

**Testimony to the United States Senate
Subcommittee on Water and Power, Senator Debbie Stabenow, Chair**

**Illinois Chamber Infrastructure Council Waterway Committee
Jim Farrell Executive Director, Infrastructure Council**

**Suggested Asian Carp Strategy
February 25, 2010**

The Illinois Chamber of Commerce and its Infrastructure Council appreciate the opportunity to contribute to the effort to protect Lake Michigan and the Great Lakes Basin from the Asian Carp and other invasive species. The Illinois Chamber would like to thank Senator Stabenow for inviting us to appear and contribute towards resolution of this important matter.

The Illinois Chamber of Commerce shares the concern of the State of Michigan and others who want this invasive species stopped before it can enter the Great Lakes. We offer recommendations, which have been submitted to the United States Environmental Protection Agency and the Asian Carp Workgroup, for action to stop the Asian Carp. We believe these suggestions can protect Lake Michigan from an invasion of Asian Carp via Illinois waterways and simultaneously provide for commerce to continue uninterrupted.

Separate and apart from our concern for a balanced and thoughtful approach to the problem of preventing the Asian Carp from reaching Lake Michigan is our concern for the creation and retention of jobs in the region. This discussion needs to move from the courtroom to the conference room. The common objective is to stop the carp. However, in the process we do not believe the Solutions should pit Illinois Tow Boat operators like John and Jacque Kindra of Kindra Lake Towing of South Chicago against Michigan fisherman and Charter Boat Captains like Paul Jensen of Muskegon.

Furthermore, we believe that our concern for the environment should give us cause to recognize commercial navigation as the most environmentally friendly and safest mode of freight transit. Depending on the commodity being transported a single barge carries the equivalent of between 60 and 120 truckloads of cargo. (The Chamber consistently uses 80 truckloads as an average in all examples.)

The Illinois Chamber is encouraged that the Asian Carp Control Strategy Framework, which we were unaware of at the time we created our plan, includes six of the eight suggestions we present. Further we are encouraged that the Framework notes the historical perspective of when invasive species from the Mississippi Basin to the Great Lakes Basin became an issue for the region. *“Historically, poor water quality in Chicago’s urban waterways had controlled the transfer of invasive species between the Great Lakes and Mississippi River watersheds.”*[Framework 1.2, page 4]

There is precedent of an impenetrable aquatic barrier.

It is our goal that this testimony will bring to light the fact that lock closures are not the answer. Though it is convenient and simple to suggest the dramatic and easily visualized act of closing the locks, we submit that halting the migration of Asian Carp should be, and can be executed twenty miles west of the Chicago and O'Brien Locks without interrupting commercial navigation.

Just this week the Illinois Department of Natural Resources (IDNR) conducted electro fishing expeditions both in the Chicago Sanitary and Ship Canal and further down stream in the area of Peru, Illinois. Once again there were no Asian Carp found above the existing electric barrier at Romeoville. Asian Carp were found down stream roughly fifty miles from Lake Michigan. We respectfully submit that this most recent result from electro fishing affirms the Chamber's position that we can address this problem many miles downstream and west of Lake Michigan.

Much, if not all, of the recent alarm regarding Asian Carp stems from eDNA testing performed by the University of Notre Dame. It must be emphasized that a positive eDNA test does not correlate to a sighting of Asian Carp, but rather to a finding of Asian Carp DNA. The Framework references the term "vector" as a delivery mechanism of Asian Carp. Many vectors have been discussed: cultural releases, bait, and the barges themselves. In fact Dr. Lodge whose research team is partnering with the United States Army Corps of Engineers on this technology acknowledged as recently as this month ;www.nd.edu that "These biological materials degrade in the environment, but this process is not instantaneous, and DNA can be held in suspension and transported." We at the Chamber have stated publicly and consistently that this new technology, which has indicated the presence of DNA has yet to produce a live Asian Carp or even an Asian Carp carcass upstream of the electronic fish barrier. Therefore, at best, eDNA should be considered a warning – not an alarm.

