 100 01/22/01 - 02/21/01 168 6.3 10.0 8.5 100 02/12/01 - 02/21/01 168 7.9 9.0 8.3 100 02/12/01 - 02/21/01 168 7.9 9.0 8.3 100 02/12/01 - 02/21/01 168 7.9 9.0 8.3 100 02/12/01 - 02/21/01 168 7.9 9.0 8.3 100 02/12/01 - 02/21/01 168 7.9 9.0 8.3 100 02/12/01 - 02/21/01 168 7.9 9.0 8.3 100 02/12/01 - 02/21/01 168 7.9 9.0 8.3 100 02/12/01 - 02/21/01 168 7.9 9.0 8.3 100 02/12/01 - 02/21/01 168 7.9 9.0 8.3 100 02/12/01 - 02/21/01 168 7.9 9.8 9.4 100 03/05/01 - 03/11/01 168 7.9 10.1 9.0 100 03/05/01 - 03/11/01 168 7.4 8.6 8.0 10.3 9.3 100 02/12/01 - 03/25/01 168 7.4 8.6 8.0 10.3 9.3 100 03/12/01 - 03/25/01 168 7.4 8.6 8.0 10.3 9.3 100 03/12/01 - 03/25/01 168 7.4 8.6 8.0 10.0 03/12/01 - 03/25/01 168 7.4 8.6 8.0 10.0 03/12/01 - 03/25/01 168 7.4 8.6 8.0 10.0 03/12/01 - 03/25/01 168 7.4 8.6 8.0 10.0 03/12/01 - 03/25/01 168 7.4 8.6 8.0 10.0 03/12/01 - 03/25/01 168 7.4 8.6 8.0 100 03/12/01 - 04/02/01 168 5.5 8.1 6.8 100 04/02/01 - 04/02/01 168 5.5 8.1 6.8 100			4.2	7.6	5.5	100
09/04/00 - 09/10/00	08/28/00 - 09/03/00	168	4.1	5.6	4.9	100
09/11/00 - 09/17/00			4.4	5.8	5.1	100
09/18/00 - 09/24/00		168	1.4	5.4	3.8	71
09/25/00 - 10/01/00			4.4	5.7	5.0	100
10/02/00 - 10/08/00		168	5.2	6.4	5.8	100
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		168	5.0	6.7	5.8	100
10/23/00 - 10/29/00		168	6.2	7.1	6.6	100
10/23/00 - 10/29/00		167	5.7	7.0	6.4	100
11/06/00 - 11/12/00			4.6	6.6	5.6	100
11/06/00 - 11/12/00	10/30/00 - 11/05/00	167	4.8	6.1	5.4	100
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			4.5	6.9	5.9	100
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		168	4.3	7.9	6.5	100
11/27/00 - 12/03/00			7.9	10.5	9.5	100
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			7.2	8.7	7.8	100
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					8.1	100
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					7.2	100
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					7.5	100
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			6.4			100
01/08/01 - 01/14/01						100
01/15/01 - 01/21/01						
01/22/01 - 01/28/01						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						
02/05/01 - 02/11/01						
02/12/01 - 02/18/01						
02/19/01 - 02/25/01						
02/26/01 - 03/04/01						
03/05/01 - 03/11/01						
03/12/01 - 03/18/01						
03/19/01 - 03/25/01						
03/26/01 - 04/01/01						
04/02/01 - 04/08/01						
04/09/01 - 04/15/01 168 4.8 8.6 6.3 100 04/16/01 - 04/22/01 168 5.5 8.1 6.8 100 04/23/01 - 04/29/01 168 5.0 6.1 5.5 100						
04/16/01 - 04/22/01 168 5.5 8.1 6.8 100 04/23/01 - 04/29/01 168 5.0 6.1 5.5 100						
04/23/01 - 04/29/01 168 5.0 6.1 5.5 100						
	04/23/01 - 04/29/01 04/30/01 - 05/06/01	168	4.6	6.1	5.3	100

TABLE AI-22 (Continued)

