BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	
)	
WATER QUALITY STANDARDS AND)	
EFFLUENT LIMITATIONS FOR THE) R08-09 Subdocke	et C
CHICAGO AREA WATERWAYS SYSTEM) (Rulemaking- Wa	iter)
(CAWS) AND THE LOWER DES PLAINES)	
RIVER: PROPOSED AMENDMENTS TO)	
35 Ill. Adm. Code Parts 301, 302, 303 and 304)	
(Recreational Use Designations))	

NOTICE OF FILING

To:

John Therriault, Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph St., Suite 11-500 Chicago, IL 60601

Persons included on the attached SERVICE LIST

Marie Tipsord, Hearing Officer Illinois Pollution Control Board James R. Thompson Center 100 West Randolph St, Suite 11-500 Chicago, IL 60601

Please take notice that, as a courtesy to The Wetlands Initiative, on the 30th Day of June, 2011, I filed with the Office of the Clerk of the Illinois Pollution Control Board the attached **PRE-FILED TESTIMONY OF PAUL BOTTS**, a copy of which is hereby served upon you.

Respectfully Submitted,

put

Jessica Dexter

Environmental Law and Policy Center 35 E. Wacker, Suite 1600

Chicago, IL 60601

DATED: June 30, 2011

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
WATER QUALITY STANDARDS AND EFFLUENT LIMITATIONS FOR THE)	R08-09 (Rulemaking – Water)
CHICAGO AREA WATERWAY SYSTEM)	
AND THE LOWER DES PLAINES RIVER:)	
PROPOSED AMENDMENTS TO 35 ILL. ADM. CODE PARTS 301, 302, 303, AND 304	.)	

Testimony of Paul Botts June 28, 2011

My name is Paul Botts and I am the executive director of the Wetlands Initiative (TWI), a not-for-profit organization dedicated to restoring the wetland resources of the Midwest to improve water quality, increase wildlife habitat and biodiversity, and reduce flood damage. TWI was founded in 1994 in recognition of the need for a wetlands-restoration organization that was small, nimble, and focused. Our primary interest and expertise is not in the saving of pristine wilderness areas but rather in restoring wetlands that had previously been drained, degraded, altered or removed.

In its first decade the Wetlands Initiative committed to two of the most important restoration projects in Illinois: the Hennepin & Hopper Lakes Project (now the Sue and Wes Dixon Waterfowl Refuge) and Midewin National Tallgrass Prairie. In our second decade we remain deeply involved in exciting restoration progress at those sites, while expanding our scope. We are working as conservation entrepreneurs to advocate, develop, and test innovative strategies for wetlands restoration. These strategies include developing ecosystem service markets that compensate landowners for restoring wetlands for the beneficial services that this natural infrastructure can provide. We also seek to demonstrate how wetlands can be restored even in the most challenging circumstances.

In recent decades the health of the Chicago River has improved dramatically. Once home to few fish species and little wildlife, the river is now home to nearly 70 species of fish, 60 species of birds and a growing diversity of animals including beavers, muskrats, mink, and river otters. As artificial barriers to access have come down, Chicago residents and visitors have rediscovered the river as a natural amenity. New watercraft launches, riverside parks and plazas and miles of trails now bring people down to the water, and riparian landowners such as the Chicago Park District and homeowner associations are encouraging active use.

The Wetlands Initiative has worked with a variety of partners to design two projects to test innovative techniques for wetlands restoration in contexts like the Chicago River. These two projects would, if implemented, test and demonstrate practical methods for achieving several of the objectives of the City of Chicago's "Chicago River Agenda" including in-stream habitat improvements, eliminating invasive species, and riverbank restoration. In particular, "active capping" is a promising new treatment approach for sediment remediation that offers long-term immobilization and the potential to break down or destroy pollutants with the use of degradation agents in an applied, multi-layer cap. Unlike traditional capping or armoring techniques, active capping involves thin layers of different materials that actively stabilize and sequester metal and organic contaminants. In addition to isolating the contaminants from the overlying water, the active capping materials can stimulate the breakdown of the contaminants by microbes in the underlying sediments. To further improve surface water quality, a diverse wetland composed of deep and shallow marsh and wet prairie plant communities can be planted on top of the capping materials.