As part of our testimony we have submitted my Sworn Affidavit which was a part of the Illinois Solicitor General's' response to the State of Michigan's Supreme Court filing which requested lock closures. And we have included a copy of our Public Comment prepared for the EPA Public Hearing held February 12, 2010.

Below is the enclosure of both documents.

Public Comment to Asian Carp Regional Coordinating Committee

Illinois Chamber Infrastructure Council Waterway Committee
Jim Farrell Executive Director, Infrastructure Council

Suggested Asian Carp Strategy **February 12, 2010**

[Updated for US Senate Subcommittee on Water and Power 2/25/2010]

Overview

First, the closure of O'Brien and Chicago Locks must simply be ruled out as an option in controlling Asian Carp or any other invasive species. The region's commercial navigation cannot supply the needs of the region without consistent continually available and operating locks. \$17 Billion of freight travels annually on Illinois waterways. In the Chicago Region the equivalent of well over a half million truckloads of cargo enters and leaves annually by barge - with an additional tens of thousands of truckloads moved by barge within the region. That is equal to trucks lined up end-to-end from New York City to Los Angeles and back again.

Examples:

- Salt for the safe travel of our roads
- Construction materials for roads, bridges schools, libraries and hospitals
- Additives for our fuels
- Fuels for our power plants
- Aviation fuel for our airports
- Recyclable metals

In addition, at the Chicago Lock tens of millions of dollars are at stake in accommodating recreational boating and commercial passenger vessels. Chicago's Navy Pier is the largest tourist attraction in the Midwest and would be severely impacted without navigation being allowed to traverse the Chicago Lock. This impact would be felt along Michigan Avenue, the new river walk, recreational boating facilities, and the entire convention, restaurant and hotel industry. "Passenger Vessel Association (PVA) member companies in Chicago operate at least 36 vessels with a combined passenger capacity of 4,115 that must pass through the Chicago River lock. Their vessels carried at least 691,674 passengers and made at least 7,790 transits through the lock in 2009. These PVA members employ at least 604 workers in high-quality, good-paying jobs and have an annual payroll of at least \$7,033,396. Tens of millions of dollars of investment assets and resources are at risk if the passenger vessels can not be employed in their normal income-producing activity".

Second, we need to recognize that if we are to create jobs we must give businesses a commitment that lock closures are not an option. Banks will not finance and businesses will not invest in this region if their business needs the waterways. Further, businesses will close and/or move if they cannot count on the availability of the locks. This is the equivalent of asking airlines to invest in O'Hare when at the same time you are contemplating closing the CTA Blue Line train and Interstate spur 190. Or in the case of the Washington DC Reagan National, you were to contemplate closing the METRO and considering intermittent closure of the bridges over the Potomac River.

Third, it must always be recognized that we would not enjoy the robust world class Chicago Region we have today without the infrastructure that created Chicago as the port of the Midwest. The building of the I & M Canal, the reversal of the Chicago River, and the completion of the Sanitary & Ship Canal made Chicago before rail, roads, or airports. And that commercial navigation is the most environmentally friendly mode of transportation for freight.

