

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF ILLINOIS

STATE OF MICHIGAN, ET AL.,)	
)	
Plaintiffs,)	Case No. 10-c-4457
)	
v.)	
)	Hon. Robert M. Dow Jr.
UNITED STATES ARMY CORPS OF)	
ENGINEERS, ET. AL.,)	
)	
Defendants.)	
)	

**FEDERAL DEFENDANT'S OPPOSITION
TO PLAINTIFFS' PRELIMINARY INJUNCTION MOTION**

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TABLE OF ABBREVIATIONS

ACRCC - Asian Carp Regional Coordinating Committee

The Corps - United States Army Corps of Engineers

Assistant Secretary - Assistant Secretary of the Army (Civil Works)

FWS - United States Fish and Wildlife

EPA - United States Environmental Protection Agency

Water District - Metropolitan Water Reclamation District of Greater Chicago

IDNR - Illinois Department of Natural Resources

eDNA - environmental DNA

GLMRIS - Great Lakes and Mississippi River Inter-Basin Study

Framework - Asian Carp Strategy Control Framework

CAWS - Chicago Area Waterway System

CSSC - Chicago Sanitary and Ship Canal

O'Brien Lock - Thomas J. O'Brien Lock and Dam

Chicago Lock and Controlling Works - Chicago Harbor Lock and Chicago River Controlling Works

Section 126 - Section 126 of Fiscal Year 2009 Appropriations, Pub. L. No. 111-85, 123 Stat. 2845 (2009)

WRDA - Water Resources Development Act

Aquatic Nuisance Prevention Act - Nonindigenous Aquatic Nuisance Prevention and Control Act

Asian carp - bighead and silver carp

INTRODUCTION

This litigation involves the Chicago Area Waterway System (“CAWS”), a system of man-made canals and natural waterways that serves as both a navigation link between Lake Michigan and the Mississippi River system and an outlet for the storm water and effluent of the City of Chicago. Plaintiffs (and the United States) are concerned about the spread of invasive silver and bighead carp (“Asian carp”) through the canal system into Lake Michigan. On July 19, 2010, the States of Michigan, Ohio, Pennsylvania, Wisconsin and Minnesota (collectively “Plaintiffs”) filed a complaint seeking the permanent separation of the Mississippi River Basin from the Great Lakes Basin. That same day, Plaintiffs filed an emergency motion asking this Court to hold that the measures currently being pursued to prevent the migration of Asian carp are unlawful and inadequate, and to impose new and drastic measures forthwith. This attempt comes only a few months after plaintiff Michigan twice unsuccessfully tried to persuade the United States Supreme Court to order similar emergency relief.

Well before this litigation began, the United States was working cooperatively with state and local partners to prevent Asian carp from entering the Great Lakes and establishing a population there. The U.S. Army Corps of Engineers (“Corps”) and its fellow participants, in a joint federal, state, and local working group, have assembled a comprehensive strategy that includes more than thirty short- and long-term steps to combat the spread of Asian carp and prevent the establishment of self-sustaining carp populations in the CAWS and Great Lakes. Those steps include using rotenone (a fish poison) in portions of the CAWS to combat any possibility of fish passage, along with intensive monitoring and collection efforts.

The Corps’ efforts have been principally associated with the construction of an electric fish

barrier in the CAWS and with measures to ensure the efficacy of that barrier as an impediment to Asian carp migration. The Corps has also studied the possible utility of temporary changes in operation of the CAWS structures used for navigation, flood control, and water diversion. The Corps continues to study the extremely complicated potential for permanent separation of the Mississippi River and Great Lakes Basins.

Plaintiffs' preliminary injunction request asks the Court for various forms of mandatory emergency relief, which include: closing, for the indefinite duration of this litigation (except as needed to protect the public health and safety), the locks and sluice gates at the three facilities that permit navigation and flood-control between the CAWS and Lake Michigan; installing block nets and taking all other available steps to prevent the migration of Asian carp into Lake Michigan; and ordering the Corps to expedite the preparation of a feasibility study, already underway, that is examining the possibility of permanently physically separating the CAWS from Lake Michigan.

As discussed below, Plaintiffs cannot meet the extraordinarily high burden necessary to obtain a mandatory preliminary injunction. First, Plaintiffs are unlikely to succeed on the merits. Plaintiffs ask this Court to overturn the ongoing discretionary actions of a federal agency, the Corps -- but to do so under a novel theory of federal common law, without invoking the appropriate waiver of sovereign immunity for tort actions, the Federal Tort Claims Act. And to the extent plaintiffs have properly invoked the Administrative Procedure Act ("APA") to seek review of final agency action, they fail to show that the Corps has acted contrary to its grants of authority from Congress, or in an arbitrary and capricious manner. Second, Plaintiffs' experts do not set forth imminent, irreparable injury. Instead, as confirmed by multiple agencies' experts, any Asian carp that are in the CAWS likely exist in very low numbers and do not present an imminent threat to Lake Michigan

of the type needed to justify extraordinary judicial intervention in an ongoing agency program. There is also great uncertainty as to whether a sustainable population of Asian carp could establish itself in Lake Michigan by way of the CAWS and, if they could, what impacts would result.

Third, Plaintiffs demand an extraordinary, mandatory injunction that could threaten public safety and flood control, substantially affect regional and national economies, and greatly disrupt transportation systems (on both land and water) on which those economies rely. Nor would Plaintiffs' requested relief meaningfully assist the multi-agency effort to prevent Asian carp migration. In short, Plaintiffs cannot prevail on the merits of their federal common law theory or APA claim; have not shown likely irreparable harm; cannot justify the mandatory relief they demand when the proposed relief is balanced against the compelling public interests; and thus, are not entitled to an injunction.

FACTUAL AND STATUTORY BACKGROUND

I. History and Overview of the Canal System

The CAWS, a system of man-made canals and natural waterways, serves as both a navigation link between Lake Michigan and the Mississippi River system and an outlet for the storm water and effluent of the City of Chicago. See Declaration of Michael Cox ¶ 2.¹ The canal system extends

¹ On the merits, the Court's review of Plaintiffs' challenge will be limited to the administrative record of the agency decision at issue - the Interim III decision, discussed infra. Camps v. Pitts, 411 U.S. 138, 142 (1973) ("[T]he focal point for judicial review should be the administrative record already in existence, not some new record made initially in reviewing court."). At present, the Court has before it only a partial record. When considering technical information, a court may consider declarations that explain the information contained in the record. See Lloyd v. Illinois Regional Transp. Authority, 548 F. Supp. 575, 590 (D. Ill. 1982). In assessing a motion for a preliminary injunction, a court is not confined to the record in assessing claims of injury. Defendant's declarations are offered to explain technical information in the partial record that is now before the Court, respond to Plaintiffs' declarations, and respond to Plaintiffs' assertions of injury.

between Lake Michigan and the Des Plaines River, a tributary of the Illinois River and ultimately of the Mississippi River. The canal system was originally constructed to permit Chicago to dilute and dispose of its waste water without discharging all of it into Lake Michigan. Using the canal system, Illinois redirected the Chicago River, which naturally flowed east into Lake Michigan, to flow west, carried by the canal system into the Des Plaines. The Chicago Harbor Lock and Chicago River Controlling Works (“Chicago Lock and Controlling Works”) were constructed at the confluence of the Chicago River and Lake Michigan. The permanent connection between Lake Michigan and the Mississippi drainage basin was made with the completion of the Chicago Sanitary and Ship Canal in 1900. See Missouri v. Illinois, 200 U.S. 496 (1906). Subsequent construction included the dredging and reversal of the Calumet River, the erection of the Thomas J. O’Brien Lock and Dam (“O’Brien Lock”) on that river, and the construction of the Cal-Sag Channel linking the Calumet with the main canal. Cox ¶ 3. The waterway system also includes the Grand Calumet and Little Calumet Rivers, which cross the Illinois-Indiana border. Each of them provides access to Lake Michigan at points in Indiana. Id.

By statute, the Corps operates and maintains the Chicago Sanitary and Ship Canal to sustain navigation from Chicago Harbor on Lake Michigan to Lockport on the Des Plaines River. See, e.g., Act of Dec. 4, 1981, Pub. L. No. 97-88, § 107, 95 Stat. 1135; Act of July 30, 1983, Pub. L. No. 98-63, Tit. I, Ch. IV, 97 Stat. 301. Vessels enter and exit the Chicago end of the canal system through the O’Brien and Chicago Locks. The Corps operates both locks in accordance with applicable statutes, regulations and agreements with the Metropolitan Water Reclamation District of Greater Chicago (“Water District”). See Declaration of Tzuoh-Ying Su ¶ 6.

Both the Chicago Lock and Controlling Works and the O'Brien Lock are used for flood control purposes and water diversion, pursuant to agreements between the Corps and the Water District. See Su ¶ 5. During severe rain events, the locks and the sluice gates are opened to abate the risk of flooding by drawing water from the canal system into Lake Michigan. Id. ¶¶ 9-10. In fact, the Chicago lock and sluice gates were opened for flood control purposes as recently as July 24, 2010 to allow approximately 5.7 billion gallons of storm water to flow into Lake Michigan. Id. ¶ 11. The Corps owns the sluice gates at the O'Brien Lock and operates them under the direction of the Water District. Id. ¶ 6. The Water District owns and operates the sluice gates at the Chicago River Controlling Works. Id. The Water District also owns and operates the Wilmette Pumping Station on the North Shore Channel, which includes pumps and a sluice gate; the Corps has no involvement in the operation of the Wilmette Pumping Station.

About seven million tons of cargo pass through the O'Brien Lock each year, as do more than 19,000 recreational boats, many of which are docked on the Calumet River and reach Lake Michigan through the lock. Cox ¶ 5. Additional cargo, ferry, and pleasure boats use the Chicago Lock. Quarles ¶¶ 107-109. The locks are also used by the Coast Guard stations on the Lake Michigan side of the locks in responding to safety emergencies on the canal and in patrolling critical infrastructure facilities in the river system. Cox ¶ 5; Quarles ¶ 110; Barndt ¶ 44.

II. Federal and State Efforts to Combat the Asian Carp.

The Corps, other federal agencies, and their Illinois counterparts have been aware for some time of the possibility that Asian carp could travel through the CAWS into the Great Lakes. See Declaration of Major General John W. Peabody ¶ 22; see also Declaration of Colonel Vincent V. Quarles ¶¶ 49-55. Indeed, as further explained below, many agencies have banded together in the

Asian Carp Regional Coordinating Committee (“ACRCC”) to form an effective team to accomplish the goal of keeping Asian carp from establishing a sustainable population that threatens the Great Lakes. See Declaration of William J. Bolen ¶¶ 8-11, 24-27 (discussing the formation of the ACRCC and the subcommittees); Peabody ¶ 13-14.

Congress has given the federal agencies a number of tools to combat the threat of Asian carp migration into the area. For example, Congress has authorized and directed the Corps to construct and upgrade the electric barrier, which keep fish from migrating through the Chicago Sanitary and Ship Canal to the Great Lakes. See, infra. In Section 126 of Fiscal Year 2009’s appropriations legislation for the Corps (“Section 126”), Congress granted the Secretary of the Army temporary emergency authority to undertake “such modifications or emergency measures as [he] determines to be appropriate, to prevent aquatic nuisance species from bypassing the [electric barrier] and . . . to prevent aquatic nuisance species from dispersing into the Great Lakes.” Energy and Water Development and Related Agencies Appropriations Act, 2010, Pub. L. No. 111-85, § 126, 123 Stat. 2845 (2009). The Secretary has delegated that authority to the Assistant Secretary of the Army (Civil Works), who has exercised that authority as discussed below. The Section 126 authority expires October 28, 2010, although the Assistant Secretary has requested that Congress extend it. Declaration of Assistant Secretary for Civil Works Jo-Ellen Darcy ¶ 7, Attach. 4.

