ILLINOIS POLLUTION CONTROL BOARD
June 2, 2011

IN THE MATTER OF:	)	
	)	
WATER QUALITY STANDARDS AND	)	R08-9 (Subdocket A)
EFFLUENT LIMITATIONS FOR THE	)	(Rulemaking - Water)
CHICAGO AREA WATERWAY SYSTEM	)	
AND LOWER DES PLAINES RIVER:	)	
PROPOSED AMENDMENTS TO 35 ILL.	)	
ADM. CODE 301, 302, 303, and 304	)	

Proposed Rule. Proposed Second Notice.

OPINION AND ORDER OF THE BOARD (by G.T. Girard):

RATIONALE FOR PROPOSED SECOND NOTICE

The Board today adopts this proposed second notice opinion and order in R08-9(A). The Board is adopting this proposed second notice to solicit comments from the participants. This action is in response to a motion for stay by the Illinois Environmental Protection Agency (IEPA)

On May 24, 2011, the IEPA filed a motion seeking to stay this rulemaking so that IEPA could amend their rulemaking proposal to respond to a United States Environmental Protection Agency (USEPA) determination filed with the Board on May 16, 2011. On May 31, 2011, Environmental Law & Policy Center, Natural Resources Defense Council, Openlands, Friends of the Chicago River, Prairie Rivers Network and the Illinois Chapter of Sierra Club (Environmental Groups) filed a response agreeing with IEPA's motion for stay. USEPA's determination found that five segments of the Chicago Area Waterways System (CAWS) should be designated for a use that allowed for recreation on and in the water (swimmable). The USEPA indicated that USEPA expected Illinois to proceed expeditiously to adopt new standards. PC 584 at 1.

The IEPA's May 24, 2011 motion asks that the Board stay the proceeding so that IEPA can amend the proposal to reflect the USEPA's determination. IEPA did not specify a date certain for the stay's termination. As is discussed below, the Board reserves ruling on the requested stay; however, the Board is adopting this proposed second notice opinion and order and allowing a brief public comment period in response to the filings on the stay.

The Board will only accept comments on this proposed second notice opinion and order that are filed with the Board by 4:30 PM, Friday June 10, 2011. The Board specifically asks that the IEPA and the Environmental Groups provide guidance on whether or not they wish the Board to act on the request for stay. The Board also specifically requests comments regarding the effect that a stay of Subdocket A would have on Subdocket B. Filings can be made at the Board's Chicago Office or electronically. The mailbox rule does not apply (35 Ill. Adm. Code

101.302(c)). The Board will place adoption of this, or an amended second notice opinion and order on the Board's Agenda for decision at our regularly scheduled meeting on June 16, 2011.

If the IEPA and the Environmental Groups continue to seek a stay, the Board does not expect to be able to meet the deadline for proceeding to adoption of the proposed rule under the Illinois Administrative Procedure Act (IAPA) (5 ILCS 100/5-40 (2008)). Section 5-40(e) provides that "[n]o rule . . . may be adopted, or filed with the Secretary of State, more than one year after the date the first notice period . . . commenced." 5 ILCS 100/5-40(e) (2008). The Board is facing the one-year deadline to adopt the proposal in Subdocket A because the first notice proposal was published in the *Illinois Register* on August 27, 2010. To comply with the IAPA, and allow the required time for JCAR review, the Board seeks to adopt the second notice opinion and order in R08-9(A) at the Board's June 16, 2011 meeting. If the Board fails to meet the deadline imposed by the Section 5-40(e) of the IAPA, the Board will need to submit another proposal to first-notice publication, which would delay adoption of the use designations.

The proposed second notice opinion and order follows below.

SUMMARY OF TODAY'S ACTION [PROPOSED]

After reviewing the record in this proceeding, including the filings received during May, the Board today proceeds with amendment to rules establishing recreational use designations for the CAWS and the Lower Des Plaines River (LDPR). The Board sends the proposal to the Joint Committee on Administrative Rules (JCAR) for second notice pursuant to IAPA (5 ILCS 100/5-40 (2008)). The Board has held 50 days of hearings and received hundreds of public comments in the four subdockets of the R08-9 rulemaking. The positions of the participants on recreational use designations are clear. In response to comments on the Board's first-notice proposal, the Board is adding a recreational use designation, "Primary Contact Recreation", for certain segments of CAWS where full body contact recreation is attainable in the foreseeable future. Primary Contact Recreation is intended to meet the Federal Water Pollution Control Act (Clean Water Act or CWA) (33 U.S.C. § 1313) recreational use goal of recreating on and in the water (swimmable). The Board adopts this use based on comments received during the first notice period that drew the Board's attention to evidence in the record that the CWA recreational use goal is attainable in those segments.

The Board is proposing four categories of recreational use designation for the CAWS and LDPR: Primary Contact Recreation, Incidental Contact Recreation, Non-contact Recreation, and Non Recreation. Proposed designations for specific segments of the CAWS and LDPR are summarized in the paragraphs immediately below and displayed in Table 2 (*see supra* page 29).

Segments of the CAWS proposed for Primary Contact Recreation are: 1) Lower North Shore Channel from North Side Water Reclamation Plant to confluence with North Branch Chicago River; 2) North Branch Chicago River from its confluence with North Shore Channel to its confluence with South Branch Chicago River and Chicago River; 3) Chicago River; 4) South Branch Chicago River; 5) Little Calumet River from its confluence with Calumet River and Grand Calumet River to its confluence with Calumet-Sag Channel; and 6) Calumet-Sag Channel.

Segments of the CAWS and LDPR proposed for Incidental Contact Recreation are: 1) Upper North Shore Channel from Wilmette Pumping Station to North Side Water Reclamation Plant; 2) South Fork of the South Branch Chicago River; 3) Chicago Sanitary and Ship Canal from its confluence with South Branch Chicago River to its confluence with Calumet-Sag Channel; 4) Calumet River from Torrence Avenue to its confluence with Grand Calumet River and Little Calumet River; 5) Lake Calumet and Lake Calumet Connecting Channel; 6) Grand Calumet River; and 7) Lower Des Plaines River from the Brandon Road Lock and Dam to the Interstate 55 bridge.

The final three segments of the CAWS and LDPR that at first notice were designated for Non-contact Recreation or Non-recreation remain the same for second notice. The Non-contact Recreation use designation is proposed for Calumet River from Lake Michigan to Torrence Avenue. The Non-recreation use designation is proposed for: 1) Chicago Sanitary and Ship Canal from its confluence with the Calumet-Sag Channel to its confluence with Des Plaines River; and 2) Lower Des Plaines River from its confluence with Chicago Sanitary and Ship Canal to the Brandon Road Lock and Dam.

The Board will allow for comment on this proposed second notice before deciding whether to proceed to second notice with the rule for review by the JCAR (*see* 5 ILCS 100/5-40 (2008)).

Guide to the Board's Opinion

In this rulemaking, numerous public hearings have been held, hundreds of comments received, and hundreds of exhibits have been filed, all in addition to the Illinois Environmental Protection Agency's (IEPA) original proposal. Therefore, for the convenience of the reader, the Board will use the following short forms to cite to these various sources. The IEPA's statement of reasons is cited as "SR" and attachments to the proposal are cited as "Attach" while hearing exhibits are cited as "Exh.". Hearing transcript are cited by date 01/01/01 and A or P if there are separate morning or afternoon transcripts. Public comments are cited as "PC".

The Board's opinion begins by relating the procedural background (page 4) followed by the statutory background (page 6). The Board next summarizes the first notice opinion and order (page 6). The Board then summarizes the public comments received since the first notice proposal (page 9). Finally, the Board discusses the Board's decision (page 25).

PRELIMINARY MATTERS

On May 17, 2011, the Board received a motion filed by the IEPA asking the Board to stay consideration of the second-notice opinion an order at the Board's May 19, 2011 meeting. R08-9A was on the Board's agenda under pending decisions on the May 19, 2011 meeting, a section of the agenda where no substantive action is taken. Therefore, the IEPA's motion is moot.

On May 18, 2011, the Board received a response in opposition to the motion filed by the Environmental Law & Policy Center, Natural Resources Defense Council, Openlands, Friends of

the Chicago River, Prairie Rivers Network and the Illinois Chapter of Sierra Club (Environmental Groups). As the motion is moot, the Board need not address the motion or response to the motion.

On May 24, 2011, the Board received another motion from the IEPA asking that the Board stay this proceeding to allow the IEPA to develop an amendment to the proposal to address the USEPA's May 16, 2011 determination. On May 31, 2011, the Environmental Groups filed a response to IEPA's motion agreeing that the Board should stay the proceeding. [The Board will insert a sentence or two reflecting the Board's decision on the IEPA stay request.]

PROCEDURAL BACKGROUND

On October 26, 2007, the IEPA filed a proposal under the general rulemaking provisions of Sections 27 and 28 of the Environmental Protection Act (Act) (415 ILCS 5/27, 28 (2008)). Generally, the proposal amended the Board's rules for Secondary Contact and Indigenous Aquatic Life Uses to update the designated uses and criteria necessary to protect the existing uses of the CAWS and the LDPR. On November 1, 2007, the Board accepted the proposal for hearing. On November 15, 2007, the Board granted a motion to hold hearings in Chicago and Joliet that accompanied the proposal.

On June 12, 2008, the Metropolitan Water Reclamation District of Greater Chicago (District) filed a motion to stay the rulemaking proceeding, which was supported by: 1) Midwest Generation L.L.C., 2) Chemical Industry Council of Illinois, and 3) Stepan Company. On June 25, 2008, the Environmental Groups filed a response in opposition to the motion. Joining in the opposition to the motion was Southeast Environmental Task Force (SETF), the People of the State of Illinois (People), and IEPA. On July 21, 2008, the Board denied the motion to stay and directed the parties to proceed with hearings.

On March 18, 2010, the Board granted a motion filed by Citgo Petroleum Corporation and PDV Midwest LLC for an additional hearing on Asian Carp, but delayed that hearing until later in 2010.[1] The Board also granted a motion filed by the Environmental Groups to sever R08-9 into subdockets. The subdockets are: 1) Subdocket A deals with the issues related to recreational use designations, 2) Subdocket B addresses issues relating to disinfection and whether or not disinfection may or may not be necessary to meet those use designations, 3) Subdocket C addresses the issues involving proposed aquatic life uses, and 4) Subdocket D addresses the issues dealing with water quality standards and criteria which are necessary to meet the aquatic life use designations.

The Board held 39 days of hearing as of March 18, 2010, when the docket was divided. As of the date of today's order, a total 50 days of hearing have been held in this proceeding, with 3 more days of hearing scheduled in August 2011. Prior to the creation of subdockets, hearings were held in Chicago: January 28, 2008 through February 1, 2008, June 16, 2008, September 8, 2008 through September 10, 2008, September 23, 2008 through September 25, 2008, February

[1] The Board held a hearing on Asian Carp in Subdocket C on November 4 and 5, 2010.

17 and 18, 2009, March 3 and 4, 2009, April 15, 2009, May 5, 6, and 20, 2009, July 28 and 29, 2009, August 13 and 14, 2009, October 5, 2009, November 9 and 10, 2009 and January 13 and 14, 2010. Hearings were held in Joliet: March 10, 2008 through March 12, 2008, October 27 and 28, 2008 and November 17, 2008. Hearings were held in Des Plaines: April 23 and 24, 2008, and December 2 and 3, 2008.

Not all the testimony received during the initial 39 days of hearing is relevant to Subdocket A. Participants providing testimony relevant to Subdocket A are:

Rob Sulski of IEPA (Exhibit 1)
Richard Lanyon of the District (Exhibit 60)
William J. Stuba of the District (Exhibit 62)
Samuel G. Dennison of the District (Exhibit 65)
Samuel Dorevitch of the District (Exhibit 100)
Adrienne D. Nemura of the District (Exhibit 116)
Thomas Granato of the District
Margaret Frisbee of the Friends of the Chicago River (Exhibit 259)
Thomas J. Bamonte on behalf of the Environmental Groups (Exhibit 284)
Robert S. Elvert of ExxonMobil Oil Corporation (Exhibit 324)
Victor Crivello on behalf of SETF (Exhibit 330)
Laura Barghusen on behalf of Openlands (Exhibit 338)
Gerald W. Adelmann on behalf of Openlands (Exhibit 344)

In addition to hearing testimony, the Board received over 350 exhibits and over 300 public comments, prior to the docket being divided. Not all those comments and exhibits are relevant to a determination of recreational use, and therefore will not be listed. In the March 18, 2010 opinion, the Board set April 15, 2010, as the date for filing final comments in this subdocket. After the docket was split, the Board received the following comments that are relevant to Subdocket A:

PC 287 Eric Kerlow
PC 288 James Des Jardins
PC 290 United States Environmental Protection Agency
PC 291 Southeast Environmental Task Force
PC 292 Citgo Petroleum Corporation and PDV Midwest
PC 293 ExxonMobil Oil Corporation
PC 294 Environmental Law & Policy Center, Natural Resources Defense Council, Openlands, Friends of the Chicago River, Prairie Rivers Network and the Illinois Chapter of Sierra Club
PC 295 Metropolitan Water Reclamation District of Greater Chicago
PC 296 The People of the State of Illinois
PC 298 Illinois Environmental Protection Agency
PC 300 Metropolitan Water Reclamation the District of Greater Chicago
PC 301 Abigail Lantz of Lincoln Park Juniors
PC 302 Environmental Groups
PC303 John R. Kindra, Kindra Lake Towing, L.P.

On August 5, 2010, the Board adopted a first-notice opinion and order, taking into consideration the comments, testimony and evidence relevant to Subdocket A. The first notice was published in the *Illinois Register* on August 27, 2010. *See* 34 Ill. Reg. 12521. During the first notice period in Subdocket A, the total number of public comments has reached over 968 and a discussion of the public comments can be found later in the opinion (*see supra* page 9).

On August 11, 2010, in accordance with Section 27(b) of the Act (415 ILCS 5/27(b) (2008)), the Board requested that the Department of Commerce and Economic Opportunity (DCEO) conduct an economic impact study for this rulemaking. On September 27, 2010, the Board received a response from DCEO, indicating that no economic impact study would be performed. At the public hearing held on October 19 and 20, 2010, the Board solicited comments on DCEO's decision not to conduct an economic impact study. The Board received no comments. 10/19/10Tr. at 5-6 and 10/20/10Tr. at 4-5.

STATUTORY BACKGROUND

This proposal was filed as a regulatory proposal of general applicability pursuant to Sections 27 and 28 of the Act (415 ILCS 5/27, 28 (2008)) and as a general rulemaking pursuant to Section 5-40 of the IAPA (5 ILCS 100/5-40 (2008)). SR at 2. Pursuant to Section 27(a) of the Act (415 ILCS 5/27(a) (2008)), the Board is required to take into account "the existing physical conditions, the character of the area involved, including the character of surrounding land uses, zoning classifications, the nature of the existing air quality or receiving body of water, as the case may be, and the technical feasibility and economic reasonableness of measuring or reducing the particular type of pollution." 415 ILCS 5/27(a) (2008).

SUMMARY OF FIRST NOTICE

In adopting the first-notice proposal, the Board did not proceed with IEPA's proposed amendment to Section 302.402 and amended the language of Section 303.204. Also, the Board proposed to repeal Section 303.441, a section not a part of the IEPA's original proposal.

At first notice, the Board determined that the CAWS and the LDPR cannot attain the Clean Water Act recreational use goal of recreating on and in the water (swimmable) at this time. However, the Board's examination of the record provided clear evidence of existing recreational uses in the CAWS and LDPR that must be protected. Therefore, the Board sent to first notice a proposal that individual reaches of the CAWS and LDPR would be designated either as incidental contact recreation, non-contact recreation, or non-recreational waters.

In finding that the CAWS and LDPR could not meet the Clean Water Act recreational use goal of recreating on and in the water, the Board examined the record in the proceeding and reviewed procedures outlined by the USEPA under the Clean Water Act (33 U.S.C. § 1313). USEPA developed rules for designating uses and conducting use attainability analyses, permitting states to adopt sub-categories of a use with appropriate criteria as well as seasonal uses. To remove a designated use or establish a use other than the CWA aquatic life and

recreational goals, States must consider six Use Attainability Analysis (UAA) factors in order to adopt such a use. *See* 40 C.F.R. § 131.10(g). The six UAA factors are:

1) Naturally occurring pollutant concentrations prevent the attainment of the use; or

2) Natural, ephemeral, intermittent, or low flow conditions or water levels prevent the attainment of the use . . . ; or

3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or

4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or

5) Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or

6) Controls more stringent than those required by sections 301(b) and 306 of the Act [CWA effluent standards] would result in widespread economic and social impact. *Id.*

After reviewing the evidence, including the UAA reports (Attach A and B) and the testimony in this proceeding, including comments from the IEPA and USEPA, the Board disagreed with the USEPA's suggestion that the CAWS and LDPR should be classified for recreation in and on the water. The Board found that the evidence supported the findings enunciated by the CAWS UAA and LDPR UAA that the Clean Water Act recreational use goal (swimmable) is not attainable because:

3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or

4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use. 40 C.F.R. § 131.10(g)(3) and (4).