Suggestions for Action

1. Conduct a study of the ability of Asian Carp to survive and/or thrive in Lake Michigan. This is a bottom feeding river fish that seems to have entered Lake Erie in a very limited way without doing harm. [In Framework]
2. Study the efficacy of eDNA testing. This newly developed test seems to have received much of its approval by its implied endorsement from the US Army Corps of Engineers' decision to try what was thought to be the best available test when no other technology was available. If the test is not going to be halted, then it should be considered merely a warning not an alarm. [In Framework]
3. Expand as planned the fish barrier system. This system appears to be working – no live Asian Carp or Asian Carp carcass has been found above the fish barrier. [In Framework]
4. Utilize the five miles between the Lockport Lock and the fish barrier at Romeoville as a designated “Kill Zone”. These kills can be implemented on an as needed basis. [In Framework]
5. Install chemical kills and/or acoustical barriers in, and adjacent to, the 600-foot lock chamber at Lockport to be used as commercial and recreational traffic are locked through the chamber. Lockport is the “Check-Point” of the region.
6. Block the passage of fish of all types by issuing an Executive Order and/or Congressional Mandate charging the United States Environmental Protection Agency to mandate adjusted standards which maintain oxygen levels that will not support an aquatic ecosystem in the 15-mile section of the Sanitary and Ship Canal as well as the Cal Sag Channel upstream from Lockport Lock. This is a man-made channel, which is currently 70% treated effluent. This would create an “Aquatic Dead Zone” between Lockport and the Sub Continental Divide. [In Framework]
7. Install south of Lockport a remedial oxygenation program to enhance water quality south of the Chicago Area Waterways and protect the ecosystem in the balance of the Illinois Waterways and the Mississippi River Basin.
8. Provide incentives and support commercial harvesting of Asian Carp from Peoria to Lockport and in the southern end of the Des Plaines River. [In Framework]

In The
Supreme Court of the United States
October Term 1966

STATES OF WISCONSIN, MINNESOTA, OHIO, AND PENNSYLVANIA, <i>Complainants,</i> v. STATE OF ILLINOIS AND THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO, <i>Defendants,</i> UNITED STATES OF AMERICA, <i>Intervenor,</i>	No. 1 Original
STATE OF MICHIGAN, <i>Complainant,</i> v. STATE OF ILLINOIS AND THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO, <i>Defendants,</i> UNITED STATES OF AMERICA, <i>Intervenor,</i>	No. 2 Original
STATE OF NEW YORK, <i>Complainant,</i> v. STATE OF ILLINOIS AND THE METROPOLITAN SANITARY DISTRICT OF GREATER CHICAGO, <i>Defendants,</i> UNITED STATES OF AMERICA, <i>Intervenor.</i>	No. 3 Original

AFFIDAVIT OF JAMES P. FARRELL

I, James P. Farrell, being duly sworn, state that the following facts are based upon my personal knowledge and are true and correct:

Background

My name is James Farrell. I am 53 years old and currently work for the Illinois Chamber of Commerce, located at 300 South Wacker Drive, Suite 1600, Chicago, Illinois 60606. I received my bachelor's degree from Franklin and Marshall College in Lancaster, Pennsylvania in 1977.

Since November 2007, I have been Executive Director of the Infrastructure Council for the Illinois Chamber of Commerce. The purpose of the Infrastructure Council is to bring business, labor, and government agencies together with policymakers to promote infrastructure improvements in Illinois and the region. Our goal is to ensure that the region has the necessary infrastructure in place that will allow Illinois and regional businesses to compete and thrive in today's global economy. Our efforts are especially heightened now given the sluggish state of the national economy, and in particular, the Illinois economy.

In my position as Executive Director, I work directly with the commercial navigation industry, railroads, mass transit agencies, the aviation industry, and engineers involved in the construction of roads and bridges. In addition, I work alongside trade unions and government agencies, such as the Illinois Department of Transportation, the Chicago Department of Transportation, the Illinois Tollway Authority, the Chicago Metropolitan Agency for Planning, and the Regional Transportation Authority.

Prior to my position as Executive Director of the Infrastructure Council, I was employed as an Illinois Chamber of Commerce staff member from 2002-2005. As a staff member, I regularly communicated with, and advocated for, members of the Chamber whose businesses were dependent on the region's infrastructure.

Prior to joining the Illinois Chamber of Commerce, I was the Founder and Principal of New Business Development (NBD). While at NBD, I worked with a variety of industries, including marine hardware, web development, natural foods, and investment banking. Before NBD, I was the principal of the James P. Farrell Company (JPFCO). JPFCO represented manufacturing and distribution firms in the building material industry.