The ACRCC members include the Corps, U.S. Fish and Wildlife Service (“FWS”), U.S. Coast Guard, U.S. Geological Survey, Illinois Department of Natural Resources (“IDNR”), Indiana Department of Natural Resources, Ohio Department of Natural Resources, Great Lakes Fishery Commission, City of Chicago, and Metropolitan Water Reclamation District of Greater Chicago (“Water District”). The ACRCC’s member agencies have taken and are currently undertaking

numerous steps to combat the spread of Asian carp, consistent with each member's statutory and regulatory authority. Bolen ¶¶ 14-23. The Asian Carp Control Strategy Framework ("Framework"), drafted by the ACRCC and commented on by Plaintiffs, includes more than thirty such steps, including: intensive efforts to monitor, confine, capture and kill Asian carp in the waterway, using electrofishing, netting, environmental DNA ("eDNA") sampling, side-scan sonar, and trained observation divers; scientific efforts to develop carp-specific poisons and "bio-bullets," attractant and repellent pheromones, and sonic or electrical means to disrupt carp reproduction; and further validation of the Coast Guard's already-in-place restrictions to prevent any possibility that Asian carp or carp eggs might be carried through vessels' ballast or bilge water.² Id.; see also Plfs. Ex. 13.

In addition to the focus on the CAWS above the fish barriers, several agencies will take other steps to reduce the threat to the Great Lakes, such as using commercial fishing to reduce the Asian carp population below the fish barriers; enforcing prohibitions on transporting injurious wildlife; and educating the public about the dangers Asian carp pose. Bolen ¶¶ 28-30; Declaration of Charles Wooley ¶¶ 5-16. The ACRCC has also been studying other potential pathways for Asian carp to enter the Great Lakes. For example, the ACRCC is working with Plaintiff Ohio to specifically address the Maumee River, which has been identified as a potential pathway for Asian carp to escape into Lake Erie from Indiana's Wabash River. Bolen ¶¶ 28-29, 31.

² When vessels take on water for stability (ballast water) or accumulate water in their void spaces (bilge water) in one location and discharge it in another, they can sometimes transmit invasive species. To prevent Asian carp from crossing the dispersal barrier in barges' ballast, the Coast Guard first requested the barge industry cease ballasting operations on either side of the barrier and then adopted a Temporary Interim Rule barring ships from discharging in the canal on one side of the barrier any ballast or bilge water that was taken on in the canal on the other side of the barrier. Barndt ¶¶ 37-38.

A. The Electric Barrier

Congress has recognized the threat posed by invasive species of fish for many years, leading to its enactment of the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (“Aquatic Nuisance Prevention Act”), 16 U.S.C. § 4701 *et seq.* Congress gave particular attention to the Chicago Ship and Sanitary Canal as a potential conduit for invasive species, and in 1996, directed the Corps to study preventive measures to keep invasive species out of the canal. 16 U.S.C. § 4722(i)(3). Since that time the Corps has constructed an initial electric barrier and a second, even more capable barrier, and is constructing a third on an expedited basis.³ Peabody ¶¶ 5-6, 20-22. The barriers are located at the southwestern end of the canal, a short distance above the Lockport Lock. Quarles ¶ 52. Due to safety concerns, the Corps operates these dispersal barriers in consultation with the Coast Guard. Quarles ¶¶ 21-24; Shea ¶ 19; Barndt 19-25.

The first electric dispersal barrier (Barrier I) was authorized by Congress in 1996 and became operational in 2002. Quarles ¶ 12; Aquatic Nuisance Prevention Act § 1202(i)(3)(C), 16 U.S.C. 4722(i)(3)(C).⁴ Testing using tagged common carp showed that the barrier was effective in deterring fish from crossing the barrier in the upstream direction (*i.e.*, toward Lake Michigan). The one tagged common carp that crossed Barrier I toward Lake Michigan appears not to have survived the passage through the electrical field. Quarles ¶ 46.

³ An electric dispersal barrier operates by creating an electrical field in the water of the canal, which either immobilizes fish or creates sufficient discomfort to deter them from attempting to pass through the area. Shea ¶¶ 5-6. The field is created by running direct electrical current through steel cables secured to the bottom of the canal. Quarles ¶¶ 13-14.

⁴ Congress has also directed that Barrier I be upgraded and made permanent, so that it can complement the operation of the other two barriers. Water Resources Development Act of 2007 (2007 Act), Pub. L. No. 110-114, § 3061(b)(1)(A), 121 Stat. 1041.

In January 2003, the design and construction of a second barrier (Barrier IIA), which has greater capabilities, was approved under Section 1135 of the Continuing Authority Program, Water Resources Development Act of 1986, Pub. L. No. 99-662, § 1135, 100 Stat. 4082, and then specifically authorized by Congress in 2005 and expanded in 2007. See District of Columbia Appropriations Act, 2005 (2005 Act), Pub. L. No. 108-335, § 345, 118 Stat. 1352; Water Resources Development Act of 2007 (2007 Act), Pub. L. No. 110-114, § 3061(b)(1)(A), 121 Stat. 1041. Barrier IIA was operational by March 2006, and after trials and extensive safety testing to address potential risks to human life and to vessels in navigation, has been in full-time operation since April 2009. Peabody ¶ 21. After monitoring showed that Asian carp might have advanced up the waterway toward the barrier farther than previously expected, in August 2009 the Corps increased the voltage and modified the other operating parameters of Barrier IIA. Quarles ¶ 51.

A third barrier (Barrier IIB) is under construction and will be completed later this year. The Corps sought and received urgent funding to expedite and complete the construction of Barrier IIB. Barrier IIB is designed to be at least as capable as Barrier IIA. Shea ¶ 26. Having both barriers in operation will permit one to continue operating when the other needs to be shut down for periodic maintenance. Barrier IIA was shut down for maintenance in December 2009, see Shea ¶ 28; at present, the Corps anticipates completing Barrier IIB in November 2010 before Barrier IIA will need to be shut down for maintenance again. Quarles ¶¶ 38-41.

1. Maintenance of Electric Barrier

Barrier IIA was taken offline for necessary maintenance in early December 2009, while Barrier I remained in operation. Barrier I then underwent brief maintenance after Barrier IIA resumed operation. To combat the threat that Asian carp would cross through the barrier location

while one of the barriers was offline, the U.S. Fish and Wildlife Service (“FWS”) and other participating agencies -- including the Michigan Department of Natural Resources -- executed a “Rapid Response” containment operation, applying the fish poison rotenone to a 5.7-mile stretch of the canal downstream of the fish barriers, between the barriers and the Lockport Lock. Bolen ¶ 13; Wooley ¶¶ 22-28; Quarles ¶ 40; Darcy ¶ 4. Caged carp were used to verify that the poisoning was effective to kill fish at various depths throughout the treated stretch of the canal. Biologists collected between 30,000 and 40,000 dead or surfaced fish during this operation. The only Asian carp was a single dead bighead carp found 5 miles downstream of the barriers. Wooley ¶ 27.

2. Efficacy Studies of the Electric Barrier

Since January 2009, as directed by Congress, the Corps has been conducting a set of studies evaluating threats to the effectiveness of the electric barrier (“Efficacy Study”). Peabody ¶ 34. Upon the discovery of the first positive eDNA evidence in the CAWS in late July 2009, the Corps developed a plan to accelerate aspects of the Efficacy Study, and has since undertaken four distinct interim studies – Interim I, II, III, and IIIA, all discussed below – on an accelerated basis. Id. ¶¶ 35-46. The Assistant Secretary has approved three of those recommendations within her authority under Section 126. Darcy ¶¶ 5-7. The Corps anticipates completion of the Final Efficacy Study by Spring 2011, following public review of the final draft study in late 2010. Peabody ¶ 36.

a. Interim I: Potential Bypass from the Des Plaines River

In Interim I, the Corps studied whether it was possible for Asian carp to enter the Chicago Sanitary and Ship Canal (CSSC) from either the Des Plaines River or the Illinois and Michigan (I&M) Canal, both of which parallel the CSSC below and above the fish barrier. Peabody ¶ 35. A significant flood could open pathways through which any Asian carp that might be present in the Des

Plaines River or I&M Canal could access the CSSC above the fish barrier, and thus bypass it. Id. Therefore, the Interim I Report recommended construction of jersey-type barriers and, where physical barriers would induce flooding, tight reinforced mesh fencing, between the Des Plaines River and the Chicago Ship and Sanitary Canal. Id. The study also recommended the blockage of culverts between the CSSC and the I & M Canal. Approved by the Assistant Secretary in January 2010 pursuant to Section 126, the construction in the I&M Canal is complete, and the construction along the Des Plaines River is scheduled to be complete in October 2010.⁵ Quarles ¶ 74; see also Darcy, Attach. 1.

b. Interim II: Optimal Operating Parameters for the Electric Barriers

Interim II will further refine the optimal operating parameters for the fish barriers, including potential safety risks of a change in operation. The Corps intends to complete the study in September of 2010. Peabody ¶ 38.

c. Interim III: Modifying Structures in the CAWS

Among other things, Interim III evaluated whether and how to modify the operation of the Chicago and O'Brien locks to deter Asian carp migration into the Great Lakes. Peabody ¶¶ 39, 40. The Assistant Secretary approved the Interim III Report on July 13, 2010. Darcy ¶ 6; see also Darcy, Attach. 2.

In response to the discovery of Asian carp eDNA above the electric barrier in late 2009, the Corps looked at what additional tools could be used to impede Asian carp migration. Peabody ¶ 41.

⁵ Notably, the July 23-25, 2010, flood event in the Chicago area provided the first successful test of these barriers. The barriers that have already been completed, which include those along the I&M Canal and portions of those along the Des Plaines River, performed as designed. Peabody ¶ 36.

Specifically, the Corps considered whether structures in the CAWS, including the locks, pumping stations and sluice gates, could be operated so as to impede fish passage while continuing their use for their intended purposes. Id. ¶ 39. To inform its analysis, the Corps asked FWS to convene a panel of experts to examine six alternatives for closing the locks at various regular and temporary periods and to analyze their likely impact on fish passage. Id. ¶ 40. The expert panel advised the Corps that none of the alternatives would mitigate any risk that may exist of Asian carp establishing a self-sustaining population in Lake Michigan. Id. Based on the results of the expert panel and other factors as set forth in the Interim III Report, the Corps decided to use the intermittent closure of the Chicago and O'Brien locks, on an as-needed basis, in support of fish control and eradication efforts performed by the resource agencies, upon the request of those agencies and in coordination with the Coast Guard. Id. ¶ 41.