Having found that the CAWS and LDPR cannot attain the Clean Water Act recreational use (swimmable) goal, the Board evaluated the proposed designated uses for the CAWS and LDPR based on the existing uses of the CAWS and LDPR. An existing use cannot be removed

according to federal regulations. 40 C.F.R. §131.10(h) and (i). Based on the CAWS and LDPR UAA studies, three categories of recreational use designations for the CAWS and LDPR were proposed: Incidental Contact Recreation, Non-contact Recreation, and Non-recreational waters. The CAWS and LDPR were separated into 14 segments and the Board examined physical, chemical, biological, and waterway use data to determine the existing uses of the CAWS. After reviewing the segments the Board proposed the following uses for each segment, as set out in Table 1.

Table 1
Proposed First Notice Recreational Use Designations for CAWS and LDPR Segments

Waterway Reaches	Current Use Designation 35 IAC 303.441	Proposed Use Designation 35 IAC 303.220 -303.227
Upper North Shore Channel from Wilmette Pumping Station to North Side Water Reclamation Plant	General Use	Incidental Contact Recreation
Lower North Shore Channel from North Side Water Reclamation Plant to confluence with North Branch of the Chicago River	Secondary Contact	Incidental Contact Recreation
North Branch of the Chicago River from its confluence with North Shore Channel to confluence with the Chicago River & South Branch of the Chicago River	Secondary Contact	Incidental Contact Recreation
Chicago River	General Use	Incidental Contact Recreation
South Branch of the Chicago River	Secondary Contact	Incidental Contact Recreation
South Fork of the South Branch of the Chicago River (Bubbly Creek)	Secondary Contact	Incidental Contact Recreation
Chicago Sanitary & Shipping Canal from its confluence with South Branch of the Chicago River to Calumet-Sag Channel	Secondary Contact	Incidental Contact Recreation
Calumet-Sag channel	Secondary Contact	Incidental Contact Recreation
Little Calumet River from its confluence with Calumet River and Grand Calumet River to its confluence with Calumet-Sag Channel	Secondary Contact	Incidental Contact Recreation
Grand Calumet River	Secondary Contact	Incidental Contact Recreation
Lake Calumet & Lake Calumet connecting Channel	Secondary Contact	Incidental Contact Recreation
Calumet River from Lake Michigan to Torrence Avenue	General Use	Non-Contact Recreation

Table 1 (cont.)
Proposed First Notice Recreational Use Designations for CAWS and LDPR Segments

Waterway Reaches	**Current Use Designation 35 IAC 303.441**	**Proposed Use Designation 35 IAC 303.220 -303.227**
Calumet River from Torrence Avenue to its confluence with Grand Calumet River and Little Calumet River	Secondary Contact	Incidental Contact Recreation
Chicago Sanitary and Ship Canal from its confluence with the Calumet-Sag Channel to its confluence with Des Plaines River	Secondary Contact	Non-Recreation
LDPR from its confluence with Chicano Sanitary and Ship Canal to the Brandon Road Lock and Dam	Secondary Contact	Non-Recreation
LDPR from the Brandon Road Lock and Dam to the Interstate 55 bridge	Secondary Contact	Incidental Contact Recreation

The Board also addressed concerns raised by the District. Specifically, the District first challenged the IEPA position that fishing is an incidental contact recreational use. Second, the District believed that safety and physical hazards in the CAWS make incidental contact recreational use unattainable. Third, the District argued that the IEPA did not account for wet weather events when designating recreational uses. And, fourth, the District asserted that the IEPA did not account for Asian Carp preventative measures when drafting this rulemaking proposal.

In the first notice opinion, the Board made findings on the four major issues raised by the District, but encouraged participants to comment on fishing as incidental contact while asking for more information on the wet weather issue in Subdocket B. The Board listed fishing among the activities under incidental contact recreation and found that fishing was consistent with the type of contact expected under the incidental contact designation. The Board also found that safety and physical hazards in the CAWS do not make incidental contact recreational use unattainable. On the Asian Carp issue, the Board found that the Asian Carp preventive measures do not change the existing uses.

Prior to the Board's first notice opinion, ExxonMobil raised concerns that barge traffic and security issues for ExxonMobil's facility on the Lower Des Plaines River create an operating environment where recreational activities should not be encouraged. The Board found that the record supported proceeding with a designated use of incidental contact for the LDPR from Brandon Road Lock and Dam to the I-55 Bridge. However, the Board invited additional comment and in particular invited the US Coast Guard to provide insights on this issue.

PUBLIC COMMENTS RECEIVED AFTER FIRST NOTICE

As noted above, the Board has received over 968 public comments in the R08-9 docket. Since the Board proceeded to first notice numerous comments in support of the proposal were

filed by individuals, organizations, and government entities. The public comments numbered PC 307-483, 485-490, 492-494, 501-504, 506-551, 557-558 573-578 and were comments that were nearly identical and supported the Board's first notice opinion and order. In addition comments 585 -968 were filed after the USEPA's determination letter, and support the USEPA's position. The Board greatly appreciates the time put forth by so many members of the affected community and the Board has taken those comments into consideration in developing this second notice opinion and order.

As discussed above, the Board received a response from DCEO to the Board's request for an economic impact study pursuant to Section 27(b) of the Act (415 ILCS 5/27(b) (2008)). The Board docketed that response as PC 491. The response indicated that no economic impact study would be performed.

The Board received more detailed and extensive comments as follows:

PC 496 ExxonMobil Oil Corporation
PC 497, 584 United States Environmental Protection Agency
PC 498 Metropolitan Water Reclamation District of Greater Chicago
PC 499 American Waterways Operators
PC 500 John R. Kindra
PC 552 Illinois Environmental Protection Agency
PC 554 The People of the State of Illinois
PC 555 Environmental Law & Policy Center, Natural Resources Defense Council, Openlands, Friends of the Chicago River, Prairie Rivers Network and the Illinois Chapter of Sierra Club

The Board will summarize these comments in the following sections.

ExxonMobil Oil Corporation (PC 496)

ExxonMobil reiterates concerns regarding safety and security issues raised prior to first notice. PC 496 at 2. ExxonMobil notes that the Upper Dresden Island Pool of the LDPR is proposed to be incidental contact and the Joliet Refinery is located on that segment. *Id*. ExxonMobil maintains that such a designation will encourage increased recreational use where there is constant barge and tugboat traffic. *Id*. ExxonMobil asserts that the constant barge traffic is a threat to recreators as there is limited room for maneuverability. *Id*.

ExxonMobil also reiterates that the Joliet Refinery is required to implement security measures because the facility is "a federally protected energy facility" and is governed by the U.S. Coast Guard. PC 496 at 2. ExxonMobil believes that the designation for incidental contact will encourage recreators and be an increased security risk for the Joliet Refinery. *Id*. ExxonMobil notes that the U.S. Coast Guard does not intend to comment in this proceeding, and urges the Board to ask for additional comment regarding security from the U.S. Army Corps of Engineers (USACE). PC 496 at 3.

ExxonMobil encourages the IEPA and "other government officials" to meet with the stakeholders of the LDPR to discuss safety and security. PC496 at 3. ExxonMobil states that the CAWS stakeholders had several meeting with IEPA to discuss these matters, while none were held with stakeholders from the LDPR. *Id*.

USEPA

PC497

USEPA expresses concerns regarding "the sufficiency of information in the record before the Board to support the conclusions that recreation in the water is not attainable at any segment of the Waterways, and recreation on the water is not attainable for those segments that the Board proposes to designate for non-recreational and non-contact recreational uses." PC 497 at 2. USEPA's concerns are based upon a review of the Board's opinion and order, information in the record available on the Board's website, and other publicly available information pertaining to CAWS that may not be part of the record.

Specifically, USEPA observes that the Board relied on three UAA factors to make the determination on the use designations for the CAWS:

1. Recreation in the water is not safe because of boat (barges, commercial and recreational boats) traffic; and unsafe flow conditions resulting from the District's actions to drain stormwater runoff during rain events to prevent flooding.

2. Limited direct access to the waterways prevents recreation in the water. Some landowners along the CAWS do not allow public access, and steep embankment and vertical walls in certain segments prevent safe entry and exit.

2. In Lake Calumet, recreation in the water is prevented by high *E.coli* levels resulting from large populations of gull and water fowl.

USEPA questions whether the record supports the Board's determination that "to attain recreation in or on water in any segment of the waterways in accordance with the 40 C.F.R. § 131.10(g) factors" is infeasible. PC 497 at 3. USEPA's concerns regarding the factors relied upon by the Board for the CAWS recreational use designation is summarized below.

Safety Issues. Relying on information from the USACE website[2], USEPA argues that CAWS segments upstream of Addison Street, the North Branch of the Chicago River, and the North Shore Channel are not subject to regular barge traffic, and therefore USEPA contends that recreation in or on the water in those segments are not impacted by barge traffic. PC 497 at 3. Further, USEPA notes that the USACE barge traffic data indicates barge traffic is predominantly in the Calumet Harbor and River, Chicago Sanitary and Ship Canal (CSSC) and Calumet-Sag segments of the CAWS. *Id.* USEPA asserts that even with heavy commercial navigation use in the Calumet River System, CSSC and LDPR, documentation in the rulemaking record includes

[2]www2.mvr.usace.army.mil/NIC2/Documents/chart130.pdf

evidence of recreation in and on water in the barge-impacted segments. *Id.* at 3-4, citing PC 478, Exh. 36, 63, and 279.

Additionally, USEPA states that USEPA is unaware of information in the record that demonstrates that barge traffic is consistently heavy throughout the year, on both weekdays and weekends, and in all segments of the CAWS used for commercial navigation such that the attainment of recreation in the water is unattainable. PC 497 at 4. Thus, USEPA questions the Board's reliance on the general barge traffic information to determine that recreation in the water is not attainable in all segments of the CAWS. Further, USEPA notes that the record lacks information concerning legislative, regulatory, or voluntary efforts that could be undertaken to enhance the safety of the waterways for recreation. *Id.*

USEPA also expresses concerns regarding the Board's finding that flow conditions resulting from draw down of water levels prior to rain events makes the waterways unsafe for recreation in and on water. USEPA contends that the record is not clear on the frequency and duration of "draw-down" conditions. Also, USEPA notes that the information in the record does not address how draw-down of water renders recreation unsafe during dry weather conditions. PC 497 at 4-5. Thus, USEPA "questions whether the record contains sufficient information to demonstrate that the need for drawing down water is a condition that prevents attainment of recreation in all segments of the Waterways (and on the water in certain segments) at all times." *Id.* at 5.

Access Issues. USEPA states that the Board has taken a position that recreation in the water is not an attainable use if recreators do not have direct shoreline or bankline access. USEPA contends that the Board's position regarding access fails to take into account recreators using existing public access sites to access the waters for full body contact recreation by intentionally jumping or climbing down into the water from boats and intentionally or unintentionally falling into water while tubing, water skiing, canoeing, kayaking or jet skiing. PC 497 at 5.

Lack of Public Access to Waterway's Banks. USEPA concedes that the record appears to indicate that owners of land abutting the waterways, such as the District and other governmental entities, are unwilling to allow public access. However, USEPA questions whether the record demonstrates that this impediment cannot be remedied through legislative or regulatory mechanisms to ensure sufficient public access. PC 497 at 5. Further, USEPA maintains that the record lacks information that quantifies the extent of land abutting the shoreline that is owned by owners unwilling to allow public access. To the contrary, USEPA notes that the record demonstrates that all segments affected by the rulemaking have one or more public access points that allow for recreation in or on the water, and can be accessed by users of recreational power boats, jet skis, canoes, kayaks or other means via nearby public access points. *Id.* at 5-6.

Lack of Safe Means to Directly Enter and Leave the Waterways. In addition to the Board's decision regarding the lack of public access, USEPA also takes issue with the Board's conclusion that lack of safe means for recreators to directly enter and exit the waterways precludes attainment of recreation in and on the water. PC 497 at 6. USEPA argues that the

record does not address the issue of safe means of entry and exit on a segment-by-segment basis. USEPA contends that the record includes ample evidence of boat launches and other means that recreators can use to safely enter and leave the waterways. Even if certain segments do not have safe means of entry and exit, USEPA questions why such conditions could not be remedied through construction of docks, ladders, or other structures. *Id.*

Elevated *E.coli* Levels in Lake Calumet. USEPA contends that the Board relied on cursory information to make the finding that naturally occurring pollutant concentrations prevent attainment of recreation in all portions of Lake Calumet at all times. USEPA notes that the CAWS UAA study suggests that high *E.coli* levels occur during early summer at the east side of Lake Calumet when a large colony of gulls is breeding and fledging young. PC 497 at 7, citing Attach B at 1-9. USEPA argues that the record lacks any other information to support the Board's findings.

USEPA's Conclusions. USEPA urges the Board to fully address the USEPA concerns with specific references to the record to support the Board's final decision. Such information, USEPA states, will be considered when USEPA reviews any new or revised water quality standards for the CAWS that Illinois submits pursuant to Section 303(c)(2) of the CWA and 40 C.F.R. § 131.20.

PC 584

On May 16, 2011, the Board received a copy of a letter dated May 11, 2011, from Nancy K. Stoner, USEPA's Acting Assistant Administrator for Water addressed to Lisa Bonnet, Interim Director of IEPA. PC 584. The letter states that USEPA is "choosing to exercise" USEPA's discretion under Section 303(c)(4)(B) of the CWA to require specific use designations for several segments of the CAWS. PC 584 at 1-2. USEPA explains that under Section 303(c)(4)(B), the Administrator may require revised standards to meet the provisions of the CWA even if the State does not provide a submission. PC 584 at 2-3. USEPA notes that the authority is discretionary and resides exclusively with the Administrator, unless delegated. In this instance, the authority has been delegated to Ms. Stoner. PC 586 at 3.

Specifically, USEPA has determined that revised use designations that allow for recreation on and in the water (swimmable) are necessary for:

1. Calumet-Sag Channel;

2. Little Calumet River from its junction with the Grand Calumet River to the Calumet-Sag Channel;

3. South Branch of the Chicago River;

4. North Branch of the Chicago River from its confluence with the North Shore Channel to its confluence with the South Branch; and

5. North Shore Channel, excluding the segment extending from the North Side Sewage Treatment Works to Lake Michigan. PC 584 at 1.

USEPA is taking this step because of new information not available in 1985 when USEPA approved the Secondary Contact Waters use designation. PC 584 at 2.

USEPA states that over the past 25 years CAWS "has been transformed into a valuable recreational asset that citizens increasingly use for boating, canoeing, kayaking, jet and water skiing, tubing and swimming." PC 584 at 1. USEPA opines that Illinois is "long overdue" for updating of water quality standards. USEPA has determined that new or revised water quality standards that protect recreation on and in the water (swimmable) are necessary for the segments of the CAWS listed above. *Id*. USEPA states that Illinois is expected to adopt water quality standards consistent with this determination "expeditiously" and if Illinois does not do so then USEPA will. *Id*.

USEPA notes that Section 101(a)(2) of the CWA provides for a national interim goal of achieving by July 1, 1983, "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water *wherever attainable*." PC 584 at 3 (emphasis in original), citing Section 101(a)(2) of the CWA. Under the rules implementing the CWA, waters that meet the CWA goal of fishable/swimmable must be protected unless those uses are shown to be unattainable based on a UAA. PC 584, citing 40 C.F.R. § 131.10. USEPA states that unless a State determines that fishable/swimmable is not attainable, the water must be designated and protected for those uses. *Id*. States are also required to review the water body segments every three years. PC 584, citing 40 C.F.R. § 131.20(a).

USEPA describes the history of the adoption of the Secondary Contact Waters designations from the Board's first notice opinion and order. PC 584 at 3-4, citing R08-9(A) slip op. at 9. USEPA goes on to explain that when USEPA approved Illinois' revisions to the water quality standards to remove existing fecal coliform standards for Secondary Contact Waters, USEPA stated:

> Primary contact activities are likewise inappropriate due to limited access and danger associated with heavy navigation as well as general aesthetic constraints. USEPA approval of elimination of bacterial indicator water quality standards for Secondary Contact waters supports the elimination of this use. PC 584 at 4.

USEPA then approved Illinois' 1985 decision to retain Secondary Contact use designations for the CAWS, and as a result, the District stopped disinfecting certain discharges to the CAWS. *Id*.

USEPA acknowledges that IEPA's UAA work and proposal to the Board as well as the Board's proceeding. PC 584 at 5. USEPA opines that the information gathered during the IEPA's UAA work and the Board's proceeding indicate that recreation in and on the water is now attainable for the segments listed above.