Throughout my career I have been concerned with freight issues as a cost of doing business, and particularly since 2007, my work has consistently focused on improving infrastructure and public systems that are essential to Illinois businesses. Such systems include railroads, waterways, roads and bridges, and airports. In this capacity, I have become very familiar with the effect that Illinois waterways—including the Chicago Area Waterways, commonly known as the Chicago River and adjoining canal system—have on businesses in Illinois and the Great Lakes Region, and which are part of the national and global economy.

I have reviewed the documents filed by the State of Michigan in the Supreme Court of the United States. I understand that Michigan seeks to force the State of Illinois, the Metropolitan Water Reclamation District of Greater Chicago, and the U.S. Army Corps of Engineers to immediately take steps designed to prevent the spread of an invasive species of Asian Carp into Lake Michigan. Specifically, Michigan seeks the closure of the O'Brien Lock and the navigational lock located at Chicago Controlling Works ("Chicago Lock"). In addition, Michigan requests that the Supreme Court order the defendants to improve the operation of the sluice gates at O'Brien, Chicago Controlling Works, and the Wilmette Pumping station so as to prevent the spread of Asian Carp into Lake Michigan. Finally,

Michigan requests that the Supreme Court order any other measures that might be necessary to prevent the potential spread of the Asian Carp into Lake Michigan.

I have also reviewed public information regarding the role of the Chicago waterway system in local, national, and international shipping. This includes information published by the Illinois Chamber of Commerce, the American Waterways Operators, the U.S. Army Corps of Engineers, and the American Association of State Highway and Transportation Officials. Further, I have discussed the impact of the possible closure of the O'Brien and Chicago Locks with regional business owners and operators, as well as representatives of the Illinois Tollway Authority. Finally, I have discussed Great Lakes' issues with Cameron Davis, Senior Advisor to the Administrator of the U.S. Environmental Protection Agency.

Based upon my knowledge of businesses in Illinois and the Great Lakes Region, and the vital role the Chicago waterway system plays in the everyday operations of these businesses, I believe even the temporary closure of the O'Brien and Chicago Locks will (1) devastate the local economy, and significantly, the role of the Illinois economy in the regional, national, and global economies, (2) endanger the safety of the region's citizens, and (3) cause environmental harm to the region.

Economic Harm

Much of Chicago's prosperity is directly related to its status as an international port city. After construction of the Illinois and Michigan Canal in 1848, Chicago and the Great Lakes Region became connected to the world via the Des Plaines River, the Illinois River and the Mississippi River. In 1900, engineers completed the Chicago Sanitary and Ship Canal; enhancing Chicago's shipping capabilities and furthering its economic relationship

with the outside world. The Chicago Sanitary and Ship Canal is the only waterway shipping link between the Great Lakes and the Mississippi River. The infrastructure provided by Chicago's canal system is largely responsible for creating the commerce that underlies Chicago's status as a vibrant and critical economy to the region and the nation.

Commercial navigation of the Illinois waterways provides essential commodities that touch the lives of the region's citizens in many ways. Shipping by barge along Chicago's waterways is the most economical, environmentally friendly, and safest manner for shipping such goods. More than \$16 billion worth of goods are transported annually to, from, and through Illinois by river barge. An example of a barge's efficiency is that one river barge alone can carry nearly 60,000 bushels of wheat—enough to provide one loaf of bread to almost every resident in the city of Chicago.

The economic harm that will result from the closure of the O'Brien and the Chicago Locks is real and significant. From June 2008 through June 2009, 7,147 loaded barges entered or left the region. That is the equivalent of 571,760 truckloads of cargo. Parked end to end, those trucks would stretch from New York City to Los Angeles and back. The O'Brien Lock handled 3,830 loaded barges—or 53% of the regional volume—totaling 306,400 truckloads. It should be noted that this number represents a depressed market. The five-year average of regional barge traffic is equivalent to 708,400 truckloads. In addition, since this data is derived from the U.S. Army Corps of Engineers' lock commodity reports, this number does not reflect the large amount of regional shuttle traffic that takes place strictly between the O'Brien and Lockport Locks on a daily basis.