In addition, based on the analysis and recommendations in the Interim III Report, under Section 126, the Assistant Secretary approved the installation of steel bar screens to block fish passage through two of the four sluice gates at the O'Brien Lock and Dam. Darcy ¶ 6. The other two sluice gates are used for flood control only and cannot be screened given the need to accommodate flood waters without becoming blocked with debris. Peabody ¶ 42. The bar screens are designed to prevent adult Asian carp from passing through sluice gates during the times that the gates are open for water intake from Lake Michigan into the CAWS. Id. The bar screens will be removed during flood events, because they would likely clog with debris and become obstructed. Id. The Corps intends to install the bar screens in September 2010. Id. The Water District has installed bar screens on two of the sluice gates at the Chicago River Controlling Works. Id.

d. Interim IIIA: Acoustic and Bubble Strobe Deterrent Systems

Also on July 13, 2010, the Assistant Secretary approved the Interim IIIA Report. Darcy ¶ 7; see also Darcy, Attach. 3. That report recommended implementing a fish deterrent barrier, employing acoustic, bubble curtain, and strobe light technology to encourage Asian carp to disperse, as a demonstration project to examine the efficacy of the dispersal technology. The project would be located at the Brandon Road Lock and Dam on the Des Plaines River just below the City of Joliet, Illinois. Peabody ¶ 46. By its terms, the Section 126 authority expires on October 28, 2010, and this project cannot be completed before October 28, 2010. Id. Thus, the Corps cannot implement this project unless Congress enacts legislation to extend the emergency implementation authority of Section 126, or other legislation that allows project implementation in accordance with law and Administration policy, and the Corps receives project implementation and operations funding.

e. Final Efficacy Study

The final report will summarize the interim reports and recommend a long-term, multi-agency comprehensive strategy to improve the efficacy of the dispersal barriers and additional measures throughout the Chicago Area Waterway System to minimize the risk of Asian carp migrating into Lake Michigan. Peabody ¶ 47. This final report will include assessments of pathways around and beyond the fish barrier in order to determine the advisability and feasibility of permanent solutions to potential bypasses from the Des Plaines River and I&M Canal. Id. It will also consider additional fish barriers or other impediments to the migration of Asian carp and other aquatic invasive species, as is possible in the relatively short time frame of this review, through the CAWS, including through the Grand and Little Calumet Rivers, into Lake Michigan. Id. Finally, it will

review potential operational changes to existing Corps waterway structures to determine whether any new information might warrant a change from the approach evaluated in Interim III. Id.

B. Environmental DNA Testing, Rotenone Poisoning, Other Monitoring Efforts and Short-Term Responses

Federal and state agencies have for some time used telemetry (fish tagging and tracking), electrofishing (a technique that uses electrodes to attract and stun fish for easy capture), and commercial netting to monitor the Illinois Waterway for the migration of Asian carp. Peabody ¶¶ 24, 29-30. Those technologies are limited in their ability to detect fish present in very small numbers, and the Corps accordingly decided to canvass the scientific community for any additional, more sensitive detection technologies. Id. ¶¶ 24-25. As a result, in August 2009, the Corps entered into a cooperative agreement with the University of Notre Dame to use an experimental technique known as environmental DNA (“eDNA”) testing. Id. ¶ 25. Fish shed DNA into the environment in various microscopic bits of tissue, such as intestinal cells shed during defecation. This “novel” technique (Plfs. Ex. 14 at ¶ 4) is to collect water samples, filter them for solids, extract all DNA from the solids, and then analyze the DNA for genetic markers unique to the bighead and silver carp species. Peabody ¶ 25.

From mid-2009 to the present, sampling has been conducted in various locations in the CSSC and the CAWS, above and below the electric fish barriers. In 2010, approximately 10 samples taken from above the fish barrier have been reported as positive for Asian carp eDNA out of a total of 536 samples processed. Id. ¶ 28. At present, eDNA evidence cannot verify whether live Asian carp are present, the number of Asian carp in an area or whether a viable population of Asian carp are present. Id. ¶ 27. A positive result does not reveal how Asian carp DNA traveled to that location.

For example, the current testing does not explain whether the eDNA is from a live or dead Asian carp, from water containing Asian carp DNA transported from other locations, or other sources. Id. ¶ 27; Chapman ¶ 26. The Corps has contracted with Battelle Corporation to perform an independent external peer review of eDNA sampling and processing. Peabody ¶ 33. Results of the peer review will be complete by December 2010. Id.

In addition, the ACRCC continues to rely on netting and fishing operations conducted by the State of Illinois, FWS, and Corps employees to inform the Corps and other agencies about the potential presence of Asian carp above and below the barriers. Since the advent of the employment of eDNA sampling, these tools have been used primarily to attempt to confirm eDNA results with the capture of physical Asian carp specimen, as discussed below. Wooley ¶ 40; Rogner ¶ 12. For example, during February and March 2010, FWS crews sampled fixed sites prescribed in the monitoring plan. Wooley ¶ 40. These sites were determined as likely spots to find Asian carp by having multiple eDNA positive samples and by experts determining that the sites were likely habitat for Asian carp. Id. Fixed site sampling consisting of one crew of three biologists conducting electrofishing operations. During these sampling events, no Asian carp were collected. Id.

Intensive sampling efforts were also conducted in May 2010 in the North Shore Channel in response to positive eDNA results. Six federal and state crews conducted netting and electrofishing operations, and commercial fishers were contracted to assist in netting operations. Id. No Asian carp were captured during this effort. Id.

The ACRCC monitoring plan indicated that positive eDNA detections within a portion of the Little Calumet River in the Chicago Area Waterway during 2009 and 2010 warranted a response action to capture and remove any Asian carp. Id. ¶ 42. From May 20-27, 2010, the multi-agency

team participated in applying rotenone to approximately a two and a half mile reach of river immediately below the O'Brien Lock and Dam. Id. ¶¶ 43-44. FWS worked closely with federal, state, and non-government partners to successfully plan and implement the response actions. This operation resulted in the collection of over 130,000 pounds of fish. No silver or bighead Asian carp were found during this effort. Id.

On June 22, 2010, a single bighead carp was captured in Lake Calumet during a commercial fishing operation conducted pursuant to the workgroup's plan. Wooley ¶ 31. This was the first Asian carp captured above the electrical barriers in the CAWS. Id. This prompted another intensive sampling response during the week of June 28, 2010. Id. For eleven days, three FWS crews and one crew from the Great Lakes Indian Fish and Wildlife Commission joined IDNR crews and contracted commercial fishers in electrofishing and netting in the Calumet River from the O'Brien Lock and Dam to Lake Michigan. Id.; Rogner ¶17. Gear deployed by agency crews included over 16,500 total yards of trammel nets and two seine hauls using a 2,400-foot seine. Rogner ¶ 17. Over ten miles of commercial nets were set, resulting in a total catch of over 15,000 fish of seventeen species. Id. No additional Asian carp were captured. Wooley ¶ 45; Rogner ¶ 17.

C. Study of Longer-Term Solutions

The Corps has also embarked on a much larger study of how to prevent transfers of aquatic invasive species between the Mississippi River basin and the Great Lakes basin, in either direction, "through [both] the Chicago Sanitary and Ship Canal and other aquatic pathways," known as the Great Lakes and Mississippi River Inter-Basin Study ("GLMRIS"). Peabody ¶ 11, 50-54; 2007 Act, § 3061(d), 121 Stat. 1041. Although the study has a time frame of a number of years, with additional time required for Congressional authorization for implementation, the Corps intends to conduct the

study in a way that allows decisions on particular recommended steps to be made as soon as the relevant portion of the study is complete, rather than awaiting completion of the entire project. Peabody ¶¶ 51-53.

ARGUMENT

I. Standard for Preliminary Injunctive Relief

A preliminary injunction is always an “extraordinary remedy.” See Winter v. NRDC, 129 S. Ct. 365, 376 (2008). Meeting the burden here requires Plaintiffs to make a compelling showing that this Court is likely to rule in its favor on the ultimate merits; “that irreparable injury is likely” -- not just possible -- “in the absence of an injunction”; that the balance of equities “tips in [its] favor”; and “that an injunction is in the public interest.” Winter, 129 S. Ct. at 374, 375. Moreover, a heightened showing is further necessary to justify a mandatory injunction -- one that alters rather than preserves the status quo, by requiring the enjoined party to act rather than forbearing. See, e.g., Heckler v. Lopez, 463 U.S. 1328, 1333-1334 (1983). Plaintiffs must show they meet all of the prongs of the preliminary injunction test. Cf. Winter, 129 S. Ct. at 375-376 (even a strong showing of likely success cannot compensate for failure to show likely injury); see Hoosier Energy Rural Elec. Coop., Inc., v. John Hancock Life Ins. Co., 582 F.3d 721, 725 (7th Cir. 2009) (“Irreparable injury is not enough to support equitable relief. *There also must be a plausible claim on the merits, and the injunction must do more good than harm (which is to say that the ‘balance of equities’ favors the plaintiff.)*”) (emphasis added).

First and foremost, Plaintiffs attempt to minimize the importance of showing a likelihood of success. The merits showing is not optional, and it is not an afterthought: a party who seeks the extraordinary injunctive relief before winning its case must show that it meets all of prongs of the

preliminary injunction test. Davis v. PBGC, 571 F.3d 1288, 1296 (D.C. Cir. 2009) (explaining that “[i]n light of the Supreme Court’s recent decisions,” including Winter and Munaf, “a strong showing of irreparable harm . . . cannot make up for a failure to demonstrate a likelihood of success on the merits.”) (emphasis added). Plaintiffs suggest that given their view of the harm, they do “not need to make an incontestable showing” on the merits. See Plfs. Brief at 41. The standard set forth by Plaintiffs is not the law. “[A] party seeking a preliminary injunction must demonstrate, among other things, a likelihood of success on the merits.” Munaf v. Geren, 128 S. Ct. 2207, 2219 (2008) (emphases added; citation omitted); accord, e.g., Winter v. NRDC, 129 S. Ct. 365, 374 (2008); Amoco Prod. Co. v. Village of Gambell, 480 U.S. 531, 546 n.12 (1987). Even Plaintiffs’ sole authority postdating Winter, Plfs. Brief at 23, n. 23, requires “at least a fair chance of success on the merits.” Qingdao Taifa Group Co. v. United States, 581 F.3d 1375, 1381 (Fed. Cir. 2009); see also ibid. (noting that the United States did not oppose the preliminary injunction in that case).

II. Plaintiffs have not demonstrated a likelihood of success on the merits

Plaintiffs plead their claims under two headings: the purported federal common law of nuisance and the APA. Neither claim is likely to succeed on the merits. The nuisance claim fails because it is barred by federal sovereign immunity, by federal law that occupies the field and precludes the courts from formulating federal common law rules, and by principles of nuisance law itself. The APA claim fails for numerous reasons. First, Plaintiffs attack numerous purported decisions of the Corps, but identify only one final agency action that is reviewable under the APA – the Interim III decision, which adopts the installation of screens on the sluice gates at the O’Brien lock and the Chicago Controlling Works and supports temporary lock closure for fish monitoring, collection and eradication efforts. See Plfs. Brief at 45-47.