WEEKLY DO SUMMARY STATISTICS AT ROUTE 83 ON THE CALUMET-SAG CHANNEL DURING AUGUST 2000 THROUGH DECEMBER 2001

	Noveles es a E	70 G-		//T \	Percent
Monitoring Dates	Number of DO Values	min	ncentration max	mean	DO Values Above Standard
Dates	DO VAIUES	HLL11	шах		Above Scandard
05/07/01 - 05/13/01	168	3.0	6.9	4.6	99
05/14/01 - 05/20/01	168	3.2	5.2	4.1	100
05/21/01 - 05/27/01	168	3.0	6.0	4.4	100
05/28/01 - 06/03/01	168	4.0	5.9	5.3	100
06/04/01 - 06/10/01	168	4.3	6.6	5.5	100
06/11/01 - 06/17/01	168	2.0	6.5	4.5	78
06/18/01 - 06/24/01	168	2.5	5.2	4.0	92
06/25/01 - 07/01/01	168	3.8	10.8	5.4	100
07/02/01 - 07/08/01	168	3.1	10.9	6.8	100
07/09/01 - 07/15/01	108	2.5	8.0	4.5	97
07/16/01 - 07/22/01			NO DATA		
07/23/01 - 07/29/01	84	1.9	4.2	3.1	55
07/30/01 - 08/05/01	168	1.4	6.0	3.7	68
08/06/01 - 08/12/01	168	2.8	11.0	5.5	95
08/13/01 - 08/19/01	168	3.4	6.9	4.6	100
08/20/01 - 08/26/01	168	2.5	5.6	4.4	95
08/27/01 - 09/02/01	168	2.3	7.9	5.2	85
09/03/01 - 09/09/01	168	5.7	10.4	7.6	100
09/10/01 - 09/16/01	168	4.7	7.6	5.7	100
09/17/01 - 09/23/01	168	4.7	6.1	5.4	100
09/24/01 - 09/30/01	168	5.2	7.2	6.1	100
10/01/01 - 10/07/01	168	5.3	7.5	6.5	100
10/08/01 - 10/14/01	168	5.3	7.2	6.3	100
10/15/01 - 10/21/01	144	4.2	6.4	5.7	100
10/22/01 - 10/28/01	168	5.6	7.8	6.7	100
10/29/01 - 11/04/01	168	6.5	7.6	7.2	100
11/05/01 - 11/11/01	168	4.6	7.1	6.0	100
11/12/01 - 11/18/01	167	4.5	6.7	6.2	100
11/19/01 - 11/25/01	168	5.5	7.5	6.8	100
11/19/01 - 11/23/01 11/26/01 - 12/02/01	168	6.3	7.5	6.8	100
11/26/01 - 12/02/01 $12/03/01 - 12/09/01$	168	5.8	7.1	6.5	100
12/03/01 - 12/03/01 $12/10/01 - 12/16/01$	168	5.7	7.0	6.4	100
12/10/01 - 12/16/01 $12/17/01 - 12/23/01$	168	6.3	8.3	7.2	100
12/17/01 - 12/23/01 $12/24/01 - 12/30/01$	168	8.2	10.1	9.3	100
12/34/01 - 12/30/01 $12/31/01 - 01/06/02$	168	9.7	10.2	9.9	100
12/31/01 - 01/06/02	100	2.1	10.2	J . J	

TABLE AI-23

WEEKLY DO SUMMARY STATISTICS AT JEFFERSON STREET ON THE DES PLAINES RIVER DURING AUGUST 2000 THROUGH DECEMBER 2001

Monitoring Dates	Number of DO Values	DO Concentration (mg/			Percent (/L) DO Values	
		min	max	mean	Above Standard	
07/31/00 - 08/06/00	168	4.0	7.4	4.9	100	
08/07/00 - 08/13/00	168	3.6	7.5	5.1	90	
08/14/00 - 08/20/00	168	3.8	6.5	5.1	99	
08/21/00 - 08/27/00	168	3.8	6.2	5.1	98	
08/28/00 - 09/03/00	168	4.3	6.8	5.3	100	
09/04/00 - 09/10/00	168	4.5	7.4	5.6	100	
09/11/00 - 09/17/00	168	3.6	7.2	5.8	99	
09/18/00 - 09/24/00	168	4.6	7.0	5.5	100	
09/25/00 - 10/01/00	167	5.4	8.1	6.4	100	
10/02/00 - 10/08/00	168	4.5	8.5	6.5	100	
10/09/00 - 10/15/00	167	5.9	8.2	7.2	100	
10/16/00 - 10/22/00	168	5.5	8.8	6.4	100	
10/23/00 - 10/29/00	168	5.4	7.2	5.9	100	
10/30/00 - 11/05/00	168	5.2	7.9	6.2	100	
11/06/00 - 11/12/00	168	5.8	8.6	7.3	100	
11/13/00 - 11/19/00	168	7.0	11.2	9.0	100	
11/20/00 - 11/26/00	168	8.8	10.8	9.7	100	
11/20/00 - 11/20/00 $11/27/00 - 12/03/00$	168	7.3	10.3	8.7	100	
12/04/00 - 12/03/00 $12/04/00 - 12/10/00$	168	8.3	11.2	9.6	100	
12/11/00 - 12/17/00	168	8.2	10.9	9.6	100	
12/11/00 - 12/11/00 $12/18/00 - 12/24/00$	168	8.7	11.5	10.1	100	
12/18/00 - 12/24/00 $12/25/00 - 12/31/00$	168	8.8	10.5	9.6	100	
01/01/01 - 01/07/01	168	6.1	9.5	8.2	100	
		7.3	10.2	8.6	100	
01/08/01 - 01/14/01	168			9.3	100	
01/15/01 - 01/21/01	168	8.2	10.4			
01/22/01 - 01/28/01	167	8.6	11.6	9.7	100	
01/29/01 - 02/04/01	168	8.8	10.8	9.7	100	
02/05/01 - 02/11/01	168	8.4	11.7	10.4	100	
02/12/01 - 02/18/01	168	8.7	11.1	9.9	100	
02/19/01 - 02/25/01	168	8.7	11.5	10.4	100	
02/26/01 - 03/04/01	168	8.7	11.4	9.8	100	
03/05/01 - 03/11/01	168	8.5	11.1	9.6	100	
03/12/01 - 03/18/01	168	6.9	9.8	8.2	100	
03/19/01 - 03/25/01	168	6.8	12.3	8.3	100	
03/26/01 - 04/01/01	168	7.5	12.5	9.6	100	
04/02/01 - 04/08/01	167	6.3	11.3	8.1	100	
04/09/01 - 04/15/01	168	4.9	8.4	6.7	100	
04/16/01 - 04/22/01	168	6.0	9.9	7.7	100	
04/23/01 - 04/29/01	168	5.6	8.5	6.9	100	
04/30/01 - 05/06/01	168	4.6	8.3	6.4	100	