Public Access. USEPA notes that in 1985 lack of public access was a factor cited by IEPA as reason for the Secondary Contact designation. PC 584 at 5. At that time there was essentially no recreation potential as most of the adjacent property was owned commercially. *Id*. USEPA notes that the District and the Forest Preserve District of Cook County own substantial portions of the land adjoining the North Shore Channel, North Branch of the Chicago River, Little Calumet River, and Calumet-Sag Channel. *Id*. USEPA believes that these governmental entities can provide public access to the waterways. *Id* USEPA further notes that based on the record before the Board each of the segments listed above already has at least one, and often several, constructed motor boat, canoe, kayak and/or row boat launches that provide access to the water. Further, USEPA notes that there are two or more areas of public lands adjacent the segments that could provide direct, open public access to the waters' shoreline. *Id*.

Finally, USEPA points out that a number of exhibits from the Board's record make clear that there now are numerous marinas, docks, ladders, and/or gently sloping banks present at various points in the segments by which individuals can directly enter the waterways to recreate in and on the water. PC 584 at 5, citing Attach L; Exh. 346 and Exh. 353 (boat launches); Exh. 264 (docks); Exh. 350 (ladders); and Exh. 351 (gently sloping banks). USEPA states that the public can also access all segments of these water bodies to recreate in and on the water via recreational power boats, jet skis, canoes, kayaks, and other watercraft. PC 584 at 5.

More specifically, USEPA notes that with the North Shore Channel, there is public land and associated walking and bike paths. PC 584 at 5, citing Attach B. USEPA also points out that the North Branch of the Chicago River is partially lined with public land and an associated walk/bike path and has eight adjacent Chicago Park District parks and five canoe lunches. PC 584 at 5, citing Attach B and L. The North Branch of the Chicago River serves as a training location for three crew teams as well. PC 584 at 5, citing Exh. 269. The South Branch of the Chicago River has two Chicago Park District parks and at least two other access points. PC 584 at 5, citing Exh. 346. USEPA points out that the Little Calumet River has at least nine marinas, a public boat launch and two adjacent forest preserves; the Calumet-Sag Channel has approximately five miles of river with adjacent forest preserves, two public boat launches, and served as a site for crew events. PC 584 at 6, citing Attach B, L, and Exh. 330. USEPA also notes that local governments are working to improve access to the CAWS via the implementation of the "Northeast Illinois Regional Water Trail Plan". PC 584 at 6, citing Exh. 345, 358-363.

USEPA states that for these reasons, recreation in and on the water (swimmable) is "no longer unattainable due to lack of public access" to the CAWS segments listed above. PC 584 at 6.

Barge Traffic. USEPA maintains that the second factor cited by IEPA for the 1985 decision to retain the Secondary Contact use designation for the CAWS was IEPA's conclusion that "[p]rimary contact activities are likewise inappropriate due to. dangers associated with heavy navigation." IEPA's conclusion was based upon IEPA's belief that:

> [t]he waterway was used almost exclusively for commercial barge transport of bulk commodities such as grain, coal, petroleum products and raw minerals; and

> this barge traffic rendered the waters unsafe for primary contact recreational use. PC 584 at 6, citing to Attachment to March 4, 1985 Letter from IEPA to EPA, Region 5 at 4.

USEPA states that the segments listed above are no longer "almost exclusively" used for commercial transport, but instead are now used for recreational purposes. PC 584 at 6. USEPA reiterates that information discussed above under public access and notes further that in 2009 barge traffic accounted for less than one percent of the total number of vessels traveling through the Chicago lock. *Id*. USEPA remarks that commercial vessel traffic made up only 10 percent of the vessels traveling through the O'Brien lock. *Id*. USEPA observes that barge traffic "is extremely rare in the northern part of the North Branch of the Chicago River and the entire North Shore Channel" and there are no federal navigation channels in the CAWS upstream of Addison Street. *Id*. USEPA opines that given the rarity or non-existence of barge traffic in those segments, barge traffic does not render recreation on or in the water (swimmable) unattainable. *Id*.

USEPA further opines that even in segments of the CAWS where barge traffic is heavier, there is evidence in the Board's record that recreation in the water is occurring. PC 584 at 6-7, citing PC 478; Exh. 64; Attach B; Exh. 330. USEPA observes that the fact that recreation in the water is occurring in these segments demonstrates that recreation in the water is attainable in segments also used for navigation. PC 584 at 7.

Aesthetics and Elimination of Water Quality Standard for Bacterial Indicator. USEPA points out that IEPA also relied on aesthetics and elimination of the water quality standard for bacterial indicator for maintaining Secondary Contact designations. However, USEPA believes neither is relevant when evaluating the attainability of recreation on or in the water (swimmable). PC 584 at 8-9, citing 40 C.F.R. § 131.10(g). USEPA observes that concerted efforts, including funding from a number of entities, have led to "remarkable changes in the aesthetic condition of the CAWS over the past 25 years." PC 584 at 9. USEPA points out that these waterways are an important local asset. *Id*. USEPA also points out that given these changes, the USEPA's action in 1985 with respect to fecal coliform criteria is not relevant to evaluating new or revised water quality standards today. *Id*.

Draw-Downs of Waters. USEPA remarks that the record includes "generalized assertions" that the draw-down of water levels in the CAWS and LDPR to allow for storm water runoff and protection from flooding results in unsafe conditions for recreation. PC 584 at 7. USEPA asserts that the only specific evidence provided to support these assertions is the testimony of a single District employee about one incident that occurred in the vicinity of the Lockport Lock and Dam. PC 584 at 7, citing 9/8/08P Tr. at 79-80. USEPA notes that there appears to be no evidence that draw-downs of waters would impact the areas USEPA designates as swimmable as the water are at least 12 miles upstream from the Lockport Lock and Dam. PC 584 at 7. "Consequently, USEPA does not agree that 'draw down' conditions render recreation in and on the water [swimmable] unattainable" in the segments listed above. *Id*. USEPA concedes that even if draw-down of waters constituted an unsafe condition, the draw-downs occur during infrequent, heavy storms. *Id*.

Disinfection.[3] USEPA notes that the cost of constructing measures to insure water quality levels protective of recreation on and in the waters was not a factor cited by IEPA in 1985. PC 584 at 8. USEPA agrees that, while the record contains evidence regarding disinfection, no one has cited this as a reason for not being able to attain the recreational use of swimmable. *Id*.

The District (PC 498)

The District's first notice comments articulate three main concerns: (1) incidental contact recreation is not an existing use where conditions are unsafe; (2) a wet weather recreation use subcategory will protect existing uses and should be considered as part of Subdocket A; and (3) the Board should consider the implications of Asian Carp preventive measures. PC 498 at 1. Below, the Board provides a brief summary of the District's comments.

Incidental Contact Recreation Not an Existing Use if Unsafe

The District expresses concern that the Board's first notice proposal misinterpreted federal regulations pertaining to how existing uses are defined and considered eligible for protection. In particular, the District points to the following segments of the CAWS that the Board proposed for incidental contact recreation use at first notice, and proposes that these segments be designated as Non-Contact:

1. Chicago Sanitary and Ship Canal (CSSC) from the South Branch of the Chicago River to the junction with the Calumet-Sag Channel;

2. Calumet-Sag Channel;

3. Chicago River;

4. South Fork of the South Branch of the Chicago River (Bubbly Creek);

5. South Branch of the Chicago River; and

6. North Branch of the Chicago River from Ashland Avenue to its confluence with the South Branch of the Chicago River at Wolf Point (Lower North Branch of the Chicago River). PC 498 at 2.

The District notes that although the Board found evidence of incidental contact recreation activities occurring in those segments, including fishing, boating, canoeing, and rowing, the District explains that the Board did not appear to consider other factors contributing to the definition of existing uses. PC 498 at 2. The District refers to the federal definition of "existing uses":

[3] The Board only briefly touches on USEPA's comment regarding costs of disinfection as that issue will be more thoroughly addressed in Subdocket B.

> *Existing uses* are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards. PC 498, quoting 40 C.F.R. 131.3(e).

The District in turn points out that while the term "actually attained" is not defined in the regulations, USEPA has provided guidance on this issue. The District cites to a USEPA guidance that allows an existing use to be established based on a demonstration that such use has actually occurred or that water quality is suitable to allow such a use, "unless there are physical problems which prevent the use regardless of water quality." PC 498 at 3, citing 63 Fed. Reg. 36742, 36752 (Jul. 7, 1998). In other words, the District states, "[i]f such problems are present, a use will not be considered to be an existing use." PC 498 at 3.

The District applies the USEPA guidance by summarizing evidence presented during the course of this rulemaking "demonstrating that physical conditions and other safety concerns make the segments of the CAWS listed above [in the District's first notice comments] unsafe for incidental contact activities." PC 498 at 4. The testimony of Richard Lanyon and Dr. Thomas Granato attested to the man-made nature of the CAWS that can make incidental contact recreational activities hazardous. PC 498 at 4. The District's witnesses testified that the physical conditions contributing to safety concerns include "lack of substantial shallow area along the banks, rapid drop offs in depth, banks lined with high vertical sheet piling or large limestone rocks, rapid and unexpected increases in stream velocity due to periodic draw-downs of water levels, and frequent barge and large power boat traffic." PC 498 at 4, citing Exh. 60 at 5, 10/28/08 Tr. at 109-10.

Dr. Granato and Mr. Lanyon further explained that draw-downs result in water elevation changes as much as seven feet which cause flow velocity increases of up to 7.5 times normal velocity. PC 498 at 4 citing Exh. 60 at 5, 10/28/08 Tr. at 134-135. The District witnesses advised that such conditions exceed U.S. Geological Survey guidance for safe wading and recreational conditions. PC 498 at 4 citing 10/28/08 Tr. at 135 and 9/8/08 Tr. at 79-80. The District explained that unsafe conditions are also attributable to traffic from thousands of barges that take up much of the width of certain segments of the CAWS where commercial boating, small craft recreational boating, wading, and other incidental contact activities would be subject to collisions and capsizing. PC 498 at 4. The District points out that the IEPA regarded these conditions as "dangerous" in the Statement of Reasons. PC 498 citing SR at 33.

The District cautions that the Board would be irresponsible to encourage incidental contact recreation activities in the segments of the CAWS identified in the District's first notice comment through such a use designation. PC 498 at 5. Alternatively, the District urges the Board to designate the listed segments for non-contact recreational use. PC 498 at 5. The District reasons that USEPA guidance supports the consideration of safety in use attainability analyses, that the Board is required to take into account the "existing physical conditions" and the "nature of the . . . receiving body of water" during a rulemaking, and that the IEPA has acknowledged that a non-contact use designation is appropriate where "physical conditions make direct human contact…dangerous." PC 498 citing 63 Fed. Reg. 36753 (Jul. 7, 1998), 415 ILCS 5/27(a) (2008), SR at 26.

Wet Weather Recreational Use Subcategory

The District proposes that the Board adopt a separate use designation specifically for wet weather recreational use. The District states that such a use designation would reflect recreational activities for the CAWS that are appropriate under conditions affected by wet weather and combined sewer overflows (CSOs). PC 498 at 5.

The District points to USEPA's guidance which indicates designated uses may be refined or existing uses may be defined with specific reference to water body conditions. With examples from other states, the District illustrates how USEPA has already approved wet weather recreational use subcategories in Indiana, Maine, Massachusetts, Ohio, and California. PC 498 at 6, PC 295 at 17, Exh. E, citing to Exh. 116 Attach 3; 10/28/08 Tr. at 148-153. USEPA indicated that an existing use for waters affected by wet weather flows might appropriately be defined as "CSO impacted recreation use." PC 498 at 6, quoting "Water Quality Standards: Wet Weather Issues and Recreational Use Protection" (Presentation by King, U.S. EPA, Apr. 27, 2007). USEPA has stated, "in a number of situations, the existing use provisions will allow states to consider changes to their designated uses to reflect this reality." *Id.*

The District specifically details how the Indiana Department of Environmental Management (IDEM) has established a wet weather limited use subcategory that replaces the otherwise applicable recreational use categories during and immediately following wet weather events. PC 498 at 6 citing Ind. Code 13-18-3-2.5. The District notes that this use subcategory was approved by USEPA. PC 498 at 6.

The District suggests the Board follow the Indiana example for identifying existing incidental contact recreational uses. The District proposes an appropriate existing use could be defined as "incidental contact recreation under CSO-impacted conditions." PC 498 at 9. The District explains that a use category of "incidental contact recreation" alone would not be able to show full support during wet weather. The District suggests a refinement of the use that references actual conditions would create a subcategory that would be able to show full support of existing uses. PC 498 at 9.

The District reiterates that the IEPA's Statement of Reasons recognized that wet weather conditions were incompatible with recreation activity, and that recreational use is not being attained during wet weather conditions. PC 498 at 9 citing SR at 45. The District cautions the Board that allowing "incidental contact recreation" as currently defined under wet weather conditions would be irresponsible. PC 498 at 9.

Although the Board's first notice indicated the impact of CSOs would be considered during Subdocket B, the District urges the Board to consider establishing a wet weather limited use subcategory in Subdocket A. PC 498 at 5, 10.

Asian Carp Preventive Measures

The District also reiterates concern for Asian Carp preventive measures in the CAWS. Preventive measures currently being considered by various state, federal, and international

agencies include "kill zones, poisons, electric barriers, intentional lowering of water quality, reducing diversions, and closing navigational locks." PC 498 at 10, PC 295 at 18. The District points out that these measures have the potential to pose new safety considerations as well as physical changes. The District emphasizes these new safety and physical considerations are relevant to determining designated uses that are appropriate since these measures will actually preclude the incidental contact recreational uses that are being proposed in this rulemaking. PC 498 at 10.

The District again refers to USEPA's discussion in the *Federal Register* that uses should be determined after consideration of "the actual use, existing water quality, water quality potential, recreational facilities, location, safety considerations, physical conditions of the water body, and access." PC 498 at 10 quoting 63 Fed. Reg. at 36753. The District believes that the Board should consider the Asian Carp preventive measures as the Board determines appropriate recreational use designations for the CAWS. PC 498 at 10.

American Waterways Operators (PC 499)

AWO filed a comment that urged the Board to maintain the CAWS and LDPR for waterborne commerce and to refrain from implementing the proposed amendments. PC 499 at 1. AWO offers comments concerning four areas: 1) the impact of increased recreational boating on safety in the waterways; 2) the importance of barge transportation to the economy of the region; 3) the environmental and congestion impacts of limiting barge transportation; and 4) the protection of navigation through the CWA. PC 499 at 2.

Safety

AWO opines that an increase in recreational activity will "severely compromise the safety of all those who travel on the waterways" and have a negative effect on the ability of commercial traffic to operate safely. PC 499 at 2. AWO notes that recreational boaters generally do not have the same training as commercial operators and in some states recreational boaters do not have to have a license. *Id*. AWO states that the disparity of training can result in more accidents. *Id.*

AWO maintains that towboat operators place safety as the highest priority. PC 499 at 2. AWO also maintains that limited exposure to the nature of towing vessels by recreational boaters also limits the ability of recreational and commercial boaters sharing limited waterways. *Id.* AWO notes that CSSC is a very restricted waterway and increasing the number of vessels is unwise. *Id*. Also, AWO points out that an accident where someone falls overboard in the CSSC "is potentially fatal" because of the steep walls of the waterway. *Id*. AWO encourages the Board to consider the safety of all operators on the waterways before encouraging more recreational uses. PC 499 at 3.

Barge Traffic and the Economy

AWO states that the member companies rely on free flow of commerce on the waterways and customers depend on waterborne commerce. PC 499 at 3. AWO notes that the products

imported and exported by barge include petroleum products, agricultural products, coal for regional power plants, road salt, steel, and cement. *Id.* AWO opines that barge transport is the most cost-effective and environmentally friendly way to move many of these materials. *Id.*

AWO states that "16 million tons of commodities moved through the CSSC, 12.4 million tons of cargo transited Lockport Lock, over 6 million tons of commodities moved through the Calumet-Sag Channel, 1.3 million tons of commodities traveled on the Chicago River, and 1.1 million tons of materials transited Lake Calumet." PC 499 at 3. AWO asserts that the significance of barge transportation on the economy has been analyzed for the Ports of Indiana, and includes a copy of the study[4]. *Id.* AWO notes that 17,655 jobs and $1.9 billion in economic activity in Northwest Indiana were attributable to barge movements through the O'Brian Lock alone during 2008. *Id.* AWO further points to a study by DePaul University, also attached, which concluded that the conservative and preliminary economic value of the industry is $4.7 billion.[5]

AWO takes issue with USEPA's pre-first notice comment suggesting that restrictions be placed on barge traffic. PC 499 at 3, *see also* PC 290. AWO opines that the USEPA's statement does not take into account "logistical reality" such as arranging for pickups and deliveries of essential commodities. *Id.* AWO claims that consumers and businesses rely on the transport of these materials and placing "arbitrary restrictions" on transport will negatively impact the region as a whole. PC 499 at 3-4. AWO also takes issue with USEPA's statements that barge traffic may be less intense at times. PC 499 at 4. AWO argues that there is no evidence to support this statement. *Id.*

Impacts of Limiting Barge Traffic

AWO argues that limiting barge traffic could do substantial environmental harm to the Chicago area's air quality and quality of life of the residents. PC 499 at 4. AWO claims that if the commodities are not moved by barge, they will be moved using trains and truck instead. *Id.* AWO opines that this will add to air pollution in the area as well as traffic congestion. *Id.* AWO claims that as a result if the proposed use designations are adopted, "the economy, air quality, and automobile traffic flow" would be significantly harmed. *Id.* "AWO urges the Board to consider the negative environmental and quality of life impacts of limiting waterborne commerce on the Chicago area" when deciding to proceed to second notice. PC 499 at 4-5.