Plaintiffs claim that the Corps has acted arbitrarily, capriciously, and not in accordance with law, *i.e.*, the purported federal common law of nuisance, the Lacey Act, and the alleged “mandatory duties” of the Nonindigenous Aquatic Nuisance Prevention and Control Act. Compl. ¶¶ 83-102; Plfs. Brief at 41-47. None of those sources of law compels the actions that Plaintiffs demand. To the contrary, the Corps’ current authorities do not permit it to carry out the permanent relief for which Plaintiffs call – the physical separation of the Mississippi and Great Lakes basins – and such a measure would require Congress to rescind the CAWS’ current statutorily authorized purpose of navigation, authorize the permanent separation, and appropriate substantial funds. To date Congress has made no such decision. Rather, Congress has directed the Corps to study options to prevent the transfer of invasive aquatic species between the surface waters of the two basins.⁶

Plaintiffs challenge the Interim III decision, which adopts the installation of screens on the sluice gates at the O’Brien lock and the Chicago Controlling Works and supports temporary lock closures for fish monitoring, collection and eradication efforts. See Plfs. Brief at 45-47 (discussing the science, which forms part of the basis for Interim III). The Corps’ final agency decision, as reflected in the Interim III report, is not arbitrary and capricious. The Corps, pursuant to its statutory authorities designating operation of the CAWS structures to maintain navigation, properly considered the uncertain scientific evidence, the potential economic harms and made a policy decision to close the locks for certain circumstances. Likewise, the Assistant Secretary, in exercising her Section 126 authority to only install screens on those sluice gates not used primarily for flood

⁶ Plaintiffs ask this Court to impose an 18-month time frame to complete that study; Congress has legislation before it to mandate the identical time limit, but has not yet enacted it. See S. 3553, 111th Cong., 2d Sess. § 11(d) (2010).

control, did not act contrary to law. The Corps is entitled to deference on its decisions and Plaintiffs have not demonstrated they are likely to succeed on the merits of their claims.

A. Plaintiffs' Public Nuisance Claim is Barred by Federal Sovereign Immunity and, In Any Event, Fails on its Own Terms

Plaintiffs argue that the Corps' operation of the structures within the CAWS constitutes a public nuisance. See Pls. Brief at 42-43; Pls. Compl. ¶¶ 83-91. Plaintiffs then claim that this Court has jurisdiction to grant injunctive relief to abate that public nuisance. Id. Plaintiffs seek to bring their public nuisance claim pursuant to the APA, but such a claim does not invoke a waiver of the United States' sovereign immunity. As discussed below, the Federal Tort Claims Act ("FTCA"), 28 U.S.C. § 2671 et seq., provides the only waiver of sovereign immunity for tort actions against the United States, and Plaintiffs cannot (and do not seek to) proceed under the FTCA. In short, Plaintiffs have no likelihood of success on the merits of their public nuisance claim against the United States.

Although Plaintiffs have not styled their claim as such, a nuisance action is properly brought as a tort. See Restatement (Second) of Torts § 821B (1979) ("A public nuisance is an unreasonable interference with a right common to the general public."). The FTCA provides the comprehensive and exclusive scheme for compensating persons injured by the torts of the Federal government, including nuisance, and limits recovery against the United States to money damages. See United States v. Smith, 499 U.S. 160, 163 (1991); see generally Duffy v. United States, 966 F.2d 307, 313 (7th Cir. 1992). Therefore, the availability of remedies under the FTCA precludes this Court from exercising jurisdiction over any new and freestanding cause of action based on the federal common law of nuisance.

Plaintiffs have not met the jurisdictional requirements necessary to invoke the FTCA's limited waiver of sovereign immunity. Actions against the United States may be maintained only when, and in the manner in which, Congress chooses to waive sovereign immunity. It is fundamental that the United States "is immune from suit save as it consents to be sued . . . , and the terms of its consent to be sued in any court define that court's jurisdiction to entertain the suit." United States v. Sherwood, 312 U.S. 584, 586 (1941) (internal citations omitted); United States v. Mitchell, 445 U.S. 535, 538 (1980). "A waiver of sovereign immunity 'cannot be implied but must be unequivocally expressed.'" Mitchell, 445 U.S. at 538 (citing United States v. King, 395 U.S. 1, 4 (1969)). The sole remedy the FTCA provides is for money damages, not injunctive relief. See 28 U.S.C. § 1346(b) and 2679(a); Sheptin v. United States, 2000 U.S. Dist. LEXIS 12999 (N. D. Ill. Sept. 1, 2000) (quoting Redland Soccer Club v. Dep't. of the Army, 55 F. 3d 827, 848 n. 11 (3rd Cir. 1995) (recognizing that equitable relief is not recoverable under the FTCA)). Because Plaintiffs seek injunctive relief, they have not properly invoked the waiver of sovereign immunity provided by the FTCA.⁷

⁷ Even if plaintiffs had invoked the FTCA and properly sought money damages, an FTCA claim cannot be brought "unless the claimant shall have first presented the claim to the appropriate Federal agency and his claim shall have been finally denied by the agency in writing and sent by certified or registered mail." 28 U.S.C. § 2675(a). The plaintiffs have made no showing or allegation that they have presented any claim associated with the allegations contained in their complaint to any agency. See McNeil v. United States, 508 U.S. 106, 113 (1993) (affirming dismissal for lack of subject matter jurisdiction where the petitioner filed his FTCA suit before presenting his claim to the appropriate federal agency); Upshaw v. United States, 669 F. Supp. 2d 32, 44 (D.D.C. 2009) (dismissing for lack of subject matter jurisdiction where plaintiff failed to plead that he presented his claim to the appropriate federal agency).

Moreover, even if the Plaintiffs (1) had exhausted their administrative remedies as required under the FTCA prior to bringing an action and (2) had pleaded for money damages, rather than equitable relief; they still would not have a claim that comes within the FTCA waiver of immunity as they have pleaded a claim under the "federal common law of nuisance." The FTCA waives

Moreover and contrary to Plaintiffs' claim, the APA does not provide for a waiver of sovereign immunity for federal common law actions. See Plfs. Brief at 42, n. 41. Section 702 of the APA, on which Plaintiffs rely, by its terms does not apply to claims "expressly or impliedly forbid[den]" by any other statute granting consent to suit. The FTCA is such a statute: it impliedly forbids injunctive relief against the United States for common law tort claims, and Section 702 therefore cannot be used to circumvent the FTCA's limited waiver of sovereign immunity. Indeed, some courts have expressly held that a federal common law nuisance action is barred by the doctrine of sovereign immunity. See Mass. v. United States Veterans Admin., 541 F.2d 119, 123 (1st Cir. 1976) (concluding that federal common law cause of action by state against VA Hospital for violating conditions of its NPDES permit was barred by the doctrine of sovereign immunity); Kennedy v. City of New York, 1986 WL 4686, at * 2 (S.D.N.Y. 1986) (unpublished opinion) ("Sovereign immunity bars a suit against the United States without its consent, which is not given to suits under the federal common law of public nuisance."); cf., e.g., Spectrum Leasing Corp. v. United States, 764 F.2d 891, 892-93, 895 (D.C. Cir. 1985) (holding that the APA does not permit suit for injunctive relief on a contract, because the Tucker Act waives sovereign immunity for contract claims but limits relief to damages).

Importantly, Plaintiff has not cited a single case where the APA was used as a waiver of sovereign immunity for a tort such as the federal common law nuisance claim brought here. Plaintiffs cite Trudeau v. FTC, 456 F.3d 178, 186-187 (D.C. Cir. 2006) for the proposition that the APA waiver of sovereign immunity is not limited to suits brought under the APA. But even if the

sovereign immunity for certain torts under the law of the state where the allegedly tortious conduct occurred. 28 U.S.C. §§ 1346(b)(1) & 2674. The FTCA does not waive immunity for tort claims predicated on federal common law. FDIC v. Meyer, 510 U.S. 471, 477 (1994).

APA provides a waiver of sovereign immunity as to certain non-tort claims for equitable relief, see Greene v. United States Army Reserve, 222 F.Supp.2d 198, 201 n.6 (D. Conn. 2002), Plaintiffs cite no authority for the proposition that this waiver extends to tort claims exclusively governed by the FTCA. Trudeau did not consider the provision of Section 702 that excludes claims “impliedly forbid[den]” by another statute – here, the FTCA.

Moreover, even if Plaintiffs had properly set forth a waiver of the United States’ sovereign immunity, they could not prevail on their public nuisance claim. First, this case does not involve one of the limited areas in which the Supreme Court has recognized the concept of a federal common law cause of action for nuisance in cases involving the apportionment of waters of an interstate stream. See Kansas v. Colorado, 206 U.S. 46 (1907) (dispute between a Colorado water user and the Colorado State Engineer who shut off water to Colorado users pursuant to a compact with New Mexico); Hinderlinder v. La Plata River & Cherry Creek Ditch Co., 304 U.S. 92 (1938); Illinois v. City of Milwaukee, 406 U.S. 91 (1972) (“Milwaukee I”) (federal common law nuisance action for pollution of interstate waters, later held to be precluded by the Clean Water Act.) None of these cases involved a cause of action against the United States, and none supports the creation of a cause of action for federal common law nuisance such as the one alleged by Plaintiffs here. The Supreme Court has explained that only in a “few and restricted instances” involving a conflict between a federal policy or interest and state law has the Supreme Court found it necessary “to develop federal common law.” Milwaukee v. Illinois, 451 U.S. 304, 313 (1981) (“Milwaukee II”) (internal citations omitted) (emphasis added). Neither Plaintiffs’ complaint nor brief make any argument in favor of the development of federal common law.

Once Congress legislates in the area, Federal courts do not apply even already-recognized principles of federal common law. “When Congress has spoken its decision controls [over federal common law], even in the context of interstate disputes.” Milwaukee II, 451 U.S. at 315 n.8. Here, both “the scope of the legislation” enacted by Congress and the fact that it directly “addresses the problem,” i.e., operation of structures in the CAWS, confirm that Congress has spoken to the issue and foreclose Plaintiffs’ attempt to subject the Corps’ decisionmaking authority to a new, judge-made standard. Id.; see also State of North Carolina v. Tennessee Valley Authority, No. 09-1623, slip op. at 6-7 (4th Cir. July 26, 2010) (holding that Congress has occupied the field of air pollution regulation given the Clean Air Act and thus the plaintiff could set forth a public nuisance case). The actions Plaintiffs challenge here -- operation of the CAWS structures to provide for navigation and flood control and water diversion -- are Congressionally authorized. “Courts traditionally have been reluctant to enjoin as a public nuisance activities which have been considered and specifically authorized by the government.” New England Legal Found. v. Costle, 666 F.2d 30, 33 (2d Cir. 1981). This is especially true “where the conduct sought to be enjoined implicates the technically complex area of environmental law.” Id.; see also Restatement (Second) of Torts § 821B cmt. F. (“Although it would be a nuisance at common law, conduct that is fully authorized by statute, ordinance or administrative regulation does not subject the actor to tort liability.”).

The Corps operates the facilities in the CAWS pursuant to the statutes authorizing the works and regulating their uses. The Corps operates and maintains the CSSC as necessary to sustain navigation from Chicago Harbor on Lake Michigan to Lockport on the Des Plaines River. See, e.g., Act of Dec. 4, 1981, Pub. L. No. 97-88, § 107, 95 Stat. 1135 (CSSC to be operated “in the interest of navigation”); Act of July 30, 1983, Tit. I, Ch. IV, 97 Stat. 301 (Chicago Lock); River and Harbors

Act of 1946, Pub. L. No. 79-525, 60 Stat. 634 (July 24, 1946) (same, for O'Brien lock). Congress has specified in the Aquatic Nuisance Prevention Act that, to the extent the agency finds feasible, efforts to combat aquatic nuisance species are to be “incorporated” into the “ongoing operations” of the canal. See 16 U.S.C. 4722(i)(3)(A) and (B)(ii). As such, Plaintiffs cannot establish that the Corps has somehow created a public nuisance by acting in accordance with its statutory mandates. Plaintiffs’ have failed to show a likelihood of success on the merits of their public nuisance claim.