If freight traffic is disrupted in the Chicago area, costs for businesses will rise, consumer prices will increase, and jobs will be lost. Coal for power plants, road salt, construction

materials, petroleum products, chemicals, fertilizer, sand, and limestone are among the many products shipped to Chicago and Illinois on its waterway system. Likewise, billions of dollars worth of manufactured goods and agricultural products are shipped out by the river and exported to the world, providing a considerable source of local and national income.

Because shipping by rail or truck is significantly more expensive than shipping by barge, common sense dictates that even the temporary shut down of the O'Brien and Chicago Locks will result in higher prices for both businesses and consumers. (Cost of shipping analysis understands that a significant portion of shipping costs includes loading and unloading at the shipping origin and destination. Thus, many businesses will not use intermodal transport of goods, *i.e.*, shipping involving more than one mode of transport. Rather, businesses will ship solely by train, truck, or barge—not some type of combination.) The resulting higher costs for many cash-strapped businesses will lead to an inevitable loss in jobs at a time when the state and national economy can scarcely afford any additional damage to the job market. As described below, the economic impact of closing the locks will be felt far and wide.

The grain industry—including corn, beans, wheat, and oats—will be seriously affected. The Chicago Board of Trade—which sets prices for worldwide grain markets—uses two facilities that are dependent on grain being shipped through the O'Brien Lock. These two facilities represent the benchmark by which the Chicago Board of Trade prices the world's grain. Any restriction on barge traffic through the O'Brien Lock will devastate the use of these two facilities, severely hampering the Chicago Board of Trade's ability to reliably price world grain.

In addition to the damage done to the complex pricing scheme of world grain, many farmers from Illinois, Wisconsin, Iowa, Missouri, Kentucky and as far away as North Dakota will be forced to find other means for shipping their grain.

There are other practical price increases in the grain industry that will result from the lock closures. Barges that carry inbound freight are often cleaned and repositioned to grain elevators located between Chicago and Peoria. These barges are then loaded with grain and shipped throughout the world. If the O'Brien Lock closure reduces the amount of barge traffic entering the region, these barges will not be available to be cleaned and repositioned to grain elevators between Chicago and Peoria. As a result, grain will have to be shipped on empty barges that are brought up from New Orleans. The difference in cost is tremendous. Repositioning a barge that has gone through the O'Brien Lock to a grain elevator located as far from Chicago as Peoria costs less than \$3,000. In contrast, an empty barge that travels from New Orleans to Peoria costs approximately \$30,000—a \$27,000 price difference. Over 21,000 barges of Illinois corn leave the region for export to the world markets every year. Thus, the total exposure to the corn industry could be as high as \$567 million per year (21,000 barges x \$27,000). The percentage of exposure actually experienced in the corn industry would be determined by how accessible the region is to the importation of material on barges. The closure of the O'Brien Lock will obviously reduce the region's inbound freight, thereby damaging the cost structure of the country's agricultural exports.

The steel industry will also feel the effects of the lock closure. The O'Brien Lock gives northwest Indiana's steel industry access to the Inland Waterway System, the Gulf of Mexico, the Panama Canal, and the Asian markets beyond the Pacific Ocean. The steel

industry uses the waterway system to receive raw material and to ship finished products and market byproducts. The steel industry accounts for much of the traffic through the O'Brien Lock. Closure of the O'Brien Lock will inevitably increase the costs of shipping steel, damaging the industry, and raising costs for consumers.

Energy prices for the region's residents will not be able to avoid the negative consequences of the potential lock closures. The majority of power plants in the region receive fuel that is shipped by barge. In times of strong market demand, much of this fuel is shipped through the O'Brien Lock. Receiving fuel by truck (Chicago's main power stations do not have rail access and depend on the river) rather than by barge will increase the costs for these power plants—an increase that will ultimately be passed on to Illinois residents in the form of higher energy costs.