Protection of Navigation

AWO notes that the CWA prohibits removing or downgrading a use attained in a waterbody. PC 499 at 5. AWO claims navigation is a use attained in the CAWS and LDPR and therefore navigation must be protected. *Id.* AWO argues that the USEPA's recommended

[4] The study is entitled "Economic Impacts of Waterborne Shipping on the Indiana Lakeshore" prepared by Martin Associates, dated August 2010.
[5] The study is entitled "An Analysis of the Economic Effects of Termination Operations at the Chicago River Controlling Works and the O'Brien Locks on the Chicago Area Waterway System" prepared by Joseph P. Schwietermann, Ph.D, DePaul University, dated April 7, 2010.

actions could have the effect of limiting navigation and that would result in a downgrading of an existing use. *Id*. AWO recommends that the Board protect navigation and prevent IEPA from downgrading the use. *Id*.

John Kindra (PC 500)

Mr. Kindra fully supports the comments of AWO and his company is a member of AWO. PC 500 at 1. Mr. Kindra specifically provides comments on the proposed use designations for the CSSC and the Calumet-Sag Channel. PC 500 at 2. Mr. Kindra states that these two waterways are narrow with concrete walls, steep embankments and deep drop offs. *Id*. The CSSC and Calumet-Sag Channel are used for commercial traffic. *Id*. Mr. Kindra opines that these factors create a dangerous situation for swimmers. *Id*.

Mr. Kindra disagrees with USEPA that all of the CAWS should have recreational uses and does not believe that resources should be allocated to attain recreation water quality in a commercial waterway, with vertical concrete walls, steep embankments, and managed flow rates. PC 500 at 2. Mr. Kindra agrees with the use designations proposed by IEPA. PC 500 at 3.

Illinois Environmental Protection Agency (PC 552)

The IEPA reviews the history of this rulemaking and notes that some comments have been received prior to the IEPA's filing of a comment. PC 552 at 3. The IEPA states that none of the first-notice comments received by the Board as of the filing of the IEPA's comment provide a basis to justify amendment of the Board's first-notice proposal. *Id*. IEPA indicates that some of the comments suggest the Board did not give sufficient weight to safety concerns and reiterate concerns that the use designations will encourage recreation on the CAWS and LDPR. *Id*. IEPA notes that "on the other hand" USEPA suggests that the Board has given too much weight to safety and physical configuration. *Id*.

The IEPA opines that the Board's first-notice opinion and order carefully weighed the evidence before proposing the use designations as proposed by the IEPA. PC 552 at 4. The IEPA expresses appreciation for the Board's efforts and requests that the Board proceed to second notice with the proposed use designations. *Id*.

People Of The State Of Illinois (PC 554)

The People support the proposed recreational use designations as the "minimally appropriate use designations for the CAWS and LDPR" and as designations which reflect the existing uses of the waters. PC 554 at 1. The People note that the existing uses include fishing and boating in canoes, kayaks and small motorized craft and these uses must be protected pursuant to the CWA. *Id*. The People ask the Board to move forward with the recreational use designations as proposed at first notice. *Id*.

The People noted that "an enormous amount of evidence" is in the record demonstrating that there are exiting recreational uses on the CAWS and LDPR. PC 554 at 2. The People state

that the "overwhelming evidence" is that CAWS and LDPR do support recreation uses as proposed at first notice. *Id.* Therefore, the People maintain that the proposed incidental contact recreational use designation is the minimum use designation appropriate for CAWS and the LDPR.

Environmental Groups (PC 555)

The Environmental Groups state that the Board's first-notice opinion is correct in the designations of the specified recreational uses for the reaches of the CAWS and LDPR, except that the Environmental Groups encourage the Board to "take into further account the comments" of the USEPA. PC 555 at 1. The Environmental Groups respond to the District's comment and state generally that: 1) the District incorrectly applies the UAA standard, including the impact the presence of Asian Carp has on the proposed designated uses; and, 2) a wet weather standard is premature. PC 555 at 1-2.

Application of UAA Factors

The Environmental Groups state that the proposed designated uses have been "overwhelmingly documented in the record" of this proceeding. PC 555 at 2. The Environmental Groups note that the UAA studies conducted by the IEPA fully documented incidental contact recreational uses and the Chicago Health, Environmental Exposure, and Recreation Study (CHEERS) also found widespread incidental contact uses. PC 555 at 2-3, *see also* Attach A and B, and PC 478. The Environmental Groups further note that the Board recognized in the first-notice opinion that the Environmental Groups supplemented the information on incidental contact uses including evidence of access points. PC 555 at 3. The Environmental Groups opine that the evidence consistently demonstrates extensive use of the CAWS and LDPR by kayakers, waders, jet skiers, and anglers and further establishes that there are no insurmountable barriers to recreational use of these waterbodies. *Id.*

The Environmental Groups state that the record "overwhelmingly" supports a conclusion that many reaches in the CAWS and LDPR are attractive to recreational users and that no physical barrier keeps incidental contact recreation from occurring. PC 555 at 3. The Environmental Groups claim that the District and "certain other participants" are attempting to argue that the proposed uses are not attainable "by relying on arguments that are illogical, specious and unsupported by law." *Id.*

Risks Associated with Recreation on CAWS and LDPR Exaggerated. The Environmental Groups challenge the District's claims that the CAWS and LDPR are not suitable for kayakers and canoers because of commercial navigation, steep concrete walls and occasional draw-downs in the system due to storm anticipation. PC 555 at 3, citing PC 498 at 4-5. The Environmental Groups argue that the District's reasoning is inconsistent with the designation standards set forth by the UAA factors (*see* 40 C.F.R. § 131.10(g)). PC 555 at 3 The Environmental Groups opine that the standard is not whether the particular use designation would be "irresponsible" or that some risk may be associated with the use, but rather what uses are existing and then what uses can be attained as determined by the six UAA factors. PC 555 at 3-4.

The Environmental Groups believe that the Board was correct in determining that recreational use exists on the CAWS and LDPR. PC 555 at 4. The Environmental Groups maintain that the District offers "nothing of relevant substance to contravene this [Board's] finding" but instead cites to the IEPA's recognition of commercial navigation, steep concrete walls and occasional draw-downs. *Id*. The Environmental Groups maintain that the IEPA's recognition of these conditions underscores that the IEPA carefully considered these conditions in examining the UAA factors in developing the proposed designated uses. *Id*. The Environmental Groups point out that when reading IEPA's comment in full context, the IEPA recognized the accessibility to the public of segments designated as incidental contact as well as the varied physical characteristics. *Id*., citing SR at 34.

The Environmental Groups argue that as a purely factual matter, the District has failed to demonstrate that safety is lacking in the segments proposed for incidental contact. PC 555 at 4. The Environmental Groups note that the District could not identify one known conflict between paddlers and barge traffic on the segments proposed for incidental contact recreation and none of the recreational users who testified experienced any problem while on the CAWS. PC 555 at 4-5. The Environmental Groups also note that many waterbodies throughout the country that share some of the characteristics of CAWS are designated as fishable/swimmable under the CWA. PC 555 at 5. The Environmental Groups state that the Illinois River, Lake Michigan and Mississippi River all are used for commercial navigation "but it would be absurd" to generalize that those waterbodies cannot achieve the CWA goal. *Id*.

Evidence Supports Incidental Contact Use Designation. The Environmental Groups take issue with the District's reliance on USEPA Guidance to challenge the incidental contact recreational use designation. PC 555 at 6, citing 63 Fed. Reg. 36742, 36752 (Jul. 7, 1998). The Environmental Groups point out that the USEPA Guidance referred to determining whether or not swimming was an existing use and indicated that observing a few people on a few occasions swimming does not constitute swimming as an existing use. *Id*. The Environmental Groups assert that if the Board had designated segments of the CAWS and LDPR as swimmable, the District's reliance on the USEPA Guidance might be warranted; however, the Board found that incidental contact was an existing use based on the evidence including evidence of "tens of thousands of people" engaging in recreation each year. PC 555 at 6.

Fishing is Incidental Contact Use. The Environmental Groups responded to the Board's request in the first-notice opinion to comment on the issue of fishing being included as incidental contact use. PC 555 at 7. The Environmental Groups state that the record "leaves no doubt" that fishing is incidental contact recreation. *Id*. The Environmental Groups note that CHEERS included fishing as incidental contact recreation. *Id*.

Application of UAA Factors too Conservative. The Environmental Groups opine that the District's position that uses should be downgraded from those proposed at first notice directly conflicts with the USEPA's position that certain segments should be considered swimmable. PC 555 at 7, citing PC 497. The Environmental Groups note that the USEPA points out that the CWA creates a rebuttable presumption that waters are fishable/swimmable and the six UAA factors must be used to establish that the CWA goals cannot be met. PC 555 at 7, citing PC 290.

The Environmental Groups maintain that the IEPA must prove that full-body contact is not achievable in the CAWS and LDPR based on the six UAA factors to establish a use less than swimmable. PC 555 at 7. The Environmental Groups note that the USEPA has pointed to specific factual issues underlying USEPA's concerns that IEPA did not meet the burden of establishing that swimmable was not achievable in the CAWS and LDPR and USEPA request that IEPA reconsider. PC 555 at 7, citing PC 290 and 497.

The Environmental Groups claim that the Board did not address USEPA's specific concern that the IEPA failed to meet the burden of proving that fishable/swimmable was not achievable. PC 555 at 7-8. The Environmental Groups opine that the Board placed a reverse burden on the USEPA to demonstrate that primary contact would be possible; however, the law places the burden on the IEPA to demonstrate that measures cannot be taken to attain primary contact. PC 555 at 8.

The Environmental Groups state that USEPA did provide factual support for considering whether some segments of CAWS and LDPR can be designated for primary contact. PC 555 at 8. The Environmental Groups urge the Board to consider the fishable/swimmable designations for segments where the IEPA has failed to establish using the six UAA factors that primary contact cannot be achieved. *Id.* The Environmental Groups also ask that when the Board is presented with an indicator criteria proposal for the CAWS and LDPR that the Board consider the possibility of more sensitive uses in parts of the CAWS. *Id.*

Asian Carp. The Environmental Groups argue that there is no basis in the record to conclude that the presence of Asian Carp alters attainability of the proposed designated uses. PC 555 at 8. The Environmental Groups note that in the CAWS, the areas proposed for incidental contact recreation are below the electric barrier system and in the LDPR "it is far from certain" that Asian Carp will establish a population in numbers that will lessen the attractiveness for recreation. *Id.*

Wet Weather Standard

The Environmental Groups indicate that the IEPA has not proposed ambient water quality standards to protect the proposed designated uses, but instead proposes a technology-based control for disinfection. PC 555 at 10. The Environmental Groups believe that a wet weather standard is not necessary in this proceeding and should be considered, if at all, when considering an ambient water quality standard. *Id.* The Environmental Groups opine that absent an ambient water quality standard, a wet weather designation has little meaning. The Environmental Groups point to the Indiana standard as an example of a standard which is an exception to the applicable primary contact standard. *Id.*

DISCUSSION

At first notice, the Board proposed recreational use designations for the CAWS and LDPR based on the record and comments of the participants that the Board had received to that point in this rulemaking. Prior to proceeding to first notice, only the USEPA and Chicago Area Sea Kayakers Association (CASKA) suggested that primary contact might be achievable in the

CAWS and LDPR. However, the comments filed by USEPA and CASKA were not sufficient to convince the Board that the UAA findings were incorrect. *See* R08-9(A) slip op. at 79. As indicated above, during the first-notice period, the Board received numerous comments, including one from USEPA that detailed evidence in the record to support USEPA's position that certain segments of the CAWS should be designated for primary contact recreations. *See generally* PC 497. USEPA then filed a determination letter, which further cited to evidence in the Board's record that supports USEPA's position that several segments should be designated for recreation on and in the water (swimmable). *See generally* PC 584. Also during first notice, the Environmental Groups suggested that the Board re-examine the record and consider USEPA's position. *See generally* PC 555.

The Board notes that the goal under the CWA is to protect the waters of Illinois to allow for recreation on and in the water (swimmable) wherever attainable. Under the federal rules implementing the CWA, uses are deemed attainable if they can be achieved by the imposition of effluent limits under the CWA. 40 C.F.R. § 131.10(d). States may remove a designated use which is not an existing use or create sub-categories of uses by performing a UAA. 40 C.F.R. § 131.10(g). Furthermore an existing use may not be removed. 40 C.F.R. § 131.10(h). Thus, the CWA and the rules implementing the CWA clearly envision that all waters are swimmable unless one of the UAA factors establishes otherwise.

Based on the more extensive comments from USEPA and the request of the Environmental Groups, the Board examines the record to consider a primary contact recreational use designation for segments of the CAWS as urged by the USEPA and supported by the Environmental Groups. The Board examines the record and these comments in context with the CWA and the rules implementing the CWA. The Board will discuss the decision on a segment-by-segment basis below. *See supra* page 25.

Also during first notice, the District and ExxonMobil provided comments which elaborate on their first notice comments. Specifically, ExxonMobil raised concern about safety and security around the Joliet Refinery. The District's comments focused on three main concerns: 1) incidental contact recreation should not be an existing use where conditions are unsafe; 2) a wet weather recreation use subcategory should be considered as part of Subdocket A to protect existing uses; and 3) the Board should consider Asian carp preventive measures. The Environmental Groups specifically responded to the comments of the District noting: 1) the District incorrectly applies the UAA standard, including the impact the presence of Asian Carp has on the proposed designated uses; and, 2) a wet weather standard is premature.

The Board is unconvinced by the arguments of the District regarding the Asian Carp issue. Further, ExxonMobil and the District have not convinced the Board that safety issues preclude the use designations proposed for second notice. The Board also continues to believe that the issue of a wet weather standard should be addressed in setting the water quality standards in Subdocket B. The Board will discuss the Asian Carp issue and then address the other issues in the segment-by-segment discussion. *See supra* page 25.

The AWO and Mr. Kindra also expressed concern that the proposed use designations not interfere with the existing use of commercial traffic on the CAWS and LDPR. The Board does

not believe, based on the evidence in the record, that the proposed uses will impact commercial navigation.

Asian Carp

The Board recognizes that the Asian Carp preventative measures may have a significant impact on the CAWS and LDPR; however, the Board at this time does not believe that the Asian Carp issue impacts a decision on recreational uses. The Board must protect existing uses of the CAWS and LDPR and those current existing uses are reflected by the proposal. Other than speculative comment, there is in fact no evidence in the record that the Asian Carp preventative measures, implemented after the UAA was completed, have permanently impacted recreational activity.[6] Therefore, although the Board held hearings on the issue as the issue relates to aquatic life uses in Subdocket C, the Board finds that the Asian Carp preventive measures do not change the existing uses or impact recreational activity.

Segment-By-Segment Recreational Use Designation

As discussed above, both USEPA and the Environmental Groups question whether the record and the Board's evaluation of the record at first notice was sufficient to find that the CWA goal of swimmable could not be met in all segments of the CAWS and LDPR. The Environmental Groups opine that the Board placed a "reverse burden" on the USEPA to demonstrate that primary contact is not achievable. *See* PC 555 at 8. The Board's first notice opinion makes clear that the Board relied specifically on two of the six UAA factors to determine that the CWA recreational use (swimmable) goal is not attainable in CAWS and LDPR. *See* R08-9(A) slip op. at 79 (Aug. 5, 2010). These factors are:

> 3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or
>
> 4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use. 40 C.F.R. § 131.10(g)(3) and (4).

Furthermore, the Board noted the concerns of USEPA that the IEPA failed to demonstrate why human pollution, hydrologic modifications and barge traffic cannot be controlled to allow for recreation in and on the water. However, responding to USEPA's comments, the Board found no evidence in the record to support those concerns,. *See* R08-9(A) slip op. at 79 (Aug. 5, 2010).

At first notice, the Board adopted the recreational use designations as proposed by IEPA. The IEPA's proposal relied on the UAA Factor Three for designating segments of CAWS and

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[6] The Board notes that the rotenone activity shut the waterway in a segment for a few days and the Coast Guard has issued a restricted navigational area around electric barrier that placed certain restrictions on passage of recreational vessels. *See generally* PC 295 at 18, Exh. F.