B. Plaintiffs Have Not Properly Challenged a Nondiscretionary Failure to Act Pursuant to the Administrative Procedure Act

Plaintiffs’ attempt to “compel agency action unlawfully withheld or unreasonably delayed” fails. Plfs. Brief at 44 (citing 5 U.S.C. § 706(1)). As the Supreme Court has unanimously held, the APA does not authorize federal courts to “enter general orders compelling compliance with broad statutory mandates” like the one on which Plaintiffs rely. Norton v. Southern Utah Wilderness Alliance, 542 U.S. 55, 66 (2004) (“SUWA”); see id. at 64-65, 66-67. Under the APA, a federal court can only remedy a “failure to act” that amounts to withholding an action that is both “discrete” and “legally required.” Id. at 63. The APA also precludes judicial review of agency action committed to the agency’s discretion by law. 5 U.S.C. § 701(a)(1); Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 410 (1971) (discussing and applying 5 U.S.C. § 701(a)(2) (prohibition on review of agency action committed to discretion) to those statutes that do not supply law to apply); Heckler v. Chaney, 470 U.S. 821, 852 (1985). Plaintiffs “unreasonably delayed” claim fails for the same reason. See SUWA, 542 U.S. at 63 n.1 (“[A] delay cannot be unreasonable with respect to action that is not required.”). The Corps and Assistant Secretary’s broad authority and discretion in

this area does not require action by the agency, on the basis of currently available information, much less the actions Plaintiffs demand.

Plaintiffs assert that the Aquatic Nuisance Prevention Act, 16 U.S.C. § 4722(c)(2), contains “mandatory duties.” Compl. ¶ 102(c). Section 4722(c)(2) states:

Whenever the Task Force determines that there is a substantial risk of unintentional introduction of an aquatic nuisance species by an identified pathway and that the adverse consequences of such an introduction are likely to be substantial, the Task Force shall, acting through the appropriate Federal agency, and after an opportunity for public comment, carry out cooperative, environmentally sound efforts with regional, State and local entities to minimize the risk of such an introduction.

Similar to the statutory language at issue in SUWA, the language of the Aquatic Nuisance Act “is mandatory as to the object to be achieved, but it leaves [the agency] a great deal of discretion in deciding how to achieve it.” SUWA, 542 U.S. at 65. The statutory directive to carry out “sound efforts” to address the risk of introduction of aquatic nuisance species leaves discretion to the agencies as to how to achieve that objective. As such, the Court should hold that there is not a mandatory duty in Section 4722(c)(2) and that the Plaintiffs do not have a likelihood of success on that claim. See also SUWA, 542 U.S. at 65. (placing the mandates to manage wild free-roaming horses and burros in a manner that is designed to achieve and maintain a thriving natural ecological balance, or to manage the [New Orleans Jazz National] [H]istorical [P]ark in such a manner as will preserve and perpetuate knowledge and understanding of the history of jazz, or to manage the [Steens Mountain] Cooperative Management and Protection Area for the benefit of present and future generations, in the same discretionary category) (internal citations omitted).

Plaintiffs also contend that the government’s actions violate the Lacey Act. That point is not well taken. Plaintiffs allege that the government has “contribute[d] to the threatened interstate

movement of injurious species.” Compl. ¶ 102(b). The Lacey Act criminally prohibits the knowing transportation of certain species into the United States or its territories. 18 U.S.C. § 42. First, Plaintiffs do not explain how the lawful operation of the CAWS structures results in the Corps “transporting” Asian carp. Second, Plaintiffs fail to discuss how a criminal statute such as the Lacey Act provides a civil cause of action. Finally, even if the argument could be made that the Corps is transporting Asian carp, there is a regulatory exception for federal agencies from obtaining the requisite transportation permit. See 50 C.F.R. § 16.13(a)(2)(v) (unlawful to transport silver carp without a permit); 50 C.F.R. § 16.32 (exception for federal agencies).

Plaintiffs tellingly fail to cite to Section 126 (which provides the Corp authority to take “emergency measures” to address the migration of Asian carp) in discussing their APA claims. Section 126 not only does not mandate any action including those Plaintiffs seek to compel; it explicitly vests the Corps with discretion. In Section 126, Congress directed the Secretary (and through him the Assistant Secretary) to proceed with implementing measures recommended by the efficacy studies and that the Corps undertake “such modifications or emergency measures as the Secretary of the Army determines to be appropriate, to prevent aquatic nuisance species from bypassing the [electrical barrier] . . . and to prevent aquatic nuisance species from dispersing into the Great Lakes.” 123 Stat. 2845 (emphasis added). The language of Section 126 is not only wholly devoid of legal requirements, it vests the Corps with far more discretion than the broad statutory mandate that the Bureau of Land Management “continue to manage [WSAs] . . . in a manner so as not to impair the suitability of such areas for preservation as wilderness” that the Supreme Court held to be beyond the limits of the APA. See SUWA, 542 U.S. at 65 (quoting 43 U.S.C. § 1782(c)). The

Assistant Secretary, operating under that explicit grant of discretion, was not required by law to reach the conclusion that the locks must be closed, to the extent they could be under Section 126.

Furthermore, the statutes and regulations under which the Corps operate the structures in the CAWS (and pursuant to which they decided to intermittently close the locks in assistance of fish monitoring, collection and eradication efforts) require the Corps to operate those structures to provide navigation, flood control and to maintain water levels in support of the 1930 Supreme Court water allocation decree. See Supplement Appropriations Act of 1983, Pub. L. No. 98-63, 97 Stat. 301 (July 30, 1983) (requiring the Chicago Lock and Controlling Works be maintained for navigation); Rivers and Harbors Act of 1946, Pub. L. No. 79-525, 60 Stat. 634 (July 24, 1946) (same for the O'Brien lock); 33 C.F.R. § 207.420 (sets the water levels for the Chicago River (Chicago Lock and Controlling Works)); 33 C.F.R. § 207.425 (sets water levels for the Calumet River (O'Brien lock)). These mandates must also be balanced by the Corps in making its decisions and cannot be reconciled with Plaintiffs' argument of a nondiscretionary duty to close the locks.

Of special importance, for the Corps to undertake the permanent request to implement separation of the Mississippi and Great Lakes water basins would require the Corps to obtain two separate authorizations from Congress: authorization to separate the basins along with the deauthorization of the project's current purposes along with substantial appropriations. Such a permanent separation would require extensive planning to address the need for alternative flood control methods in the Chicago area, among many other environmental and engineering challenges inherent in changing the existing waterways that have been used for multiple purposes for over 100 years. Plaintiffs also gloss over the fact that any physical separation of the CAWS from Lake Michigan would alter the flow of water contrary to that decreed by the Supreme Court in Wisconsin

v. Illinois. In other words, Plaintiffs cannot point to any law requiring the permanent separation of the Mississippi and Great Lakes water basins because none exists, and they have little to no likelihood of succeeding on the relief requested in their complaint.

C. The Corps Considered Expert Scientific Opinions in Deciding Not to Close Locks for Longer Than Needed by Resource Agencies and to Install Screens on Some Sluice Gates, Which is Entitled to Deference and is Not Arbitrary and Capricious

Of the actions Plaintiffs challenge, the only final agency action falling within the APA's waiver of sovereign immunity is the Interim III, modified lock operations, decision.⁸ See Plfs. Brief at 45-46. Plaintiffs take issue with the risk assessment conducted for Interim III and claim that the Corps manipulated the scientific results by not requesting the experts' opinions on permanent closure of the locks. Id. Plaintiffs further believe the Corps has "ignor[ed]" the eDNA evidence. Id. at 26. Plaintiffs real disagreement is the conclusion the Corps drew from the scientific evidence found in the FWS's risk assessment, not with the evidence itself. But the fact that Plaintiffs draw a different conclusion from the science does not equate to an arbitrary and capricious finding. Even though another authority or decisionmaker may have chosen a different course, if the "agency's reasons and policy choices ... conform to 'certain minimal standards of rationality' . . . the rule is reasonable and

⁸ Plaintiffs incorrectly attempt to challenge other agency "decisions." Plfs. Brief at 44-45 (attempting to have the following characterized as reviewable under the APA: decision to operate the CAWS structures as a public nuisance, decision to rely on the electric barrier as the primary defense to Asian carp, and the reopening of the O'Brien lock following fish eradication efforts). The waiver of immunity under the APA only applies to final agency action, and an action becomes "final" under the APA only when: (1) the agency's decision-making process is consummated and (2) rights and obligations have been fixed. See Bennett v. Spear, 520 U.S. 154, 178 (1997); see also, Franklin v. Mass., 505 U.S. 788, 798 (1992) (census report not reviewable as it was "more like a tentative recommendation than a final and binding determination"); Dalton v. Specter, 511 U.S. 462, 469 (1994) (report not reviewable as it "carr[ied] no direct consequences' for base closures."). The other decisions listed by Plaintiffs are not final decisions by the agency but instead, are simply the normal day-to-day operation of structures in the CAWS.

must be upheld.” Small Refiner Lead Phase-Down Task Force v. EPA, 705 F.2d 506, 521 (D.C. Cir. 1983); see also Israel v. U.S. Dep’t. of Agric., 282 F.3d 521, 526 (7th Cir.2002) (“The arbitrary and capricious standard is highly deferential, and even if we disagree with an agency’s action, we must uphold the action if the agency considered all of the relevant factors and we can discern a rational basis for the agency’s choice.”) (internal citations omitted).

As stated by the Supreme Court and especially appropriate to this case:

[the agency’s decision] represents a reasonable accommodation of manifestly competing interests and is entitled to deference: the regulatory scheme is technical and complex, the agency considered the matter in a detailed and reasoned fashion, and the decision involves reconciling conflicting policies.

While agencies are not directly accountable to the people, the Chief Executive is, and it is entirely appropriate for this political branch of the Government to make such policy choices – resolving the competing interests which Congress itself either inadvertently did not resolve, or intentionally left to be resolved by the agency

Chevron, USA v. Natural Res. Def. Council, 467 U.S. 837, 865-66 (1984) (footnotes omitted).

Deference to an agency’s scientific and technical expertise dictates that agency action must be upheld as long as the agency has “considered the relevant factors and articulated a rational connection between the facts found and the choice made.” Baltimore Gas & Elec. Co. v. Natural Res. Def. Council, 462 U.S. 87, 105 (1983). The Court must defer to the agency’s expertise, particularly with respect to decision-making. Environmental Law and Policy Center v. NRC, 470 F.3d 676, 682 (7th Cir. 2006); Indiana Forest Alliance, Inc. v. U.S. Forest Service, 325 F.3d 851, 858 (7th Cir. 2003). In deciding that modified lock operations were only appropriate for assisting in monitoring or eradication efforts, the Corps considered the scientific evidence available in a detailed and reasoned fashion, weighed uncertainty and reconciled the scientific and economic policies. Likewise, the

decision to install screens on two of the sluice gates as an exercise of Section 126 authority was based on scientific and policy reasons. Thus, the Interim III decision is entitled to deference.