TABLE AI-23 (Continued)

WEEKLY DO SUMMARY STATISTICS AT JEFFERSON STREET ON THE DES PLAINES RIVER DURING AUGUST 2000 THROUGH DECEMBER 2001

					Percent
Monitoring Dates	Number of DO Values		ncentratio		DO Values Above Standard
		min	max	mean	
05/07/01 - 05/13/01	168	4 3	7 4	e e	100
05/07/01 - 05/13/01 $05/14/01 - 05/20/01$	168	4.3 3.7	7.4 6.9	5.5 5.0	100 95
05/14/01 - 05/20/01					
· · · · · · · · · · · · · · · · · · ·	167	3.9 5.1	8.2 7.7	5.2	98
05/28/01 - 06/03/01	168			6.4	100
06/04/01 - 06/10/01	168	5.3	8.4	6.6	100
06/11/01 - 06/17/01	168	4.0	7.9	5.7	100
06/18/01 - 06/24/01	168	3.5	6.7	5.0	96
06/25/01 - 07/01/01	168	4.0	9.5	5.7	100
07/02/01 - 07/08/01	168	3.8	7.3	5.4	98
07/09/01 - 07/15/01	168	3.3	7.2	5.2	79
07/16/01 - 07/22/01	168	3.8	7.4	5.9	98
07/23/01 - 07/29/01	168	3.4	6.6	4.9	84
07/30/01 - 08/05/01	168	1.3	6.5	4.4	63
08/06/01 - 08/12/01	168	1.3	7.1	4.5	67
08/13/01 - 08/19/01	168	3.6	6.3	4.9	88
08/20/01 - 08/26/01	168	3.9	7.2	5.6	99
08/27/01 - 09/02/01	83	3.5	5.9	4.9	95
09/03/01 - 09/09/01	85	4.9	7.5	6.3	100
09/10/01 - 09/16/01	168	4.2	6.6	5.4	100
09/17/01 - 09/23/01	168	4.1	8.0	6.2	100
9/24/01 - 09/30/01	168	5.2	8.1	6.6	100
0/01/01 - 10/07/01	168	5.8	8.8	7.0	100
.0/08/01 - 10/14/01	168	5.3	8.9	7.0	100
.0/15/01 - 10/21/01	168	5.9	8.8	7.1	100
.0/22/01 - 10/28/01	168	6.2	8.8	7.3	100
.0/29/01 - 11/04/01	168	6.8	9.3	7.7	100
1/05/01 - 11/11/01	168	6.0	8.1	7.1	100
1/12/01 - 11/18/01	168	5.9	9.8	7.1	100
1/19/01 - 11/25/01	168	5.6	8.2	6.9	100
1/26/01 - 12/02/01	168	6.4	8.5	7.3	100
2/03/01 - 12/09/01	60	6.2	9.0	7.7	100
2/10/01 - 12/16/01	109	6.1	7.9	7.1	100
2/17/01 - 12/23/01	168	6.4	9.6	7.7	100
2/24/01 - 12/30/01	168	7.9	10.4	9.1	100
2/31/01 - 01/06/02	168	9.0	10.6	9.8	100