The Bubbly Creek Turning Basin Active Capping Demonstration Pilot Project would use innovative active capping strategies for wetlands creation at a site located at the confluence of the South Fork of the South Branch (a.k.a. Bubbly Creek) and the South Branch of the Chicago River. In development since 2000, this project would further develop this promising solution to the nationwide problem of remediating contaminated sediments while improving water quality, creating new wetlands habitat and expanding fishing access to the river. This demonstration project would test the water quality impacts of different contaminant-specific active capping materials in eight test plots spanning 4 acres, in a combination of open-flow and hydraulically-isolated conditions in conjunction with a constructed wetland. This project would demonstrate water quality improvement, increase wildlife habitat, and provide vital, high quality open space and recreational opportunities to a community in need of these amenities. TWI has collaborated on this effort with the City of Chicago's Department of Environment, the University of Illinois at Chicago, the Metropolitan Water Reclamation District of Greater Chicago, the Chicago Park District and the U.S. Army Corps of Engineers. A similar project is now underway on the Grand Calumet River in Indiana.

Located downstream from Bubbly Creek in the Chicago Sanitary and Ship Canal, Collateral Channel is a dead-end slip containing sediments contaminated with large quantities of organic and inorganic pollutants from past municipal and industrial wastes. The <u>Collateral Channel Demonstration Project</u> would use active capping technology to stabilize the contaminated sediments in the channel, improve water quality, control greenhouse and noxious gas emissions and create a high quality wetland on top of the protective cap. This one-acre project will help demonstrate the ability of a wetland to clean polluted water including

effluent from combined-sewer overflows in an urban setting, while also providing habitat for native and migrating wildlife as well as new neighborhood waterway access in the form of a gazebo and walkway overlooking the new wetlands. TWI collaborated in the design and planning of this project with the Metropolitan Water Reclamation District of Greater Chicago, Patrick Engineering, the University of Illinois at Chicago, the Boeing Co., and several private foundations.

Both of these projects are designed and engineered; they await only implementation funding, final specifications and the relevant permits. If carried out these projects would demonstrate the specific techniques and benefits just described. They would also help the public and policymakers understand that wetlands habitat can be restored to any river system, even where challenges such as heavily-contaminated sediments and armored banks seem at first glance to make that an implausible objective.

The Chicago River has taken impressive steps towards a remarkable recovery. As a Chicago native and lifelong area resident who is old enough to remember when few would even consider kayaking in the Chicago, I look forward to even more success to come. The Wetlands Initiative and its partners on these projects are excited about demonstrating how that can be achieved on the ground in Chicago.

Date: June 28, 2011

Submitted by:

Paul Botts
Executive Director
The Wetlands Initiative
53 W. Jackson, Suite 1015
Chicago IL 60604

CERTIFICATE OF SERVICE

I, Jessica Dexter, hereby certify that I have served the attached **Testimony of Paul Botts** upon:

Mr. John T. Therriault Assistant Clerk of the Board Illinois Pollution Control Board 100 West Randolph Street, Suite 11-500 Chicago, Illinois 60601

via electronic filing on June 30, 2011; and upon the attached service list by depositing said document in the United States Mail, postage prepaid, in Chicago, Illinois on June 30, 2011.

Respectfully Submitted,

put

Jessica Dexter

Environmental Law and Policy Center 35 E. Wacker, Suite 1600

Chicago, IL 60601

June 30, 2011

SERVICE LIST

Frederick M. Feldman, Esq., Louis Kollias, Margaret T. Conway, Ronald M. Hill Metropolitan Water Reclamation District 100 East Erie Street Chicago, IL 60611

Roy M. Harsch Drinker Biddle & Reath 191 N. Wacker Drive, Suite 3700 Chicago, IL 60606-1698

Claire A. Manning Brown, Hay & Stephens LLP 700 First Mercantile Bank Building 205 South Fifth St., P.O. Box 2459 Springfield, IL 62705-2459

Deborah J. Williams, Stefanie N. Diers IEPA 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794-9276

Alec M. Davis, Katherine D. Hodge, Matthew C. Read, Monica T. Rios, N. LaDonna Driver Hodge Dwyer & Driver 3150 Roland Avenue P.O. Box 5776 Springfield, IL 62705-5776