1. The Corps Sought Expert Scientific Opinion on the Impacts of Lock Closure to the Migration of Asian carp

In order to reasonably evaluate the impact of temporarily closing the locks, the Corps sent a formal request to the FWS, asking for a risk analysis of the proposed alternatives for modifying operations of the Chicago and O'Brien Locks. Peabody ¶ 42; Wooley ¶ 48. Alternative scenarios for lock operation were considered as a means of lowering the risk of bighead and silver carps establishing sustainable populations in Lake Michigan by way of the Chicago Area Waterways, and provided for the statutorily authorized uses of the structures to continue. Possible modifications considered included minimizing impacts to the navigation industry and minimizing impacts from flooding. In the short term, the Corps was considering a range of alternative lock operations within its existing statutory authorities that would increase the time the locks would be closed. The six alternatives included:

1. Continue current operations;
2. Lock closure of three to four days a week and normal operations for the remaining days of the week;
3. Lock closure of one week/month and normal operation for the remaining days of the month;
4. Lock closure every other week and normal operations for the alternative weeks;
5. Lock closure of two months with extensive monitoring to determine if Asian carps are in the CAWS. If no Asian carps are collected during the closed period, then lock operations will be resumed at the end of the closure period. Locks would remain open, unless there was a significant flow event (flow rate trigger TBD) that could trigger fish movement. Locks would be closed on an emergency basis while monitoring activities were executed; and
6. Two-week lock closure, in mid-late April, during which extensive surveillance and monitoring is conducted. If no Asian carps are recovered, then the locks will operate normally. However, if there is a significant rainfall event that results in elevated flows (and a possible stimulus for Asian carps to move upstream) after the two weeks of

surveillance/monitoring, then the locks would be closed as soon as possible. During the lock closure, resources could be mobilized to complete surveillance/monitoring for a week. If no Asian carps are captured during the week, then the locks would be reopened.

Wooley ¶ 49; Darcy, Attach. 2 at 24-25, 50-60. To complete the risk analyses, a panel of ten experts (from the Corps, IDNR, Illinois Environmental Protection Agency, Illinois Natural History Survey, U.S. Geological Survey, and FWS) was convened. Wooley ¶ 50. Individuals were selected: 1) based on their expertise and knowledge related to the technical questions that formed the basis of the review, and 2) to ensure broad representation of the various entities engaged in Asian carp containment in the CAWS. Id. Nine experts completed various components of the risk analysis form, which was composed of sections focusing on: 1) risk assessment of possible lock operation alternatives, and 2) biological, ecological, and risk management questions posed by the Corps. Id. ¶ 51. The tenth expert chose to not to participate, because one of his agency colleagues conducted the risk assessment for both representatives of that agency. Id. Some experts completed only limited sections of the form, because their expertise was specific to discrete topics considered in the risk analysis. Id.

Of the six alternatives, there was no individual or combination of lock operation scenarios that experts believe will lower any risk that exists of Asian carps establishing self-sustaining populations in Lake Michigan in a meaningful way. Darcy, Attach. 2 at 25; Wooley ¶ 54; Peabody ¶ 42. In other words, nine scientific experts concluded that the temporary closure of the locks would not make a difference to the migration because the locks would be opened during some periods. The experts did provide limited options (control/prevention techniques, etc) that may, if implemented, potentially lower the risk of Asian carp establishment in Lake Michigan related to any lock operation

alternative. None of the options provided by the experts to lower risk of lock operation alternatives were recommended by more than one expert, so there was no clear consensus about how to manage the risk. Wooley ¶ 54.

Plaintiffs claim the risk assessment should be discounted because the experts were not presented with the option of permanent lock closure in the six alternatives presented. Plfs. Brief at 45-46. As explained in the Interim III report, there are many reasons why such an option was not contemplated during this study. Darcy, Attach. 2 at 53; Peabody ¶ 44. First, the expedited nature of the study did not allow for extended or permanent lock closure, given the complicated nature of the potential impacts. If the locks are permanently closed, they will not be available for navigation, flood control emergency access or water quality diversion. A full assessment is needed to analyze these impacts and any potential mitigation, which will take time to gather and analyze the information. Id. Second, the Corps continues to evaluate the need for permanent lock closures in the GLMRIS study and will respond as new information become available. Id. The Corps' explanation for not considering permanent closure in this limited study -- the purpose of which was to determine which actions the Corps could take quickly under existing authorities, which would make a difference -- is fully reasonable. In so easily dismissing the risk assessment, Plaintiffs ask this Court to disregard the Corps' statutory duties to maintain the CAWS' structures for navigation and flood control, and to find the risk assessment arbitrary based simply on Plaintiffs' feeling that permanent separation should have been included. The Corps has not acted arbitrary and the Interim III decision should be upheld.

2. The Corps Appropriately Weighed the Scientific Results and Made a Reasonable Decision in the Interim III Report

Often “the available data do not settle a regulatory issue and the agency must then exercise its judgment in moving from the facts and probabilities on the record to a policy conclusion.” Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 52 (1983). When faced with such a situation, “[i]t is the prerogative of [the decisionmaker] to weigh those opinions and make a policy judgment based on the scientific data.” Southern Offshore Fishing Ass’n v. Daley, 995 F. Supp. 1411, 1432 (M.D. Fla. 1998) (quoting Organized Fishermen of Florida v. Franklin, 846 F. Supp. 1569, 1577 (S.D. Fla. 1994)) and noting that the administrative record evinces a healthy debate, which featured noticeably vocal expert opinions both supporting and opposing the means employed by the Secretary); see also Associated Fisheries of Maine, Inc. v. Daley, 954 F. Supp. 383, 389 (D. Me. 1997) (holding that since the administrative record recounted “strenuous disagreement among the scientists and economists” regarding the interpretation of data, the analysis of difficult problems, the interpretation of historical information, and prediction of the future, the Secretary’s decision was not arbitrary or capricious).

Assistant Secretary Darcy considered the following factors in evaluating whether to exercise Section 126 to authorize screens on two sluice gates at O’Brien: (a) the risk that an aquatic nuisance species will bypass the existing control measures; (b) the severity of the threat to the ecosystem that such an aquatic nuisance species presents; (c) the feasibility, efficacy, and environmental soundness of any recommended emergency measure; (d) the consequences of any recommended emergency measure with regard to Congress’ directive that the Illinois Waterway be maintained for purposes of navigation; (e) the consequences of any recommended emergency measure with regard to the

impacts to the national and regional economy; and (f) the consequences of any recommended measure on flood mitigation and control efforts. Darcy ¶ 3. The Corps, likewise, considered similar factors in deciding whether to intermittently close the locks for fish monitoring, collection and eradication efforts. Peabody ¶¶ 55-58; Darcy, Attach. 2 at 54-60. As the decision to shut the locks for fish monitoring, collection and eradication efforts falls within the Corps' existing statutory authorities, the Corps did not need to exercise Section 126 authority in making its decision (in which Secretary Darcy concurred).

In this situation, the record before the Corps and Secretary Darcy evidences a thorough, detailed scientific process, with experts concluding that temporary closure of the locks would not impede the migration of Asian carps. After weighing the scientific results and the policy concerns, the Corps and the Assistant Secretary reasonably concluded that the currently available scientific evidence did not warrant temporarily closing the locks other than to assist in monitoring and eradication efforts. They likewise concluded that the evidence does not warrant placing screens on all the sluice gates. Plaintiffs have not shown that the Corps' decision in the Interim III Report is arbitrary or capricious, and are not likely to succeed on the merits.

III. Plaintiffs Have Not Demonstrated Imminent Irreparable Harm

Plaintiffs have failed to establish that the extraordinary, mandatory injunctive relief they seek is necessary to prevent irreparable harm from occurring. Several aspects of Plaintiffs' requested relief are already underway without judicial compulsion by multiple agencies, both federal and state. First, the "continue[d] comprehensive monitoring" that Plaintiffs seek, Plfs. Brief at 49, is already well under way, using the eDNA research in tandem with more conventional techniques. Wooley ¶¶ 32-41; Rogner ¶¶ 16-17. The multi-agency monitoring group responded to the finding of the live

carp in Lake Calumet with increased monitoring and extensive fishing, which did not result in the capture of any additional Asian carp. Wooley ¶¶ 45-46; Rogner ¶ 17. Second, the multi-agency monitoring group is responding to the overflow between the Des Plaines River and the CSSC on July 25, 2010 by conducting eDNA sampling and traditional monitoring activities in the area. Quarles ¶ 75. Third, the multi-agency group is installing a network of at least thirty acoustic receivers to track the movement of tagged Asian carp and surrogate species in the area around the electric barrier. Quarles ¶¶ 68-70. Finally, the multi-agency group continues to evaluate and apply rotenone when warranted. Most recently, IDNR led a rotenone exercise in May 2010 in the CAWS near the O'Brien lock based on eDNA results. Wooley ¶¶ 42-44; Rogner ¶¶ 12-15, 18-23. Thus, no injunction is necessary to direct the ACRCC to "capture or kill bighead or silver carp." Plfs. Brief at 48. As discussed above, the group continues to work to find and destroy any Asian carp within the CAWS through rotenone applications and traditional fishing methods.

Plaintiffs' main argument on the immediacy of irreparable harm stems from the eDNA results coupled with the discovery of a single live fish in Lake Calumet. See generally Declaration of Tammy J. Newcomb (Plaintiffs' expert on harm). Based on this evidence, Plaintiffs argue that the electric barrier must have failed, and because the locks remain open to water traffic, fish can migrate into the Lake, and thus, fish are on the cusp of establishing a breeding population in Lake Michigan. Plfs. Brief at 23-31. On this theory, Plaintiffs demand the closure of the locks and screening of all sluice gates, along with the construction of physical barriers in the Little Calumet River⁹ and Calumet River. Contrary to Plaintiffs' arguments, the current eDNA results and one fish do not

⁹ Contrary to Plaintiffs' averments, the Grand Calumet already has a temporary set of barriers in place that, absent flood conditions, prevent Asian carp from passing. Quarles ¶¶ 113-115.

establish the requisite likelihood that a reproducing population of carp is on the verge of establishing itself in the Great Lakes.

Regarding the eDNA evidence, as the Corps Division Commander concluded following consultation with EPA and other agencies: the state of the science does not yet permit the agencies to conclude with the requisite confidence that live Asian carp are in the canal system in numbers that present an imminent threat. Peabody ¶¶ 26-27. Environmental DNA is new science that has not previously been used to confirm fish presence. Id. Depending on the circumstances, the presence of eDNA may correspond to a live fish, a dead fish, or simply the presence of fish mucus, feces, urine, or other cells. Id. For example, the eDNA results for the sampling contained in Lake Calumet (where the one fish above the barrier was found) have been negative, Peabody ¶ 15, and in areas where live fish are known to be abundant the results are not always positive. Plfs. Ex. 14 at ¶ 24. In contrast, the May rotenone event was conducted in an area where multiple positive eDNA samples were collected, and no Asian carp were found out of 130,000 pounds of fish recovered. Quarles ¶ 59.

The Corps and the other agencies continue to use the eDNA evidence but have to remain cautious in any approach based solely on that evidence. Peabody ¶¶ 29-31. Contrary to Plaintiffs' representation, Plfs. Brief at 46-47, the EPA quality controlled the laboratory and determined there was no cross contamination in the sampling collection but did not fully peer review the work. Plfs. Ex. 14 at ¶¶ 16-17. The Corps has contracted with an independent entity to peer review the eDNA scientific method and should have the results in December 2010. Peabody ¶ 33. And the federal government has not ignored the eDNA results. Indeed, the multi-agency group has used and continues to use the eDNA as a tool to focus monitoring and fishing exercises.