LDPR as Incidental Contact Recreation Use, and UAA Factors Three and Four for those segments proposed as Non-contact Recreation and Non-recreational uses. See PC 298 at 6-7 and Exh. 29. As proposed by the IEPA at first notice, the Board considered issues concerning commercial navigation (barge traffic), dangerous flow conditions, access, and physical barriers under the UAA Factor Four. In addition to some of the issues under UAA Factor Four, the Board considered human caused conditions and sources of pollution, including CSOs and wet weather discharges, and the invasive species barrier under the UAA Factor Three. The Board also relied on additional information provided by IEPA regarding local recreational use prohibitions, and future attainability of primary contact recreational uses. The Board's decision at first notice was based primarily on an evaluation of issues concerning water quality, flow conditions, physical barriers, and future attainability of recreation in the waterways.

As discussed above, in response to USEPA's comment and the Environmental Groups' request to reexamine the record, as well as the District's request to amend the designated uses, the Board will now discuss the application of the UAA Factors to the CAWS and LDPR on a segment-by-segment basis, starting with the CAWS segments followed by the LDPR. A list of the waterway segments is given in Table 2 below. For each waterway segment, Table 2 gives the current use designation, the first notice proposed use designation, and the second notice proposed recreational use designation.

Table 2
Proposed Recreational Use Designation for CAWS and LDPR

Waterway Segments	Current Use Designation 35 IAC 303.441	First Notice Proposed Use Designation	Second Notice Proposed Recreational Use Designation
Upper North Shore Channel from Wilmette Pumping Station to North Side Water Reclamation Plant	General Use	Incidental Contact Recreation	Incidental Contact Recreation
Lower North Shore Channel from North Side Water Reclamation Plant to confluence with North Branch of the Chicago River	Secondary Contact	Incidental Contact Recreation	Primary Contact Recreation
North Branch of the Chicago River from its confluence with North Shore Channel to confluence with the Chicago River & South Branch of the Chicago River	Secondary Contact	Incidental Contact Recreation	Primary Contact Recreation
Chicago River	General Use	Incidental Contact Recreation	Primary Contact Recreation
South Branch of the Chicago River	Secondary Contact	Incidental Contact Recreation	Primary Contact Recreation
South Fork of the South Branch of the Chicago River (Bubbly Creek)	Secondary Contact	Incidental Contact Recreation	Incidental Contact Recreation
Chicago Sanitary & Shipping Canal from its confluence with South Branch of the Chicago River to Calumet-Sag Channel	Secondary Contact	Incidental Contact Recreation	Incidental Contact Recreation
Calumet-Sag channel	Secondary Contact	Incidental Contact Recreation	Primary Contact Recreation
Little Calumet River from its confluence with Calumet River and Grand Calumet River to its confluence with Calumet-Sag Channel	Secondary Contact	Incidental Contact Recreation	Primary Contact Recreation

Table 2 (cont.)
Proposed Recreational Use Designation for CAWS and LDPR

Waterway Segments	Current Use Designation 35 IAC 303.441	First Notice Proposed Use Designation	Second Notice Proposed Recreational Use Designation
Grand Calumet River	Secondary Contact	Incidental Contact Recreation	Incidental Contact Recreation
Lake Calumet & Lake Calumet connecting Channel	Secondary Contact	Incidental Contact Recreation	Incidental Contact Recreation
Calumet River from Lake Michigan to Torrence Avenue (North Reach)	General Use	Non-Contact Recreation	Non-Contact Recreation
Calumet River from Torrence Avenue to its confluence with Grand Calumet River and Little Calumet River (South Reach)	Secondary Contact	Incidental Contact Recreation	Incidental Contact Recreation
Chicago Sanitary and Ship Canal from its confluence with the Calumet-Sag Channel to its confluence with Des Plaines River	Secondary Contact	Non Recreation	Non Recreation
LDPR from its confluence with Chicago Sanitary and Ship Canal to the Brandon Road Lock and Dam	Secondary Contact	Non-Recreation	Non-Recreation
LDPR from the Brandon Road Lock and Dam to the Interstate 55 bridge	Secondary Contact	Incidental Contact Recreation	Incidental Contact Recreation

North Shore Channel

As noted in Table 2, the North Shore Channel (upper and lower) begins at the Wilmette Pumping Station and ends at North Branch of the Chicago River. This segment is 7.7 miles long, 90 feet wide, and has depth varying between 5 to 10 feet. The narrow riparian corridor along the North Shore Channel is mainly parkland owned by the District and managed in some locations by municipalities and park districts. The North Shore Channel is divided into two segments, upper and lower, with the District's Northside Side Water Reclamation Plant (WRP) as the break point. Attach B at 4-23. While the section of North Shore Channel upstream of the WRP (upper North Shore Channel) is currently designated as General Use, the section downstream of the WRP (lower North Shore Channel) is designated as Secondary Contact and Indigenous Aquatic Life Use. *Id*. at 3-8.

The upper North Shore Channel receives CSOs and stormwater runoff. This segment experiences little or no flow over long periods due to reduced discretionary diversion from Lake Michigan. *Id.* The UAA notes that the lack of flow creates stagnant conditions resulting in low dissolved oxygen (D.O.) conditions and bacteria levels exceeding General Use bacteria criteria. *Id.*

The primary flow in the lower North Shore Channel comes from the Northside WRP with an average design flow of 333 million gallons per day (mgd). *Id.* at 3-8. The flow from the WRP also creates a backwater area in the upper North Shore Channel. IEPA's CWA Section 305(b) report from 2004 indicates that North Shore Channel is impacted by various parameters, including fecal coliforms, flow alterations, and excess algal growth. *Id*. at 3-9.

The UAA established screening levels based on *E.coli* concentrations to evaluate bacterial quality of the CAWS consistent with USEPA guidance for protecting recreational uses identified as existing uses in the CAWS. An *E.coli* geometric mean of 1000 colony forming units (cfu)/100 milligrams per liter (mL) was used as screening level for limited contact recreation and a geometric mean of 2740 cfu/100mL was used for recreational navigation. *Id.* at 4-7. The bacteria sampling results from four in-stream grab sampling locations, two each on the Upper and Lower channels indicate *E.coli* levels exceeding 2470 cfu/10 mL in both upper and lower North Shore Channel. *Id.* at 4-27:28. The UAA notes that the numerous CSOs on the upper and lower North Shore Channel are likely cause for elevated *E.coli* levels exceeding 2470 cfu/100 mL at Central and Oakton Avenues. Based on a September 2002 permit data, the CAWS UAA estimates 30 permitted CSOs on the North Shore Channel. The CSOs coupled with the undisinfected discharge from the North Side WRP result in *E.coli* concentrations over 2470 cfu/100 mL most of the time (100 percent at Devon Ave.). *Id.*

A 14-day recreation and use survey of the North Shore Channel did not find primary contact recreational activity occurring. The recreational activities observed included: fishing (73 percent of the observed activities); canoeing, sculling, or hand powered boating activity (21 percent); power boating (5 percent); and wading (1 percent). *Id*. at 4-23-24. The North Shore Channel is not used for commercial navigation. Although the riparian corridor along the North Shore Channel is mostly owned by the District, the survey found public access points, including canoe launches and boating docks. *Id.* at 24 and Attach L.

USEPA argues that the North Shore Channel, excluding the segment extending from the North Side Sewage Treatment Works to Lake Michigan (upper North Shore Channel), can attain the CWA goal of swimmable. PC 584 at 1. USEPA notes that the District and the Forest Preserve District of Cook county own a substantial portion of the land adjoining the North Shore Channels, which could allow for public access. PC 584 at 5. Additionally the North Shore Channel is lined with a walk/bike path. *Id*. Thus, USEPA argues that the lack of public access is not a valid reason for finding that the CWA goal of swimmable is not attainable. *Id*.

Furthermore, USEPA notes that there is little to no barge traffic in the North Shore Channel. PC 584 at 6. USEPA observes as to the issue of draw down impacting the flow, only one witness described a safety issue regarding draw downs and that took place in the Lockport Lock and Dam. PC 584 at 7.

The North Shore Channel is not one of the segments that the District sought to have the use designation amended. *See generally* PC 498 at 2.

Board Finding on North Shore Channel . As stated previously, unless one of the six UAA factors can be demonstrated to apply, the Board must find that the CWA goal of swimmable is attainable. The Board at first notice determined that UAA Factor Three prevented attaining the CWA goal of swimmable by examining issues of water quality, flow conditions, physical barriers and future attainability of recreation in this segment. The USEPA has convinced the Board that those issues do not present an impediment to attaining the CWA goal of swimmable in this segment. The USEPA's arguments and citation to evidence in the record convince the Board that the record does not support the Board's reliance on the UAA Factor Three to find that the CWA goal was not achievable. Therefore, the Board establishes a recreational use goal of Primary Contact Recreation to ensure that the CWA goal of swimmable is attained on the lower North Shore Channel.

USEPA has provided the Board specific citations to the record which demonstrate that public access is available in the lower North Shore Channel. Furthermore, any safety issues with barge traffic are not a concern in this segment of the CAWS. The lower North Shore Channel, currently designated Secondary Contact and proposed at first notice as Incidental Contact, has sufficient public access points to allow for swimming. Further, the bacteria levels, which may be seen as an impediment to a swimmable use designation, are conditions which are being addressed through Tunnel and Reservoir Project (TARP)[7] and could be addressed through effluent limits. *See* 40 C.F.R. § 131.10(h)(2). The Board is examining such limits in Subdocket B. Therefore, the Board finds that the lower North Shore Channel is a segment of CAWS that can attain the CWA goal of swimmable in the foreseeable future.

[7] The District has undertaken the TARP to "alleviate the polluting effects of CSOs and to provide relief from local flooding by providing holding capacity for 18 billion gallons of combined sewage in its tunnels and reservoirs until it can be pumped to the WRP for full treatment." Attach. B at 3-14. TARP is being implemented in two phases. TARP Phase I, which consists of the construction of 109.4 miles of deep tunnel with a storage capacity of 2.3 billion gallons was completed in 2006. PC 565, Item 11 at 1.

However, the upper North Shore Channel has documented issues with stagnant waters and low flow. The Board notes that USEPA's determination that some segments could achieve primary contact recreation did not include the upper North Shore Channel. Because of the significant issues with low flow and stagnant waters the Board finds that the designated use for the upper North Shore Channel of Incidental Contact Recreation is more appropriate as the flow conditions cannot be rectified in the foreseeable future. The Board recognizes that the current use designation for this segment is General Use waters; however, the record demonstrates that the upper North Shore Channel has never achieved that designated use. The Board finds that the UAA Factor Three establishes that Primary Contact Recreation cannot be achieved in the upper North Shore Channel in the foreseeable future. Therefore Board proceeds to second notice with the upper North Shore Channel use designation unchanged from first notice.

North Branch of the Chicago River

The North Branch of the Chicago River segment is 7.7 miles long, extending from the confluence with the North Shore Channel to the junction of the Chicago River. Attach B at 3-6. The North Branch of the Chicago River is often divided into two sections, the upper and lower North Branch of the Chicago River. The upper North Branch of the Chicago River extends 2.6 miles from North Shore Channel to the North Avenue Turning Basin. In this section, the channel has been either straightened or relocated into straight segments with steep earthen side slopes. The width is generally 90 feet with a depth in the center of the channel of approximately 10 feet. *Id.* Land use along the upper North Branch of the Chicago River consists of a mix of commercial, industrial, residential and park land/open space. The North Branch of the Chicago River is one of the few segments in the Chicago Area Waterway System with single family homes bordering the waterway. *Id.*

The lower North Branch of the Chicago River is 5.1 miles long extending from the North Avenue Turning Basin to the junction of the Chicago River. Although the lower North Branch of the Chicago River follows its original course, the channel has been deepened and widened in this area. The width of this reach varies from 150- to 300-feet with a depth between 10 to 15 feet. In several reaches, the banks consist of vertical dock walls in various states of disrepair. In addition to upper and lower North Branch of the Chicago River, the North Branch of the Chicago River includes the North Branch Canal, which is a one mile long alternate route that splits from the upper North Branch of the Chicago River around Goose Island and connects to the North Avenue Turning Basin. Attach B. at 3-7. The canal's width ranges from 80 to 120 feet with a depth of 4 to 8 feet. Both the upper and lower North Branch of the Chicago River are currently designated as Secondary Contact and Indigenous Aquatic Life Use.

A recreational and navigation use survey of the North Branch of the Chicago River was conducted over a period of 16 days. Attach B at 4-44 to 4-45. The survey found that the predominant recreational uses were power boating, fishing, and hand powered boating (canoeing, sculling, etc.). *Id.* at 4-45. The survey did not observe primary contact recreation. The North Branch of the Chicago River is also used for small craft commercial navigation downstream of Addison Street. The survey found multiple private and public docks, as well as kayak and canoe rental facilities on the North Branch of the Chicago River.

As with the North Shore Channel, the flow of water in the North Branch of the Chicago River is affected by draw-downs to accommodate anticipated storm flow. SR at 32. Several reaches of the North Branch of the Chicago River consist of banks with vertical dock walls or steep earthen side slopes. The UAA notes that the bacterial water quality in the North Branch of the Chicago River is affected by the CSOs, urban runoff, and WRP discharge. Bacteria concentrations in the Chicago River System were evaluated using data from the eight monthly grab sampling locations operated by the District. The frequency distribution for *E.coli* results from March through November at stations in the North Branch of the Chicago River show bacteria levels above the screening levels for limited contact recreational use. The data show some improvement in bacterial quality downstream past the confluence with the Chicago River. Attach B. at 4-28, 29 and 50.

USEPA notes that public access to the North Branch of the Chicago River includes District and Forest Preserve property. PC 584 at 5. Furthermore, there are boat launches, a walk/bike path and the North Branch of the Chicago River serves as training site for crew teams. *Id*. Thus, USEPA argues that lack of public access is not a valid reason for finding that the CWA goal of swimmable is not attainable. *Id*.

USEPA argues that barge traffic is rare on part of this segment as there are no federal navigation channels upstream of Addison Street. PC 584 at 6. However, even in the portion of the North Branch of the Chicago River downstream of Addison Street, recreation is occurring. *Id*. As to the issue of draw down impacting the flow, USEPA observes that only one witness described a safety issue regarding draw downs and that took place in the Lockport Lock and Dam. PC 584 at 7.

The District asks that the Board consider designating the North Branch of the Chicago River from Ashland Avenue to the confluence with the South Branch of the Chicago River at Wolf Point (Lower North Branch of the Chicago River) as Non-Contact Recreation. PC 498 at 2. The District concedes that the Board found evidence of Incidental Contact Recreation, but argues that the Board did not properly apply a definition of "existing uses" in finding that Incidental Contact Recreation was occurring. *Id*.

Board Finding on North Branch of the Chicago River. As stated previously, unless one of the six UAA factors can be demonstrated to occur, the Board must find that the CWA goal of swimmable is attainable. The Board at first notice determined that UAA Factor Three prevented attaining the CWA goal of swimmable by examining issues of water quality, flow conditions, physical barriers and future attainability of recreation in this segment. The USEPA has convinced the Board that those issues do not impede attainment of the CWA goal of swimmable in this segment. The USEPA's arguments and citation to evidence in the record convince the Board that the record does not support the Board's reliance on the UAA Factor Three to find that the CWA goal was not achievable. Therefore, the Board establishes a recreational use goal of Primary Contact Recreation to ensure that the CWA goal of swimmable is attained on the North Branch of the Chicago River.

As with the North Shore Channel, USEPA points the Board to numerous instances in the record establishing that public access to the North Branch of the Chicago River is feasible. Furthermore, the UAA establishes that substantial recreation is taking place on the North Branch of the Chicago River. And though the District argues that the Board did not properly apply the definition of "existing uses"; the Board disagrees. The Board specifically finds that recreation is occurring in the North Branch of the Chicago River.

The Board does note that CSOs along with the upstream discharge from the Northside WRP could be an impediment to reaching the CWA goal in the North Branch of the Chicago River. However, as with the North Shore Channel, these are conditions which are being addressed through TARP and could be addressed through effluent limits (*see* 40 C.F.R. § 131.10(h)(2)), that the Board is examining in Subdocket B.

Likewise, the Board finds that the District's concern about dangerous flow conditions due to draw downs are not supported by the record. Furthermore, the District could implement safety features if concerned about the impact of draw downs.

Chicago River

The Chicago River begins at the confluence of the North and South Branches and extends 1.5 miles east to the ending point at the Chicago River Lock and Controlling Works. Attach B. at 3-5. The Chicago River's width ranges from 200 to 250 feet with a depth ranging from 20 to 26 feet. The banks consist primarily of vertical walls, however, at the confluence of the three branches there is a sloped earthen riverbank. *Id.* The UAA notes that the banks are developed with high-rise office buildings, residential buildings, and open space that consist of hardscape plazas and cafes. Recreational navigation boating occurs in the Chicago River, with many excursion and water taxi boats operating on the downtown waterway. In addition to the excursion boats, the river is used by several rowing teams for training in the early morning hours. The river also has light commercial barge traffic. In addition to boating and sightseeing, many Chicagoans use the Chicago River for angling. *Id.* Other than boating and fishing, the UAA recreational and navigation use survey did not observe primary contact recreational activities in the Chicago River segment. *Id.* at 4-46.