Ariel J. Tesher, Jeffrey C. Fort SNR Denton US LLP 233 South Wacker Driver Suite 7800 Chicago, IL 60606-6404

Ann Alexander, Senior Attorney Natural Resources Defense Council 2 N. Riverside Plaza, Suite 2250 Chicago, IL 60606 Andrew Armstrong, Matthew J. Dunn – Chief, Susan Hedman Office of the Attorney General Environmental Bureau North 69 West Washington Street, Suite 1800 Chicago, IL 60602

Bernard Sawyer, Thomas Granto Metropolitan Water Reclamation District 6001 W. Pershing Rd. Cicero, IL 60650-4112

Lisa Frede Chemical Industry Council of Illinois 1400 East Touhy Avenue Suite 100 Des Plaines, IL 60019-3338

Fredric P. Andes, Erika K. Powers Barnes & Thornburg 1 North Wacker Drive Suite 4400 Chicago, IL 60606

James L. Daugherty - District Manger Thorn Creek Basin Sanitary District 700 West End Avenue Chicago Heights, IL 60411

Tracy Elzemeyer – General Counsel American Water Company 727 Craig Road St. Louis, MO 63141

Keith I. Harley, Elizabeth Schenkier Chicago Legal Clinic, Inc. 211 West Wacker Drive, Suite 750 Chicago, Il 60606

Robert VanGyseghem City of Geneva 1800 South Street Geneva, IL 60134-2203

Cindy Skrukrud, Jerry Paulsen McHenry County Defenders 132 Cass Street Woodstock, IL 60098

W.C. Blanton Husch Blackwell Sanders LLP 4801 Main Street Suite 1000 Kansas City, MO 64112

Marie Tipsord - Hearing Officer Illinois Pollution Control Board 100 W. Randolph St. Suite 11-500 Chicago, IL 60601

James E. Eggen City of Joliet, Department of Public Works and Utilities 921 E. Washington Street Joliet, IL 60431

Kay Anderson American Bottoms RWTF One American Bottoms Road Sauget, IL 62201

Jack Darin Sierra Club 70 E. Lake Street, Suite 1500 Chicago, IL 60601-7447

Bob Carter Bloomington Normal Water Reclamation District PO Box 3307 Bloomington, IL 61702-3307 Frederick D. Keady, P.E. – President Vermilion Coal Company 1979 Johns Drive Glenview, IL 60025

Mark Schultz Navy Facilities and Engineering Command 201 Decatur Avenue Building 1A Great Lakes, IL 60088-2801

Irwin Polls Ecological Monitoring and Assessment 3206 Maple Leaf Drive Glenview, IL 60025

Dr. Thomas J. Murphy 2325 N. Clifton Street Chicago, IL 60614

Cathy Hudzik
City of Chicago –
Mayor's Office of Intergovernmental Affairs
121 N. LaSalle Street City Hall - Room 406
Chicago, IL 60602

Stacy Meyers-Glen Openlands 25 East Washington Street, Suite 1650 Chicago, IL 60602

Beth Steinhorn 2021 Timberbrook Springfield, IL 62702

Lyman Welch Alliance for the Great Lakes 17 N. State St., Suite 1390 Chicago, IL 60602

Tom Muth Fox Metro Water Reclamation District 682 State Route 31 Oswego IL 60543

Kenneth W. Liss Andrews Environmental Engineering 3300 Ginger Creek Drive Springfield, IL 62711

Vicky McKinley Evanston Environment Board 223 Grey Avenue Evanston, IL 60202

Marc Miller Office of Lt. Governor Pat Quinn Room 414 State House Springfield, IL 62706 James Huff - Vice President Huff & Huff, Inc. 915 Harger Road, Suite 330 Oak Brook IL 60523

Susan Charles, Thomas W. Dimond Ice Miller LLP 200 West Madison, Suite 3500 Chicago, IL 60606

Kristy A. N. Bulleit Hunton & Williams LLC 1900 K Street, NW Washington DC 20006

Kristen Laughridge Gale Nijman Franzetti LLP 10 South LaSalle Street, Suite 3600 Chicago, IL 60603