The live fish caught in Lake Calumet also does not equate to a sustainable population of fish above the electric barrier, nor does it show any alleged failure of the barrier. The origins of the live bighead fish caught in Lake Calumet above the fish barrier are unknown. Chapman ¶¶ 28-29. For example, the federal government does not know if the fish swam across the electric barriers, was carried to the location via ballast water or a bait bucket, or released into the water body by a third party. Chapman ¶¶ 29-33. Such third party releases have been known to occur and are also an explanation for Asian carp found in isolated lagoons near Chicago. Rogner ¶¶ 24-27.

Of importance to the question of imminence, Mr. Chapman explains that the establishment of a fish population depends on the number of fish present and that invaders usually require multiple introductions. Moreover, the best information available provides evidence that if such an invasion [of Asian carp into the Great Lakes] does occur, it will probably take many years (possibly one to three decades) for the population to become problematic. Chapman ¶¶ 13, 19-25. In short, a preliminary injunction need not issue based on imminence.

Moreover, and contrary to Plaintiffs' argument that irreparable harm to the Great Lakes is a given, whether Asian carps can survive and reproduce in the Great Lakes is actually debatable. Chapman ¶¶ 6-16; 34-40. As explained by a leading scientist on Asian carp (upon whose work Plaintiffs' experts relies):

[t]he likely survival and growth of individual Asian carp does not necessarily mean that, even with high propagule pressure, Asian carps would successfully invade the Great Lakes and develop extremely large populations that would cause undesirable economic and environmental problems. This remains an unknown. Chapman ¶ 6. Mr. Chapman explains that there is "no evidence as yet that [Asian carps have entered the Great Lakes in sufficient numbers to establish a successful breeding population]." Chapman ¶ 12. Indeed, single bighead carp have been caught in Lake Erie itself on multiple occasions and there

is no indication that the species has established itself, or begun to do so. Chapman ¶¶ 4, 10. Likewise, “[t]he potential for damage [to the Great Lakes] is high (although not as high as some would have it -- the complete destruction of all fisheries in the Great Lakes is extremely unlikely) but the level of certainty that any damage will occur is low.” Chapman ¶ 27. In other words, the potential and level of irreparable harm is unknown and should not form the basis for a preliminary injunction. In short, Plaintiffs cannot demonstrate imminent harm where “[i]t is impossible to predict with precision whether Asian carps will be able to adapt, produce a large population, and become problematic in the Great Lakes.” Chapman ¶ 9.

IV. The Balance of Injuries Tips Decidedly In Favor Of Defendants; An Injunction Would Harm The Public Interest.

As discussed above, the locks and sluice gates at the Chicago and O’Brien locks are used to relieve flooding, to provide Coast Guard vessels with speedy passage between the lakefront and the CAWS, to divert water from Lake Michigan pursuant to Supreme Court decree, to transport more than \$1.7 billion in cargo annually, and to provide passage for hundreds of thousands of individuals for recreation. Plaintiffs’ proposed relief would have consequences for flood control, public safety, and other important considerations that are sufficiently grave to counsel against taking such steps in the absence of appropriate study. Plaintiffs’ proposed relief would, among other things, adversely impact multi-agency efforts to protect against flooding and public safety¹⁰ and harm the local and

¹⁰ Plaintiffs purport to preserve certain functions fulfilled by the locks and sluice gates, at least temporarily, by allowing for their use “as needed to protect public health and safety.” Plfs. Brief at 48. Plaintiffs, nonetheless, would have this Court undertake for itself the questions of deciding: 1) when, whether, and how the locks should be permitted to open in emergencies; 2) how the sluice gates should be operated to protect public health and safety; 3) how screens over the sluice gates should be maintained; 4) whether to install block nets or other interim barriers in the Calumet and Little Calumet Rivers; 5) what methods should be used to capture or kill Asian carp; 6) how to monitor for the presence of Asian carp; and 7) the time frame for completing and the final results

regional economy around Chicago.

While Plaintiffs' vague requested relief would cause certain economic, social, and environmental impacts, that relief is uncertain to impact the likelihood that a self-sustaining population of Asian carp will become established in the Great Lakes. Rather than implement the relief sought by Plaintiffs, including relief twice denied by the Supreme Court, the Corps and the ACRCC are implementing a carefully considered plan to prevent the migration of Asian carp which includes lock closure when such closures are likely to augment monitoring and/or eradication efforts. In contrast, Plaintiffs' proposed relief would impose certain harms in exchange for unlikely benefits. Such a tradeoff is not in the public interest.

A. Use of Locks for Flood Control. The ability to move water from the canals into Lake Michigan is an essential flood-control tool. Guarding against flooding regularly requires the use of the locks and sluice gates that Plaintiffs seek to close with limited exception. As recently as July 24, 2010, flooding required the Corps to open the Chicago Lock and Controlling Works and the Water District to open the sluice gates at the Chicago Lock and Controlling Works and the Wilmette Pumping Station. Quarles ¶ 105; Su ¶¶ 11, 19. Without the ability to mitigate flood conditions in the canals, the Corps and Water District would face a real possibility of both dangerous flooding and hazardous sewage backups into the City of Chicago. Quarles ¶ 100, Su ¶¶ 13, 15, 20.

Flood conditions threaten the Chicago area with considerable regularity. Indeed, since 1986, the Water District was forced to reverse flow to Lake Michigan through the Chicago Lock and

of the Corps' long-term study of the permanent physical separation of the Great Lakes and Mississippi Basins. Plaintiffs' proposed relief would have significant immediate consequences, as well as possible effects on flood control, public safety, and other important considerations that are sufficiently grave to counsel against taking such steps in the absence of appropriate study, regardless of the contours of any order governing the ongoing multi-agency effort to stop Asian carp migration.

Controlling Works and/or sluice gates (ten times), the O'Brien lock and sluice gates (four times), and the Wilmette pumping station sluice gates (twenty-one times). Su ¶¶ 11-12, 19. Fourteen of these flow reversals occurred during August and September - precisely during the time of year Plaintiffs' injunction would initially be in effect. *Id.*

Plaintiffs purport to leave open the possibility of continuing to use the locks and sluice gates to preserve public health and safety. Plfs. Brief at 48. However, the design and operation of the locks make it impossible to mandate that the locks be opened only to relieve flood waters. The O'Brien and Chicago Lock and Controlling Works cannot simply be switched off and remain in working order. Plaintiffs seek an injunction that would cover, at a minimum, the next eighteen months. Especially in cold weather, the locks require frequent -- sometimes constant -- cycling in order to remain operational. Cox ¶¶ 6-7. An injunction prohibiting such cycling, even a temporary one, would risk degrading the locks to the point that the shutdown will necessarily become a permanent one, with the attendant consequences for flood control, navigation, and public safety. Such an injunction would dramatically increase the risk that Chicago would suffer severe flooding and would increase the severity of any flooding.

B. Use of Sluice Gates for Flood Control. Plaintiffs quibble with the Corps' plan to install screens in a manner that will preserve their critical functions of flood control and preservation of water quality. Plaintiffs would have the Corps or Water District: 1) install screens on all sluice gates at O'Brien, Chicago, and Wilmette; and 2) require that the screens be constructed in a manner that prevents all fish passage. Plfs. Brief at 48. These proposals would undermine the ability of the sluice gates to relieve flooding. Quarles ¶ 77, Darcy, Attach. 2 at 46-48. It will not advance the Corps' efforts to prevent the migration of any Asian carp in the CAWS to install screens on the two

gates at O'Brien designated for flood relief when those screens must be removed during floods. Peabody ¶ 42. Similar concerns apply to Plaintiffs' proposal to install additional screens on the Chicago and Wilmette sluice gates that are owned and operated by Water District. See Darcy, Attach. 2 at 46-47, 49-50.

C. Impact of Proposed Physical Barriers. Plaintiffs also propose that physical barriers be installed to block fish passage in the Calumet and Little Calumet Rivers. Plfs. Brief at 30, 48. The Little Calumet River already poses a significant flooding risk, one that the Corps is working to mitigate through flood control projects. Even if the Corps possessed the real estate rights, authority, and appropriations necessary to install a physical barrier on the Little Calumet River, the construction of such a barrier to block the passage of Asian carp -- and water -- would create further flooding and associated public safety concerns, decrease water quality, and impact navigation. Quarles ¶¶ 116-22; Su ¶¶ 21-23. The installation of a physical barrier in the Grand Calumet lakeward of the O'Brien lock, including the impact on the lock's public health and safety functions Plaintiffs recognize are necessary, have not been modeled. At a minimum, such a barrier would increase flood risk. Quarles ¶ 122.

Plaintiffs' proposal to install block nets in several waterways is similarly problematic, as block nets are poorly suited for use as long-term fish barriers. Block nets would likely clog with debris, creating increased flood risk and/or the possibility that the nets would pull apart. Quarles ¶¶ 120-22; Peabody ¶ 58; Su ¶ 17. The installation of block nets in the Little Calumet River and physical barriers, including block nets, in the Calumet River would cause similar concerns. Quarles ¶¶ 122; Su ¶ 17. Finally, the installation of physical barriers would restrict navigation. Quarles ¶

121.¹¹

D. Risks to Public Safety. The Coast Guard depends on the locks to respond in short order to boating emergencies on the Illinois Waterway, where numerous recreational craft operate. The Coast Guard station at Calumet Harbor and its temporary Chicago substation respond to search and rescue and law enforcement emergencies on both sides of the Chicago and O'Brien locks. The Coast Guard also responds to environmental crises on the waterway, such as oil spills.¹² Most heavy industry, including refineries and coal operations, is on the waterway. Many of the Coast Guard vessels that respond to these crises, such as oil retrieval vessels, can respond only through the locks; they are not designed to be transported over land by trailer. Barndt ¶ 60.

Plaintiffs seek to explain away the consequences of a permanent lock closure for public safety by asserting that the Coast Guard (and local public-safety agencies) should operate facilities and maintain boats on both sides of the to-be-closed locks.¹³ The Coast Guard does not view that

¹¹ The Corps recently conditionally approved the construction of a demonstration acoustic bubble strobe fish deterrent system that might help prevent the migration of Asian carp without posing the risks and harms posed by Plaintiffs' proposed barriers.

¹² The Coast Guard also works with the Corps to address public-safety concerns related to the methods used "to block the passage of, capture or kill bighead and silver carp that may be present in the CAWS." See Plfs. Brief at 48. The preliminary results of some studies conducted by the Corps in support of Interim II suggests that a slight increase in the operating parameters of Barrier IIA might increase its efficacy in deterring very small juvenile Asian carp. Shea ¶ 14; Quarles ¶ 30. Any increase in the barrier's operating parameters will require an evaluation of any potential safety concerns. Barndt ¶¶ 20-26; Quarles ¶¶ 33-34. Moreover, increasing the voltage of these barriers prematurely and unnecessarily would result in increased maintenance requirements and potential for failure of the barriers. Quarles ¶ 33.