The Chicago River is currently designated as General Use waters, and generally has observed bacteria levels that are lower than many other CAWS segments. On occasion the flow in the North Branch of the Chicago River will enter into the Chicago River when the force of the discretionary diversion and lock flow is not sufficient to overcome instream density current causing exceedance of the General Use bacteria criteria under 35 Ill. Adm. Code 302. *Id.* The frequency distribution for *E.coli* results from March through November at the sampling station in the Chicago River show bacteria levels below the screening level for limited contact recreational use (1030 cfu/100 mL). Attach B. at 4-50. The UAA notes that Illinois' CWA Section 303(d) list of impaired waters includes the Chicago River as being impaired for recreational uses. PC 298 citing Exh. 34 and 45. The flow of water in the Chicago River is also affected by the District's management of flow in the CAWS (draw downs) to accommodate anticipated storm flow.

USEPA did not comment on this segment of the CAWS specifically in either of the first notice comments. *See generally* PC 497, 584.

The District asks that the Board consider designating the Chicago River as Non-Contact Recreation. PC 498 at 2. The District concedes that the Board found evidence of Incidental Contact Recreation, but argues that the Board did not properly apply a definition of "existing uses" in finding that Incidental Contact Recreation was occurring. *Id.*

Board Finding on the Chicago River. The Chicago River is currently designated as a General Use water, although the UAA found no incidences of primary contact in the Chicago River. However, the Board is reluctant to lower the current designated use, absent some extraordinary showing that the use cannot be met. That is not present here. The evidence establishes that recreational activities occur frequently, though swimming was not observed in the UAA. The Board is not convinced that any UAA Factor has been sufficiently established to lower the existing use of the Chicago River. Therefore, the Board will amend the recreational use designation to be consistent with the Primary Contact Recreational use standard that is proposed for the remainder of the applicable CAWS segments, but this will not lower the current use.

South Branch of the Chicago River

The South Branch of the Chicago River extends from the confluence with the Chicago River and the North Branch of the Chicago River to the CSSC at the Damen Avenue Bridge. Generally, the 4.5 mile long segment follows its original course, except for a short reach which was relocated in 1928 to eliminate a major bend. The South Branch of the Chicago River varies in width from 200 to 250 feet and the depth ranges from 15 to 20 feet. The banks on this segment mostly consist of vertical dock walls. Attach B. at 3-4. The riparian land use is mainly commercial and industrial. *Id.* at 4-44. There are several marinas on the South Branch of the Chicago River that provide launch sites for canoes and boats. The UAA recreational and navigation use survey found power boating, fishing, and hand powered boating to be the predominant recreational activities in the South Branch of the Chicago River. Additionally, commercial navigation was observed in area where USACE maintains the channel. *Id.* at 4-47. The recreational survey did not observe any primary contact activities in the South Branch of the Chicago River. This segment is currently designated as Secondary Contact and Indigenous Aquatic Life use.

As with the other segments, the bacterial water quality was evaluated by considering the frequency distribution of *E.coli* sampling results from March through November. The results from the stations in the South Branch of the Chicago River show bacteria levels above the limited contact recreational use screening level of 1030 cfu/100mL. The UAA notes that the South Fork of the South Branch of the Chicago River (Bubbly Creek) adds an additional bacterial load on the Chicago River System with *E.coli* concentrations above 2740 cfu/100mL 22 percent of the time. *Id.* at 4-50. Flow conditions in the South Branch of the Chicago River are affected by draw downs to accommodate anticipated storm flow in the CAWS. SR at 32.

USEPA notes that public access to the South Branch of the Chicago River includes two Chicago Park District parks and two other access points. PC 584 at 5. USEPA argues that for that reason the CWA goal of swimmable is no longer unattainable. *Id*. USEPA argues that even with barge traffic, recreation is occurring on the South Branch of the Chicago River and based on that, the CWA goal of swimmable is attainable. PC 584 at 6. As to the issue of draw downs impacting the flow, USEPA observes that only one witness described a safety issue regarding draw downs and that took place in the Lockport Lock and Dam. PC 584 at 7.

The District asks that the Board consider designating the South Branch of the Chicago River as Non-Contact Recreation. PC 498 at 2. The District concedes that the Board found evidence of Incidental Contact Recreation, but argues that the Board did not properly apply a definition of "existing uses" in finding that Incidental Contact Recreation was occurring. *Id*.

Board Finding on South Branch of the Chicago River. The record contains evidence of public access and ample evidence that recreating is already occurring. As stated previously, unless one of the six UAA factors can be demonstrated to occur, the Board must find that the CWA goal of swimmable is attainable. The Board at first notice determined that UAA Factor Three prevented attaining the CWA goal of swimmable by examining issues of water quality, flow conditions, physical barriers and future attainability of recreation in this segment. The USEPA has convinced the Board that those issues do not present an impediment to attaining the CWA goal of swimmable in this segment. The USEPA's arguments and citation to evidence in the record convince the Board that the record does not support the Board's reliance on the UAA Factor Three to find that the CWA goal was not achievable. Therefore, the Board will establish a recreational use goal of Primary Contact Recreation to ensure that the CWA goal of swimmable is attained on the South Branch of the Chicago River.

The USEPA has pointed to specific access points for the public as well as noting that barge traffic has not limited the current use of the South Branch of the Chicago River for recreation. And though the District argues that the Board did not properly apply the definition of "existing uses"; the Board disagrees. The Board specifically finds that recreation is occurring in the South Branch of the Chicago River.

The record indicates that the South Branch of the Chicago River has elevated bacteria levels; however these are conditions which are being addressed through TARP and could be addressed through effluent limits. *See* 40 C.F.R. § 131.10(h)(2)). As stated above, effluent limits will be addressed in Subdocket B.

Likewise, the Board finds that the District's concern about dangerous flow conditions due to draw downs are not supported by the record. Furthermore, the District could implement safety features if concerned about the impact of draw downs.

South Fork of South Branch of the Chicago River (Bubbly Creek)

The South Fork, also known as Bubbly Creek, extends 1.3 miles from the Racine Avenue Pumping Station to the junction with the South Branch of the Chicago River. The channel's width varies from 100 to 200 feet with a depth ranging from 3 to 13 feet. The channel banks

consist of steeply sloped earthen or rock material, and vertical dock walls in some sections. Attach B at 3-4. Riparian land use is predominantly industrial and commercial up to 35th Street and transitions to residential and open space north of 35th Street. *Id.* The recreational uses on South Fork include power boating and canoeing. This segment is also used for commercial navigation. *Id.* at 4-48. The UAA did not observe primary contact recreation in the South Fork. *Id.*

The South Fork is mostly stagnant with virtually no natural flow into the system other than the CSO discharge from the District's Racine Avenue Pumping Station. The UAA notes that sediments in South Fork are significantly contaminated as a result of historic discharges from the stockyards and other industries, plus organic matter originating from the Racine Avenue Pumping Station. Attach B at 3-5. The UAA notes that the Illinois' CWA Section 303(d) list includes South Fork as being impaired by high pH, low D.O. and total phosphorus. The major contributors to the impairments are CSOs along the South Fork, with the majority of the flow coming from the Racine Avenue Pumping Station. *Id.* The UAA also notes that the bacterial water quality measured in terms of *E.coli* concentration show levels above the screening level for Non-contact Recreation Use (2740 cfu/100 mL). *Id.* at 4-50.

USEPA did not comment on this segment of the CAWS specifically in either of the first notice comments. *See generally* PC497, 584.

The District asks that the Board consider designating the South Fork of the South Branch of the Chicago River as Non-Contact Recreation. PC 498 at 2. The District concedes that the Board found evidence of Incidental Contact Recreation, but argues that the Board did not properly apply a definition of "existing uses" in finding that Incidental Contact Recreation was occurring. *Id.*

Board Finding South Fork of South Branch of the Chicago River (Bubbly Creek).
In light of the above, the Board finds that the South Fork of South Branch of the Chicago River is significantly impacted by human caused conditions and sources of pollution that preclude primary contact recreation in accordance with the UAA Factor Three. The human caused conditions that prevent attainment of the CWA goal of swimmable include steep banks, vertical dock walls, power boating, and commercial barge traffic. Water quality in the South Fork is significantly impacted by stagnant conditions and historically contaminated sediments. The combination of all these impediments does not support primary contact recreational uses. These conditions, the Board notes, are irreversible in the foreseeable future. Additionally, full contact recreational activities like swimming, diving or jumping have not been observed on this segment. Thus, the Board finds that the proposed designation of Incidental Contact Recreation Use is appropriate for the South Fork of South Branch of the Chicago River.

The District argues that the Board did not properly apply the definition of "existing uses" the Board disagrees. The Board specifically finds that recreation is occurring on the South Fork of South Branch of the Chicago River.

Chicago Sanitary and Ship Canal (CSSC)

The CSSC extends 31.1 miles from the confluence with the South Branch of the Chicago River at the Damen Avenue Bridge to Des Plaines River (near Lockport Powerhouse and Lock). The canal consists of vertical concrete walls and steep rockfill embankments with an average width of 200- to 300-feet and depth of 27-to 50-feet. Attach B at 3-2 and 3-3. The canal was constructed primarily for transporting human waste and industrial pollutants away from Lake Michigan, and providing a commercial navigation conduit between the Great Lakes and the Mississippi River. *Id.* at 3-2. The CSSC is currently designated as Secondary Contact and Indigenous Aquatic Life use. For purposes of the proposed recreational use designation, the CSSC was divided into two segments based on the physical characteristics of the canal and existing uses: the Upper CSSC, which extends from the South Branch of the Chicago River to Calumet-Sag Channel; and the Lower CSSC, which begins at Calumet-Sag Channel and ends at the CSSC's confluence with Des Plaines River.

The land use along the CSSC is predominantly industrial and commercial. Two coal-fired power plants, the Fisk and Crawford Generation Stations, are located downstream of Western Avenue. The stations withdraw and discharge water from the CSSC for non-contact cooling purposes. Downstream of the power stations, the District's Stickney WRP, with an average design discharge of 1.2 billion gallons per day, discharges undisinfected effluent to the CSSC between Cicero and Harlem Avenues. Attach B. at 3-3. The Will County Generating Station near Romeoville, which is downstream of the Stickney WRP, also uses the CSSC for cooling purposes. Further downstream, the CSSC receives undisinfected effluent from the District's Lemont WRP which has an average design flow of 2.3 mgd. The UAA notes that in addition to the power stations, several industrial facilities along the CSSC utilize the CSSC for cooling purposes and contribute stormwater runoff. *Id.*

While the canal's riparian land use is dominated by industrial and commercial use, the UAA notes that in the upper reaches towards the South Branch of the Chicago River, the Chicago Park District is constructing a motorized boat launch at Western Avenue. Also, a half-mile river edge path and area for bank fishing is located just downstream of the South Branch turning basin. *Id.* A 28-day recreation and navigation use survey of the CSSC conducted between June 17 and August 28, 2003, observed no primary contact activities in the CSSC. *Id.* at 4-69 and 4-70. The primary recreational activities observed were fishing and power boating. The survey also observed commercial navigation.

Regarding the lower CSSC, the IEPA states that the lower sections of CSSC downstream of the confluence with the Calumet-Sag Channel consist of the most severe physical barriers against recreational uses. In addition to deep-draft, vertical-walled shipping channels, the IEPA notes that there are no designated points for public access. SR at 33. Further, the Lockport Lock and Dam, and the Invasive Species Dispersal Barrier are located in the lower CSSC. *Id.*

The Illinois 2004 CWA Section 305(b) report lists the CSSC as potentially impaired for polychlorinated biphenyls (PCBs) in fish tissue, ammonia (unionized), D.O., total nitrogen, oil and grease, total phosphorus and iron. The potential sources of impairment include flow regulation/modification, municipal point sources, CSO, urban runoff during storm events,

channelization and hydro-modification. Attach B at 3-2. Bacteria concentrations in the CSSC were evaluated in the UAA by using data from the seven instream grab sampling locations. The frequency distribution for *E.coli* from March through November indicates that the bacteria levels exceed the screening levels for limited contact recreation in the CSSC. *Id.* at 4-28. The bacteria levels are influenced by the undisinfected wastewater effluent from the Stickney WRP. The results show that bacteria concentration decreases as the water moves down the CSSC. *Id.* at 4-73. The record also shows that bacterial levels in the waterway exceed draft federal water quality criteria following CSO events and downstream of WRP effluent most all other times. SR at 35.

As with the other segments of the CAWS, the flow of water in the CSSC is affected by the draw downs effectuated in order to accommodate anticipated storm flow. As noted previously, the lowering of water depth in the Lockport basin to accommodate anticipated storm flow results in depth changes of 4 to 6 feet and rapid changes in flow velocity in a 24 to 48 hour period. SR at 32-33.

The District asks that the Board consider designating the CSSC as Non-Contact Recreation. PC 498 at 2. The District concedes that the Board found evidence of Incidental Contact Recreation, but argues that the Board did not properly apply a definition of "existing uses" in finding that Incidental Contact Recreation was occurring.

Board Finding on CSSC. The Board finds that the record supports the proposed Incidental Contact Recreation designation for the Upper CSSC. This segment of the CSSC is significantly impacted by human caused conditions and sources of pollution that preclude primary contact recreation in accordance with the UAA Factor Three. These conditions include steep banks, vertical dock walls, power boating and commercial barge traffic. Further, the water quality does not support primary contact recreational uses. These conditions, the Board notes, are irreversible in the foreseeable future. Additionally, full contact recreational activities like swimming, diving or jumping were not observed on this segment. However, as noted above, the record indicates that efforts are being made to promote recreational boating activities in the upper CSSC towards the South Branch of the Chicago River. Thus, the Board finds that the proposed designation of Incidental Contact Recreation Use is appropriate for the Upper CSSC.

Regarding the Lower CSSC, the Board finds that the record supports the proposed Non-Recreational Use designation. The Lower CSSC is not only impacted by human caused conditions and sources of pollution, this segment is severely impacted by hydrologic modification, physical barriers and unique anthropogenic features that preclude primary contact recreation in accordance with the UAA Factors Three and Four. The Lower CSSC has some of the most severe physical barriers against recreational uses. In addition to deep-draft, vertical-walled shipping channels, the there are no designated points for public access. The Lockport Lock and Dam, and the electrified Invasive Species Dispersal Barrier are located in the lower CSSC. The Board finds that the existing conditions in the Lower CSSC are irreversible in the foreseeable future. Full contact recreational activities like swimming, diving or jumping were not observed on this segment. Therefore, the Board finds that the proposed designation of Non-Recreational Use is appropriate for the Lower CSSC.

Calumet-Sag Channel

The Calumet-Sag Channel extends 16.2 miles upstream from the confluence with the CSSC to the Little Calumet River. The Calumet-Sag Channel is a man-made trapezoidal channel that is 225-feet wide and approximately 10-feet deep. Attach B at 3-9. In some sections, the north bank of the channel has a vertical wall. The channel has a nearly continuous narrow band of cottonwood, willow, and box elder trees along each bank of the reach that blocks views of residential and industrial land uses from the waterway. The Palos-Sag Forest Preserve, one of the largest contiguous open spaces in Northeastern Illinois, exists along the banks of the channel. *Id.* The IEPA has proposed that Calumet-Sag Channel be designated as Incidental Contact Recreation.

A 17-day recreation and navigation use survey of the Calumet-Sag Channel found that the predominant uses were fishing and power boating. The survey also observed commercial navigation in areas maintained by the USACE. The survey noted two boat launches in the Villages of Alsip and Worth with approximately 11,000 boat launches during recreational season. Attach B at 4-85. The UAA notes that the launches are mainly used for power boats and to a much lesser extent for jet skis. *Id.* The UAA notes that paddling boat activity is very limited on the Calumet-Sag Channel due to the heavy boat traffic by commercial and recreational boats.

The UAA notes that the Calumet-Sag Channel's water quality impairments include low D.O., PCBs, and physical habitat impairment. Attach B at 3-10 citing IEPA 2004. The causes of impairment include CSOs, industrial sources, municipal point sources, urban stormwater runoff, hydro-modification, channelization, habitat modification, removal of riparian vegetation, and contaminated sediments. *Id.* The bacteria concentrations in the Calumet System were evaluated using data from the seven instream grab sampling locations operated by the District along with IEPA's sampling of Lake Calumet in 2004. The geometric mean concentrations of *E.coli* from March through November shows that bacteria levels in the Calumet-Sag Channel is influenced by the bacterial load from the Little Calumet River. *Id.* at 4-29 and 4-88. While the *E.coli* geometric mean concentrations are above the screening level for limited contact recreation (1030cfu/100mL) more than 25 percent of the time in the upper reaches of the Calumet-Sag Channel, the *E.coli* levels decline downstream. *Id.* at 4-28. At Cicero Avenue, the *E.coli* concentrations are less than the screening level of 1030 cfu/100mL more than 75 percent of the time.

As with the other segments of the CAWS, the flow of water in the Calumet-Sag Channel is affected by the draw-downs effectuated to accommodate anticipated storm flow that result in rapid changes in flow velocity and depth during precipitation events.

USEPA disagrees with the IEPA and argues that the CWA goal of swimmable is attainable in the Calumet-Sag Channel. PC 584 at 1. USEPA notes that the District and the Forest Preserve District of Cook County own a substantial portion of the land adjoining the Calumet-Sag Channel, which could allows for public access. PC 584 at 5. Furthermore, there are at least two public boat launches on the Calumet-Sag Channel, which has also served as a site

for crewing events. Thus, USEPA argues that lack of public access is not a valid reason for finding that the CWA goal of swimmable is not attainable . *Id.*

USEPA notes that even though there is barge traffic in the area, recreation is occurring. *Id.* As to the issue of draw down impacting the flow, USEPA observes that only one witness described a safety issue regarding draw downs and that took place in the Lockport Lock and Dam. PC 584 at 7.

The District asks that the Board consider designating the Calumet-Sag Channel as Non-Contact Recreation. PC 498 at 2. The District concedes that the Board found evidence of Incidental Contact Recreation, but argues that the Board did not properly apply a definition of "existing uses" in finding that Incidental Contact Recreation was occurring. *Id.*

Board finding on the Calumet-Sag Channel. The record contains evidence of public access and ample evidence that recreating already occurs. For example, two boat launches in the Villages of Alsip and Worth had approximately 11,000 boat launches during recreational season. As stated previously, unless one of the six UAA factors can be demonstrated to occur, the Board must find that the CWA goal of swimmable is attainable. The Board at first notice determined that UAA Factor Three prevented attaining the CWA goal of swimmable by examining issues of water quality, flow conditions, physical barriers and future attainability of recreation in this segment. The USEPA has convinced the Board that those issues do not present an impediment to attaining the CWA goal of swimmable in this segment. The USEPA's arguments and citation to evidence in the record convince the Board that the record does not support the Board's reliance on the UAA factor three to find that the CWA goal was not achievable. Therefore, the Board will establish a recreational use goal of Primary Contact Recreation to ensure that the CWA goal of swimmable is attained on the Calumet-Sag Channel.

The USEPA has pointed to specific access points for the public as well as noting that barge traffic has not limited the current use of the Calumet-Sag Channel for recreation. Furthermore, the evidence in the record establishes that even more recreation and access for the public is planned on the Calumets in the near future. *See* Exh. 345. The District argues that the Board did not properly apply the definition of "existing uses," but the Board disagrees. The Board finds that recreation is occurring in the Calumet-Sag Channel.

The record indicates that the Calumet-Sag Channel has elevated bacteria levels. However these are conditions which are being addressed through TARP and could be addressed through effluent limits (*see* 40 C.F.R. § 131.10(h)(2)) that the Board is examining in Subdocket B.

Likewise, the Board finds that the District's concern about dangerous flow conditions due to draw downs are not supported by the record. Furthermore, the District could implement safety features if concerned about the impact of draw downs.

Little Calumet River

The Little Calumet River extends 6.9 miles from the confluence with the Calumet-Sag Channel to the confluence with both Calumet River and Grand Calumet near the O'Brien Lock and Dam. Attach B at 3-10. The Little Calumet River has been altered from the natural condition by increasing the width and depth and changing the alignment of the river. The width varies from 250 to 350-feet and the depth in the center on the channel is approximately 12-feet. *Id.* The UAA notes that the majority of the channel banks are earthen side slopes with a few reaches of vertical dock walls. *Id.* citing MWRDGC 2001. The riparian land use includes heavy industry, with some open space and forest preserve areas nearby. The District's Calumet WRP, which has an average design flow of 354 mgd, discharges the effluent to the Little Calumet River.

The river is extensively used for commercial and recreational boating. The UAA notes that shoreline angling is limited due to the lack of access points and open space. Attach B at 3-10 citing Gobster and Westphal 1998. Numerous boat launches, private docks, taverns, and restaurants line the Little Calumet just south of the O'Brien Lock and Dam. A recreation and navigation use survey of the Little Calumet found fishing and power boating to be the predominant recreational uses. *Id.* at 4-84. The survey found an instance of primary contact activity, which includes swimming, diving or jumping. The survey also observed commercial navigation. *Id.*

The UAA notes that according to the Illinois 2004 CWA Section 305(b) report, the Little Calumet River's water quality impairments include iron, D.O., PCBs, and mercury, which result in a fish consumption advisory for this reach. Attach B at 3-10 citing Gobster and Westphal 1998. As noted earlier, the bacteria concentrations in the Calumet System were evaluated using data from the seven instream grab sampling locations operated by the District along with IEPA's sampling of Lake Calumet in 2004. The geometric mean concentrations of *E.coli* from March through November shows that bacteria levels in the Little Calumet River is impacted by the undisinfected effluent from the District's Calumet WRP. *Id.* at 4-29. The *E.coli* concentrations downstream of the WRP discharge point is above the screening level of 1030 cfu/100 mL for limited contact recreation. *Id.* However, the *E.coli* levels fall below the screening level downstream in the Calumet-Sag Channel at Cicero Avenue.

USEPA argues that the CWA goal of swimmable is attainable in the Little Calumet River. PC 584 at 1. USEPA notes that the District and the Forest Preserve District of Cook county own a substantial portion of the land adjoining the Calumet-Sag Channel, which could allow for public access. PC 584 at 5. Furthermore, there are at least nine public boat launches on the Little Calumet River. PC 584 at 6. Thus, USEPA argues that lack of public access is not a valid reason for finding that the CWA goal of swimmable is not attainable. *Id*.

USEPA notes that even though there is barge traffic in the area, recreation is occurring. *Id*. USEPA observes as to the issue of draw down impacting the flow, only one witness described a safety issue regarding draw downs and that took place in the Lockport Lock and Dam. PC 584 at 7.

Board Finding on the Little Calumet River. The record contains evidence of public access and ample evidence that recreating is already occurring. For example, there are nine public boat launches on the Little Calumet River. Numerous private docks, taverns, and restaurants line the Little Calumet just south of the O'Brien Lock and Dam. Fishing and power boating are predominant recreational uses, but a recreational survey observed one instance of primary contact activity, which includes swimming, diving or jumping. As stated previously, unless one of the six UAA factors can be demonstrated to occur, the Board must find that the CWA goal of swimmable is attainable. In this instance, the USEPA's arguments and citation to evidence in the record convince the Board that the record does not support the Board's reliance on the UAA Factor Three to find that the CWA goal was not achievable. Therefore, the Board establishes a recreational use goal of Primary Contact Recreation to ensure that the CWA goal of swimmable is attained on the Little Calumet River.

The USEPA has pointed to specific access points for the public as well as noting that barge traffic has not limited the current use of the Little Calumet River for recreation. Furthermore, the evidence in the record establishes that even more recreation and access for the public is planned on the Calumets in the near future. *See* Exh. 345.

The record does indicate that the Little Calumet River has elevated bacteria levels. However these are conditions which are being addressed through TARP and could be addressed through effluent limits (*see* 40 C.F.R. § 131.10(h)(2)), that the Board is examining in Subdocket B.

Grand Calumet River

The Grand Calumet River originates in Indiana and flows west through Illinois for approximately three miles before Grand Calumet River empties into the Little Calumet River. The UAA notes that the Grand Calumet River is very shallow, with the average depth around 2-feet and contains heavily contaminated sediments that originated from the industrial complexes and CSOs in Indiana. *Id.* at 3-11. While recreational activity on the Grand Calumet River is extremely limited due to the shallow depth, fishing is common along the banks at the confluence of the Grand Calumet River and the Little Calumet River. A one-day recreation and navigation use survey of the Grand Calumet River found fishing to be the only recreational activity. *Id.* at 4-83.

Board Finding on Grand Calumet River. The Board finds that the record supports the proposed Incidental Contact Recreational Use designation for the Grand Calumet River. The segment of Grand Calumet River in Illinois is significantly impacted by human caused conditions and sources of pollution that preclude primary contact recreation in accordance with the UAA Factor Three. The contaminated sediments coupled with the shallow depth of the stream prevent CWA goal of swimmable in this segment. Further, the Board notes that existing conditions are irreversible in the foreseeable future. Additionally, full contact recreational activities like swimming, diving or jumping were not observed on this segment in a one-day survey. Thus, the Board finds that the proposed designation of Incidental Contact Recreation Use is appropriate for the Grand Calumet River.

Calumet River

The Calumet River extends from the confluence with the Grand Calumet River to Calumet Harbor in Lake Michigan. Attach B at 3-11. The IEPA divided the Calumet River into two reaches: the north reach, which begins at Lake Michigan and ends at Torrance Avenue crossing; and the south reach, which begins at Torrance Avenue crossing and ends at Grand Calumet River. SR at 29. The river is approximately 8 miles in length, with an average width of 450-feet and depth of 27 feet. The channel banks consist of sheet-pile, concrete walls and rip-rap. Attach B at 3-11. The south reach of the Calumet River includes the O'Brien Lock and Controlling Works, which is used to transfer watercraft back and water diversion between the Lake Michigan and the Little Calumet side of the Calumet River. SR. at 29. At present, the north reach of the Calumet River is designated as General Use and the south reach is designated as Secondary Contact and Indigenous Aquatic Life use.

The UAA observes that the river has been heavily dredged to support barge operations and the industries that are found along the banks. Further, the UAA states that recreation and navigation use survey was not conducted along the Calumet River due to dangers of traveling the area. *Id.* at 4-86. However, the UAA notes that the river segment is used for fishing, commercial navigation, and recreational boaters accessing Lake Michigan. Small non-motorized boat recreation is very limited due to the hazardous conditions created by the heavy barge traffic and the limited access points. According to the Illinois 2004 CWA Section 305(b) report, the Calumet River is impaired by PCBs, silver, high pH, total phosphorus, and fecal coliform bacteria. Attach B at 3-11. The potential sources of impairment include industrial point sources, CSOs, and urban runoff during storm events.

Board Finding on the Calumet River. Based on the existing conditions and current uses, the Board finds that the proposed use designation of Non-contact Recreation is appropriate for the north reach of the Calumet River. The Board finds that the human caused conditions and sources of pollution coupled with the impacts physical barriers and hydrologic modifications preclude primary or Incidental Contact Recreation in the north reach of Calumet River in accordance with the UAA Factors Three and Four. Further, the Board finds the existing conditions in the north reach are irreversible in the foreseeable future. Additionally, full contact recreational activities like swimming, diving or jumping were not observed on this reach. However, since the north reach of the Calumet River is used for passage of recreational boats to Lake Michigan, the Board finds that the proposed Non-contact Recreation Use designation is appropriate for the north reach of the Calumet River.

The Board recognizes that this is a downgraded use from the current General Use designation. However, the Calumet River never achieved General Use designation and therefore, the Board may remove the Calumet River from General Use as it is not an existing use. *See* 40 C.F.R. § 131.10(g).

Regarding the south reach of Calumet River, the Board notes that while existing conditions are similar to the north reach, the record indicates that recreational boating and fishing occurs in this segment. Therefore, the Board finds that the proposed designation of Incidental Contact Recreation is justified to protect any existing incidental contact activities.

Lake Calumet

Lake Calumet includes the contiguous waters west of Calumet River. The lake receives flow from several storm ditches and sewers and from surrounding wetlands. SR at 30. The UAA notes that the historical footprint of Lake Calumet is surrounded by many contaminated sites subject to various voluntary, federal, state and local agency cleanup projects. Attach B at 3-11 and 3-12. The UAA notes that Lake Calumet has limited access and may be accessed by boat only through the Chicago Park District launch on Lake Michigan via an access point at Stony Island Avenue through the O'Brien Lock and Dam on the Calumet River. Attach B at 4-105. The recreational uses in the lake include fishing (shore line and boats) and canoeing. *Id.* 4-86. The UAA notes that Lake Calumet meets the bacterial water quality screening criteria for limited contact recreation, except during early summer at the east side of the lake where bacteria levels are higher due to large colony of gulls breeding in the area. *Id.* at 1-9. Data collected by IEPA in the summer of 2004 indicate that E. *coli* levels were highest in areas of active gull and waterfowl use and lowest in the areas of non-waterfowl use.

Board Finding on Lake Calumet. The Board finds that the record supports the proposed Incidental Contact Recreation Use designation for the Lake Calumet. The UAA states that the high bacterial counts due to natural sources may prevent Lake Calumet from becoming a whole-body contact recreation waterbody. However, IEPA relied on UAA Factor Three, which addresses human caused conditions and sources of pollution, to designate Lake Calumet as Incidental Contact Recreation Use. In addition to issues concerning bacterial water quality, Lake Calumet is surrounded by many contaminated sites subject to various voluntary, federal, state and local agency cleanup projects. The Board also notes that Lake Calumet has very limited access for shoreline activity. Further, the southern portion of the lake consists of primarily deep-draft channels, while the northern portion of the lake is shallow (2-6 feet) with a clay bottom. These conditions are not conducive to primary contact recreation. Further, primary contact recreation is not an existing use in the lake. In light of these factors, the Board finds that the proposed designation of Incidental Contact Recreation Use is appropriate for Lake Calumet.

LDPR – Brandon Road Pool

The LDPR UAA study describes the Brandon Road Pool segment of the LDPR as a 4-mile man-made channel beginning at the confluence of the Des Plaines River and the CSSC and ending at the Brandon Road Lock and Dam. The channel is approximately 300 feet wide with varying depth between 12-15 feet. The channel is bordered on the sides by masonry, concrete or sheet pile embankment. Attach A at 1-7. The UAA notes that the effluent discharges from upstream WRPs constitute almost 90 percent of the flow in the LDPR. Consequently, the Lower Des Plaines is characterized as an effluent dominated stream. *Id.* at 1-8.

The Brandon Pool segment is part of the Upper Illinois Waterway, which is one of the busiest inland commercial navigation systems in the nation. The Illinois Waterway includes the Illinois River, portions of the Des Plaines River and the CSSC. *Id.* At present this LDPR reach is designated as Secondary Contact Recreation and Indigenous Aquatic life. The entire waterway is completely channelized to a minimum depth of 9 feet and is used mostly for

transport of bulk commodities. *Id.* Other recreational activities such as swimming, water skiing, tubing, or canoeing were not observed in the Brandon Pool. Attach A at 7-39. Further, water access to the river along most of the Brandon Pool is prevented by steep concrete and sheet pile embankments. The main recreational facility on the Brandon Pool, Bicentennial Park in Joliet, is not designed for primary contact recreation. *Id.* The study also notes that the existing bacterial water quality does not meet the Illinois standard for primary contact recreation. Finally, the waterway serves as a major shipping lane that occupies the entire width of the pool, raising serious safety concerns for activities such as swimming and water skiing. *Id.* at 7-41.

Board Finding on LDPR – Brandon Road Pool. The Board finds that the Brandon Pool is significantly impacted by human caused conditions and sources of pollution along with hydrologic modifications that preclude recreational activities in accordance with the UAA Factors three and four. Specifically, the Board notes that the vertical sheet pile and concrete embankment coupled with commercial navigation traffic limits recreational activities in this segment. The UAA notes when two tows going in opposite directions meet on this segment, almost the entire cross- section would be taken up by the barges making this segment unsuitable for recreation. Attach A at 7-23. Additionally, Brandon Pool is also affected by rapid changes in flow velocity and depth during storm events. Therefore, the Board finds that the proposed designation of Non-Recreational Waters is justified for the Brandon Road Pool segment.

LDPR – Dresden Island Pool

The entire Dresden Island Pool extends 14 miles from the Brandon Lock and Dam to the Dresden Island Lock Dam on the Illinois River. This segment is approximately 800 feet wide, with a varying depth of 2 to 15 feet. A portion of the Dresden Island Pool extending from the Brandon Lock and Dam to the I-55 Bridge is subject to this rulemaking. This reach, which is referred to as the Upper Dresden Island Pool, is currently designated as Secondary Contact and Indigenous Aquatic Life Use waters. The UAA study notes that Upper Dresden Island Pool has more natural features when compared with the Brandon Road Pool. The stream meanders and has fair amount of natural shoreline and channels. Attach A at 1-7. This segment is also completely channelized to a minimum depth of 9 ft and is used primarily for commercial transport of bulk commodities such as grain, coal, petroleum products, chemicals and raw materials. *Id*.