¹³ Plaintiffs implicitly concede that the only alternative to using the locks to transit between the CAWS and Lake Michigan, trucking a boat across land from the Coast Guard station and launching it from a boat ramp, is unworkable based on the currently available assets. Plfs. Brief at 33. Such land-based transit would increase response times -- potentially dangerously so. Barndt ¶¶ 50, 54, 59.

solution as viable: dividing its Chicago-area assets, such that boats stationed on the river side are not quickly available to the lake side and vice versa, could leave both sides vulnerable to shortages. During the busy summer months when the Coast Guard operates a temporary station with dock space on the river side of the Chicago Lock and Controlling Works, the Coast Guard requires the use of the locks to respond to emergencies in an efficient and effective manner. Barndt ¶¶ 44-55. Outside of the busy summer months, Plaintiffs' proposed solution would require the Coast Guard to open a new station, using boats, personnel, and funds that it does not currently have. Barndt ¶¶ 61-64.¹⁴

E. Economic and Transportation Impacts. Plaintiffs' proposed injunction would suspend, or end, navigation between the Mississippi River and Great Lakes basins. All waterborne traffic between the Great Lakes and Mississippi must pass through the Illinois Waterway (or else circumnavigate the eastern United States) and transit the locks. Severing that link by closing the locks would require many tons of commodities, such as condensing tubes used in power plants, to be shipped by other, significantly more expensive means -- or not at all. Peabody ¶ 56-57; Moyer ¶ 26. Plaintiffs' preliminary injunction would force the region -- indeed, anyone who ships, carries, receives, or ultimately purchases the \$1.7 billion worth of freight that passes through the O'Brien

¹⁴ Plaintiffs contend that the Corps' long-planned repair of the Chicago Lock's seventy-year-old gates between November 2010 and April 2011 "confirms that extended closure of the Lock does not present an unacceptable risk to public health and safety." Plfs. Brief at 33. To the contrary, the timing of the lock repair and the potential consequences of failing to repair the lock highlight the need to preserve the use of the lock. The temporary unavailability of the lock is necessary to make sure it is available in the future for public safety and other purposes. Peabody ¶ 55, Barndt ¶ 50. The Chicago closure will take place during the winter season, when the Chicago Lock's traffic (which is mostly recreational and passenger boat traffic) is at a minimum and the risk of flooding is lower. Abou-el-Seoud ¶¶ 2-3. Moreover, the closure will not affect the O'Brien Lock, which handles a steady stream of commercial traffic year-round. Furthermore, Moreover, the Chicago lock closure was announced to navigation interests ten months in advance, see Abou-el-Seoud ¶ 2, so that -- to the extent possible -- they can plan around the closure.

Lock annually to bear the cost. Quarles ¶¶ 107-8.¹⁵ The proposed injunction would also end recreational traffic through the locks.

Plaintiffs' proffered economic analysis, which seeks to minimize the economic impact of the proposed injunction, founders on its own assumptions. Dr. Taylor assumes that all cargo that currently passes through the Chicago and O'Brien locks could be transloaded using either unidentified existing terminals or as-yet-unconstructed new terminals. Taylor at 36.¹⁶ Even if many such unused terminals exist, Dr. Taylor fails to address whether: 1) the terminals could handle the specialized materials currently shipped through the CAWS; and 2) businesses whose facilities are currently oriented to shipping through the CAWS could switch to other modes of transportation¹⁷ immediately and without significant cost. Taylor at 36; Moyer ¶¶ 20-21, 24. Dr. Taylor also envisions a long-term option that would require the construction of at least two new transload

¹⁵ Corps studies indicate that shipping that cargo through the O'Brien Lock rather than over land saves shippers approximately \$192 million per year, meaning that switching to the least expensive land transportation would cost the shippers nearly 10% of the total value of their cargo. Quarles ¶ 108. And in some instances, land-based freight transportation may not be practicable at all. The Chicago Lock and Controlling Works, too, plays an important role in making transit possible. Nearly 700,000 passengers, such as ferry riders, passed through the Chicago Lock in 2008. Moyer ¶ 9; Quarles ¶ 107.

¹⁶ Dr. Taylor's affidavit fails to correct many of the flawed assumptions set forth in his February 3, 2010 affidavit in support of Plaintiff Michigan's second unsuccessful Motion for Preliminary Injunction before the Supreme Court. Many of these flawed assumptions were independently identified through reviews by Ian Savage, a Northwestern University economics professor specializing in transportation issues, Michael Bronzini a retired Dewberry Chair Professor from the School of Information Technology and Engineering at George Mason University, and Jim Kruse, the Director of the Center for Ports and Waterways at the Texas Transportation Institute. Moyer ¶ 15, Attach. 1-3.

¹⁷ Dr. Taylor minimizes the costs related to truck transportation from these unidentified terminals located "up and down the Illinois River," by inappropriately assuming that cargo offloaded at these terminals would travel the same distance - and impose the same costs - as cargo offloaded in the CAWS near current terminals. Compare Moyer ¶ 28 with Taylor at 25, 36-38, 58.

terminals on the CAWS that would permit goods to be transferred from barges and loaded onto trucks or rail cars nearby current transfer locations. Taylor at 36. Even if suitable sites for such terminals exist, that construction could not likely be done in less than a year. Moyer ¶ 22.

Moreover, while Dr. Taylor acknowledges that shipping by barge is cheaper, he understates the savings associated with shipping to the Chicago area in particular by relying on national average rates for a single recession year - 2008. The Corps' estimate - that closing the locks would increase shipping costs by \$192 million per year - used average tonnage figures for five years. Moyer ¶ 16. Furthermore, Dr. Taylor's assumptions fail to reflect the fact that commodities dominating trade in the Chicago area generally require more specialized handling than bulk coal and grain flows that dominate the national waterway trade and that costs. Moyer ¶¶ 21-22, 24-25.¹⁸ But even using Dr. Taylor's chosen year, the Corps' estimate is still more than twice as high as Dr. Taylor's (\$167 million per year in 2008), in part because the Corps uses more precise cost data that better tracks the specific commodities that actually pass through the O'Brien lock, whereas Dr. Taylor relies on national averages. Moyer ¶¶ 7-8, 16.

Unsurprisingly, given the complexity of the issues, Dr. Taylor does not even attempt to analyze: 1) the economic harm that might be caused by the establishment of a self-sustaining population of Asian carp in the Great Lakes;¹⁹ or 2) the economic impact that the permanent physical

¹⁸ In fact, the appropriateness of the national average rates used by Dr. Taylor as a benchmark for estimating the economic impact of Plaintiffs' proposed injunction were questioned by the Texas Transportation Institute - the very source of those rates. Moyer, Attach. 3; Taylor at 15.

¹⁹ Plaintiffs estimate the value of the entire Great Lakes fisheries rather than estimating the cost of Asian carp establishing a self-sustaining population in the Great Lakes. Plfs. Brief at 37. The extent to which this figure overstates the potential economic threat posed by Asian carp is currently unclear, but it merits noting that: 1) "there is a high degree of uncertainty in what will

separation of the CAWS from Lake Michigan sought by Plaintiffs would have on the flood control, public health, and public safety functions discussed above. See Taylor at 38-39. The need for such analysis underscores the need to evaluate the many potential consequences of permanent measures to prevent the transfer of all manners of aquatic invasive species between the Great Lakes and Mississippi River basins. Peabody ¶¶ 50-56; Moyer ¶¶ 3-6.

F. Accelerated completion of GLMRIS. Plaintiffs not only seek injunctive relief requiring the Corps to expedite its completion of the GLMRIS, they seek to predetermine the result of GLMRIS - seeking preliminary relief that would recommend “specific measures to permanently separate the CAWS from Lake Michigan” and permanent relief ordering the Corps to “implement plans to permanently and physically separate . . . the CAWS from Lake Michigan.” Plfs. Brief at 49; Plfs. Compl. at 34. The magnitude of the issues the Corps must study in evaluating the permanent separation of the Mississippi and Great Lakes basins and the potential wide-ranging and severe impacts that the separation would have on important purposes of flood control, navigation, commerce, and sanitation merit the careful study that the Corps intends. Peabody ¶¶ 45, 50-52; Quarles ¶¶ 82-89. Finally, Plaintiffs have not set forth any legal basis for the relief that they seek - as explained above, permanent separation would require Congressional authorization and significant funding.

G. Plaintiffs’ relief would impose certain costs without producing discernible benefits.

Perhaps the most significant flaw in Plaintiffs’ argument is that much of the relief sought by Plaintiffs is unlikely to advance comprehensive ongoing efforts to prevent Asian carp migration. The

happen if Asian carp invade the Great Lakes;” and 2) the economic impact, if any, on the Great Lakes fisheries is unclear. Chapman ¶¶ 39-40; Moyer ¶ 18.

Corps, along with the other federal and state agencies that are actively engaged in efforts to prevent Asian carp migration, are already taking or planning to take appropriate actions that Plaintiffs seek to compel through their injunction - undertaking continuous and regular monitoring for Asian carp; using the best available methods to block, capture, and kill Asian carp that are consistent with preserving public health and safety; completing the partially constructed physical barrier between the Des Plaines River and the CAWS; and installing screens on the sluice gates that are used for regular water intake. For example, the ACRCC recently: 1) increased monitoring and control efforts in Lake Calumet and nearby areas as a result of the capture of a Bighead carp in Lake Calumet and; 2) is increasing monitoring in response to the overtopping of the Des Plaines River during the July 23, 2010 flood. Wooley ¶ 45; Quarles ¶¶ 63, 75. The ACRCC is even addressing threats, such as the hydrologic connection between the Wabash and Maumee Rivers that creates a risk of Asian carp migrating to the Great Lakes through Plaintiff Ohio, that Plaintiffs fail to account for. Bolen ¶¶ 28-29; Quarles ¶ 88.

In contrast to these efforts, Plaintiffs' proposed additional relief is unlikely to advance Plaintiffs' and the Corps' common goal of preventing the establishment of a self-sustaining population of Asian Carp in the CAWS. As discussed above, the locks and sluice gates must be opened regularly to preserve public health and safety. Plaintiffs' proposed relief accepts this reality, but fails to recognize that the need to regularly open the locks and sluice gates renders the general closure of the locks and sluice gates unlikely to add any value to the ongoing multi-agency efforts, especially when weighed against the known costs of such action.

Using the FWS's Risk Analysis, the Corps analyzed six different lock closure scenarios ranging from no-action to a closure of the Chicago and O'Brien locks for two months -

approximately the time now remaining until the Corps' Section 126 authority expires. Darcy, Attach. 2 at 50-60. Plaintiffs concede that the locks and sluice gates must be used as needed to protect public health and safety - for flood relief, to preserve water quality, for the occasional transit of Coast Guard boats. Plfs. Brief at 48. Such necessary use includes the cycling of the locks to preserve their use for such functions. Accordingly, Plaintiffs' proposed injunctive relief is substantially similar to the modified lock operations that the Corps rejected because limiting lock openings appears unlikely to "statistically reduce the likelihood of [Asian Carp] passing through the locks." Darcy, Attach. 2 at 52; *Id.* Appendix D at Section V. In short, any temporary lock closure that allows for the use of the locks for public health and safety purposes, as proposed by Plaintiffs, is unlikely to prevent any Asian carp located in the CAWS from migrating through the locks.

Plaintiffs also propose that the Corps apply rotenone to at least two separate areas of the CAWS. Plfs. Brief at 49. The ACRC's December 2009 and May 2010 rotenone operations required carefully planned multi-agency coordination and significant resources. Rogner ¶¶ 19-23; Quarles ¶¶ 40, 59; Bolen ¶ 13. The application of rotenone suggested by Plaintiffs may be impractical, ineffective, inefficient, and unsafe. Rogner ¶¶ 19-23. As evidenced by the application of rotenone in May 2010 - in which 130,000 pounds of forty species of fish were killed without recovering a single Asian carp - Plaintiffs' proposed widespread application of rotenone may do more harm than good. Plaintiffs have not shown how the public interest benefits from their requested relief and the balance of injuries tips decidedly in favor of the Defendant.

CONCLUSION

Based on the above, the federal defendant respectfully requests that the Court deny Plaintiffs' motion for a preliminary injunction.

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Respectfully submitted,
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