The UAA notes that recreational uses in Dresden Island Pool include fishing, boating, water skiing and occasional swimming. However, recreational uses occur primarily downstream of the I-55 bridge where four marinas and public landings are located. Attach A at 7-44. The Lower Dresden Island Pool that is located downstream of the I-55 bridge is classified as General Use Waters, and is not subject to this rulemaking. The UAA notes that access to the river upstream of the I-55 Bridge is limited. The UAA indicates that the bacterial quality of the Dresden Island Pool is significantly affected by the City of Joliet's WRP effluent. The densities of fecal coliforms were three to four times higher than the General Use Standard. *Id.*

Board Finding on LDPR – Dresden Island Pool. The Board finds that LDPR Dresden Island Pool is significantly impacted by human caused conditions and sources of pollution that preclude primary contact recreational activities in accordance with the UAA Factor Three. For

example, these conditions include lack of public access and significant commercial transport of bulk commodities. Further, the Board finds that primary contact activity is not an existing use in the Dresden Pool. Therefore, the Board finds that the proposed designation of Incidental Contact Recreation is appropriate for the LDPR Dresden Island Pool segment.

JCAR's Suggested Changes

JCAR suggested several minor non-substantive changes to the rule, which the Board includes at second notice. However, one change suggested by JCAR attempts to clarify language in Section 303.204 alters the meaning of the Section and the Board declines to make that change. The Board appreciates JCAR's bringing this awkward language to the Board's attention and the Board will amend the first sentence in Section 303.204 to clarify the language.

Economic Reasonableness and Technical Feasibility

Pursuant to Section 27 of the Act (415 ILCS 5/27 (2008)) when promulgating a rule, the Board must take into account several matters including existing water quality and the technical feasibility and economic reasonableness of reducing pollution. 415 ILCS 5/27(a) (2008) Further, the Board must make a determination as to whether the proposed rule has any adverse economic impact on the people of Illinois. 415 ILCS 5/27(b) (2008). The record in this proceeding establishes that the historically improved water quality in the CAWS and LDPR has enhanced opportunities for recreation and is leading to increased public and private investment along the waterways. The use designations proposed in this rulemaking will further allow for recreation on and in the waters of the CAWS and LDPR. The record does not indicate any adverse economic impact for upgrading the uses of the CAWS and LDPR. Therefore, the Board finds that the proposed rule is economically reasonable and technically feasible.

CONCLUSION

After a careful review of the comments and the record, the Board is proposing four categories of recreational use designation for the Chicago Area Waterway System and Lower Des Plaines River: Primary Contact Recreation, Incidental Contact Recreation, Non-contact Recreation, and Non Recreation. At second notice, the Board responded to comments from participants by adding rules defining the recreational use designation, "Primary Contact Recreation", to identify segments of the CAWS where full body contact recreation is attainable in the foreseeable future. Primary Contact Recreation is intended to meet the CWA recreational use goal of recreating on and in the water (swimmable). The Board adopts this use based on comments received during the first notice period that drew the Board's attention to evidence in the record demonstrating that the CWA recreational use goal was attainable in specific segments.

Segments of the CAWS proposed for Primary Contact Recreation are: 1) Lower North Shore Channel from North Side Water Reclamation Plant to confluence with North Branch of the Chicago River; 2) North Branch of the Chicago River from its confluence with North Shore Channel to its confluence with South Branch of the Chicago River and Chicago River; 3) Chicago River; 4) South Branch of the Chicago River; 5) Little Calumet River from its

confluence with Calumet River and Grand Calumet River to its confluence with Calumet-Sag Channel; and 6) Calumet-Sag Channel.

Segments of the CAWS and LDPR proposed for Incidental Contact Recreation are: 1) Upper North Shore Channel from Wilmette Pumping Station to North Side Water Reclamation Plant; 2) South Fork of the South Branch of the Chicago River; 3) Chicago Sanitary and Ship Canal from its confluence with South Branch of the Chicago River to its confluence with Calumet-Sag Channel; 4) Calumet River from Torrence Avenue to its confluence with Grand Calumet River and Little Calumet River; 5) Lake Calumet and Lake Calumet Connecting Channel; 6) Grand Calumet River; and 7) Lower Des Plaines River from the Brandon Road Lock and Dam to the Interstate 55 bridge.

The final three segments of the CAWS and LDPR that at first notice were designated for Non-contact Recreation or Non-recreation remain the same for second notice. The Non-contact Recreation use designation is proposed for Calumet River from Lake Michigan to Torrence Avenue. The Non-recreation use designation is proposed for: 1) Chicago Sanitary and Ship Canal from its confluence with the Calumet-Sag Channel to its confluence with Des Plaines River; and 2) Lower Des Plaines River from its confluence with Chicago Sanitary and Ship Canal to the Brandon Road Lock and Dam.

The Board will propose the rule, amended consistent with this opinion, for second notice review by JCAR.

ORDER

The Board directs the Clerk to submit the following rule to the Joint Committee on Administrative Rules for second notice review:

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE C: WATER POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD

PART 301
INTRODUCTION

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301.APPENDIX A	References to Previous Rules

AUTHORITY: Implementing Section 13 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/13 and 27].

SOURCE: Filed with the Secretary of State January 1, 1978; amended at 3 Ill. Reg. 25, p. 190, effective June 21, 1979; amended at 5 Ill. Reg. 6384, effective May 28, 1981; codified at 6 Ill. Reg. 7818; amended in R88-1 at 13 Ill. Reg. 5984, effective April 18, 1989; amended in R88-21(A) at 14 Ill. Reg. 2879, effective February 13, 1990; amended in R99-8 at 23 Ill. Reg. 11277, effective August 26, 1999; amended in R02-11 at 27 Ill. Reg. 158, effective December 20, 2002; amended in R08-9(A) at 35 Ill. Reg. _____, effective _____.

Section 301.247 Chicago Area Waterway System

"Chicago Area Waterway System" means Calumet River, Grand Calumet River, Little Calumet River downstream from the confluence of Calumet River and Grand Calumet River, Calumet-Sag Channel, Lake Calumet, Chicago River and its branches downstream from their confluence with North Shore Channel, North Shore Channel and Chicago Sanitary and Ship Canal.

(Source: Added at 35 Ill. Reg. ____, effective _____)

Section 301.282 Incidental Contact Recreation

"Incidental Contact Recreation" means any recreational activity in which human contact with the water is incidental and in which the probability of ingesting appreciable quantities of water is minimal, such as fishing; commercial boating; small craft recreational boating; and any limited contact associated with shoreline activity such as wading.

(Source: Added at 35 Ill. Reg. ____, effective _____)

Section 301.307 Lower Des Plaines River

"Lower Des Plaines River" means Des Plaines River from the confluence with Chicago Sanitary and Ship Canal to the Interstate 55 Bridge.

(Source: Added at 35 Ill. Reg. _____, effective _____)

Section 301.323 ~~Non-Contact Recreation~~Primary Contact Recreation

"Primary Contact Recreation" means any recreational activity in which human contact consists of full body contact with the waters such as swimming, diving, or jumping; and, including all Incidental Contact Recreation.

~~"Non-contact Recreation" means any recreational or other water use in which human contact with the water is unlikely, such as pass through commercial or recreational navigation, and where physical conditions or hydrologic modifications make direct human contact unlikely or dangerous.~~

(Source: Added at 35 Ill. Reg. ____, effective _____)

Section 301.324 Non-Contact Recreation and Non-Recreational

a) "Non-contact Recreation" means any recreational or other water use in which human contact with the water is unlikely, such as pass through commercial or recreational navigation, and where physical conditions or hydrologic modifications make direct human contact unlikely or dangerous.

b) "Non-recreational" means a water body where the physical conditions or hydrologic modifications preclude primary contact, incidental contact and non-contact recreation.

(Source: Added at 35 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE C: WATER POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD

PART 303
WATER USE DESIGNATIONS AND SITE-SPECIFIC WATER QUALITY STANDARDS

SUBPART A: GENERAL PROVISIONS

SUBPART B: NONSPECIFIC WATER USE DESIGNATIONS

SUBPART C: SPECIFIC USE DESIGNATIONS AND SITE SPECIFIC WATER QUALITY STANDARDS

SUBPART D: THERMAL DISCHARGES

AUTHORITY: Implementing Section 13 and authorized by Sections 11(b) and 27 of the Environmental Protection Act [415 ILCS 5/13, 11(b) and 27].

SOURCE: Filed with the Secretary of State January 1, 1978; amended at 2 Ill. Reg. 27, p. 221, effective July 5, 1978; amended at 3 Ill. Reg. 20, p. 95, effective May 17, 1979; amended at 5 Ill. Reg. 11592, effective October 19, 1981; codified at 6 Ill. Reg. 7818; amended at 6 Ill. Reg. 11161, effective September 7, 1982; amended at 7 Ill. Reg. 8111, effective June 23, 1983; amended in R87-27 at 12 Ill. Reg. 9917, effective May 27, 1988; amended in R87-2 at 13 Ill. Reg. 15649, effective September 22, 1989; amended in R87-36 at 14 Ill. Reg. 9460, effective May 31, 1990; amended in R86-14 at 14 Ill. Reg. 20724, effective December 18, 1990; amended in R89-14(C) at 16 Ill. Reg. 14684, effective September 10, 1992; amended in R92-17 at 18 Ill. Reg. 2981, effective February 14, 1994; amended in R91-23 at 18 Ill. Reg. 13457, effective August 19, 1994; amended in R93-13 at 19 Ill. Reg. 1310, effective January 30, 1995; amended in R95-14 at 20 Ill. Reg. 3534, effective February 8, 1996; amended in R97-25 at 22 Ill. Reg. 1403, effective December 24, 1997; amended in R01-13 at 26 Ill. Reg. 3517, effective February 22, 2002; amended in R03-11 at 28 Ill. Reg. 3071, effective February 4, 2004; amended in R06-24 at 31 Ill. Reg. 4440, effective February 27, 2007; amended in R09-8 at 33 Ill. Reg. 7903, effective May 29, 2009; amended in R09-11 at 33 Ill. Reg. 12258, effective August 11, 2009; amended in R08-9(A) at 35 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 303.102 Rulemaking Required (Repealed)

~~Designation of waters to meet secondary contact and indigenous aquatic life standards is governed by Part 102 of Subtitle A.~~

(Source: Repealed at 35 Ill. Reg. _____, effective_____)

SUBPART B: NONSPECIFIC WATER USE DESIGNATIONS

Section 303.204 Chicago Area Waterway System and Lower Des Plaines River ~~Secondary Contact and Indigenous Aquatic Life~~ Waters

The Chicago Area Waterway System and Lower Des Plaines River Waters ~~which~~ are designated to protect for incidental contact or non-contact recreational uses~~,~~ (except where designated as non-recreational waters~~;~~) and commercial activity~~,~~ (including navigation and industrial water supply uses)~~,~~ limited only by the physical condition of these waters and hydrologic modifications to these waters. These waters are required to meet the secondary contact and indigenous aquatic life standards contained in 35 Ill. Adm. Code 302, Subpart D~~of Subpart D, of Part 302~~, but are not required to meet the general use standards or the public and food processing water supply standards of 35 Ill. Adm. Code 302, Subpart B and C~~Subparts B and C, of Part 302~~. Designated recreational uses for each segment of the Chicago Area Waterway System and Lower Des Plaines River are identified in this Subpart.

(Source: Amended at 35 Ill. Reg. _____, effective _____)

Section 303.220 Primary Contact Recreation Waters ~~Incidental Contact Recreation Waters~~

The following waters are designated as Primary Contact Recreation Waters and must be protected for Primary Contact Recreation uses as defined in 35 Ill. Adm. Code 301.282.

a) Lower North Shore Channel from North Side Water Reclamation Plant to confluence with North Branch of the Chicago River;

b) North Branch of the Chicago River from its confluence with North Shore Channel to its confluence with South Branch of the Chicago River and Chicago River;

c) Chicago River;

d) South Branch of the Chicago River;

e) Little Calumet River from its confluence with Calumet River and Grand Calumet River to its confluence with Calumet-Sag Channel; and

f) Calumet-Sag Channel.

~~The following waters are designated as Incidental Contact Recreation waters and must protect for incidental contact recreational uses as defined in 35 Ill. Adm. Code 301.282.~~

~~a) North Shore Channel;~~

~~b) North Branch of the Chicago River from its confluence with North Shore Channel to its confluence with South Branch of the Chicago River and Chicago River;~~

~~c) Chicago River;~~

~~d) South Branch of the Chicago River and its South Fork;~~

~~e) Chicago Sanitary and Ship Canal from its confluence with South Branch of the Chicago River to its confluence with Calumet-Sag Channel;~~

~~f) Calumet River from Torrence Avenue to its confluence with Grand Calumet River and Little Calumet River;~~

~~g) Lake Calumet;~~

~~h) Lake Calumet Connecting Channel;~~

~~i) Grand Calumet River;~~

~~j) Little Calumet River from its confluence with Calumet River and Grand Calumet River to its confluence with Calumet-Sag Channel;~~

~~k) Calumet-Sag Channel; and~~

~~l Lower Des Plaines River from the Brandon Road Lock and Dam to the Interstate 55 bridge.~~

(Source: Added at 35 Ill. Reg. _____, effective _____)

Section 303.225 Incidental Contact Recreation Waters ~~Non-Contact Recreation Waters~~

The following waters are designated as Incidental Contact Recreation waters and must protect for incidental contact recreational uses as defined in 35 Ill. Adm. Code 301.282.

a) Upper North Shore Channel from Wilmette Pumping Station to North Side Water Reclamation Plant;

b) South Fork of the South Branch of the Chicago River (Bubbly Creek) ~~and its South Fork;~~

c) Chicago Sanitary and Ship Canal from its confluence with South Branch of the Chicago River to its confluence with Calumet-Sag Channel;

d) Calumet River from Torrence Avenue to its confluence with Grand Calumet River and Little Calumet River;

e) Lake Calumet;

f) Lake Calumet Connecting Channel;

g) Grand Calumet River;

h) Lower Des Plaines River from the Brandon Road Lock and Dam to the Interstate 55 bridge.

~~Calumet River from Lake Michigan to Torrence Avenue is designated as a Non-Contact Recreation water and must protect for non-contact recreational uses as defined in 35 Ill. Adm. Code 301.323.~~

(Source: Added at 35 Ill. Reg. _____, effective _____)

Section 303.227 Non-Contact Recreation Waters and Non-Recreational Waters

a) Non-Contact Recreation. Calumet River from Lake Michigan to Torrence Avenue is designated as a Non-Contact Recreation water and must protect for non-contact recreational uses as defined in 35 Ill. Adm. Code 301.323.

b) The following waters are designated as Non-Recreational waters as defined in 35 Ill. Adm. Code 301.324.

1~~a~~) Chicago Sanitary and Ship Canal from its confluence with the Calumet-Sag Channel to its confluence with Des Plaines River; and

2~~b~~) Lower Des Plaines River from its confluence with Chicago Sanitary and Ship Canal to the Brandon Road Lock and Dam.

(Source: Added at 35 Ill. Reg. _____, effective _____)

SUBPART C: SPECIFIC USE DESIGNATIONS AND SITE SPECIFIC WATER QUALITY STANDARDS

Section 303.441 Secondary Contact Waters (Repealed)

~~The following are designated as secondary contact and indigenous aquatic life waters and must meet the water quality standards of 35 Ill. Adm. Code 302.Subpart D:~~

~~a)~~ ~~The Chicago Sanitary and Ship Canal;~~

~~b)~~ ~~The Calumet-Sag Channel;~~

~~c)~~ ~~The Little Calumet River from its junction with the Grand Calumet River to the Calumet-Sag Channel;~~

~~d)~~ ~~The Grand Calumet River;~~

~~e)~~ ~~The Calumet River, except the 6.8 mile segment extending from the O'Brien Locks and Dam to Lake Michigan;~~

~~f)~~ ~~Lake Calumet;~~

~~g)~~ ~~The South Branch of the Chicago River;~~

~~h)~~ ~~The North Branch of the Chicago River from its confluence with the North Shore Channel to its confluence with the South Branch;~~

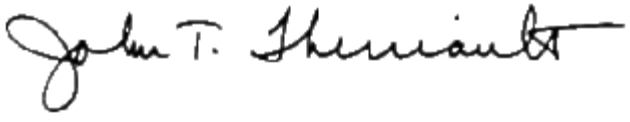
~~i)~~ ~~The Des Plaines River from its confluence with the Chicago Sanitary and Ship Canal to the Interstate 55 bridge; and~~

~~j)~~ ~~The North Shore Channel, excluding the segment extending from the North Side Sewage Treatment Works to Lake Michigan. The dissolved oxygen in said Channel shall be not less than 5 mg/l during 16 hours of any 24 hour period, nor less than 4 mg/l at any time.~~

(Source: Repealed at 35 Ill. Reg. _____, effective _____)

IT IS SO ORDERED.

I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on June 2, 2011, by a vote of 5-0.



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John T. Therriault, Assistant Clerk
Illinois Pollution Control Board