Refineries in the region depend on petrochemical additives that are shipped by barge through the O'Brien Lock. Shipping by truck or rail will raise costs for these refineries. Again, the increased costs will be passed on to the consumer in the form of higher gasoline prices. Likewise, the increased shipping costs will mean that refineries will no longer find it economical to ship certain refinery byproducts, such as petroleum coke—a very cost effective fuel used by many communities in the region as fuel for power plants. Without the revenue from these byproducts to help offset refinery costs, the upward pressure on gasoline prices will be even greater.

Construction costs of all kinds will be affected by the closure of the O'Brien and Chicago Locks. Steel, concrete, and asphalt will have to be shipped by rail or truck—raising the cost of such materials. Thus, the costs of building essential structures such as bridges and roads, as well as schools, libraries, and fire stations will inevitably rise. Both businesses

and local governments may delay or cancel new building projects if the rising price of construction materials becomes cost prohibitive.

Taxpayers will also feel the economic impact of closing the O'Brien and Chicago Locks, as the cost of maintaining Illinois roadways will inevitably increase. Conclusive studies conducted by the American Association of State Highway and Transportation Officials show that there is a direct link between pavement fatigue and vehicle weight. Large trucks cause pavement damage at a quicker and costlier rate than passenger vehicles. According to the National Cooperative Highway Research Program, trucks are responsible for 30%-50% of highway capital program costs. Thus, for every \$1 billion spent on roadway infrastructure, \$300-\$500 million is used to remedy the damage caused by trucks. Studies conducted by the Illinois Tollway Authority indicate that one truck carrying a heavy load does 10,000 times more damage to the road than a passenger vehicle.

As mentioned, the five-year average of cargo shipped by barge in the region is equivalent to 708,400 trucks. Approximately 53% of these trucks are currently shipped by barge through the O'Brien Lock. Thus, closing the O'Brien Lock would likely force an average of over 375,000 additional trucks a year onto the region's roads and highways. This increase in the number of trucks will reduce the life expectancy of roadways and increase the amount of expenditures that will need to be allotted for the state's roads and bridges. (Over \$9 billion has already been appropriated in 2010.) In addition, the increase in number of trucks will necessitate additional construction and repairs to maintain the roadways. This increase in construction and repair will have the further effect of causing congestion and delays, raising the cost of doing business in Illinois. These increased costs will be borne by Illinois consumers and taxpayers.

Understandably, the Chicago waterway system is already heavily regulated due to the environmental impact of reversing the flow of the Chicago River. The region, however, must have the ability to manage the water level on a daily basis to prevent flooding—and not just in the case of an extreme event. The economic damage caused by the flooding of Chicago is clear and quantifiable. The Chicago Flood of 1992 reported estimated damage of \$1.2 billion to property and an additional \$36 million in legal costs to the city of Chicago. In today's dollars, a similar flooding would be considerably more costly. If Michigan succeeds in forcing the closure of navigational locks and gates, the likelihood of such a flood (and the corresponding dangers and costs) would increase dramatically. The costs associated with any flooding will be borne by the region's taxpayers.

Finally, I note that the State of Michigan seems to suggest in its documents submitted to the Supreme Court that under extreme circumstances, it may be necessary to open the river system's locks and gates on Lake Michigan to prevent massive flooding. Thus, the invasive species of carp would still be able to enter Lake Michigan. The result will be that the lock closures would devastate the region's economy and gain nothing in the process.

Safety Threat

In addition to the economic impact, an even temporary shut down of the locks would also threaten the safety of the region's citizens.

Illinois is the country's third largest consumer of road salt. If the O'Brien Lock is closed, road salt would become logistically price prohibitive for many cash-strapped municipalities, minimizing their ability to fund road maintenance and safety. While the City of Chicago receives its salt directly from Lake Michigan freighters (which are not dependent on the O'Brien Lock), the balance of the region receives its salt from terminals

along the Sanitary and Ship Canal. Currently, the only landmass in the region that can accommodate the volumes of salt required for the safety of its citizens is between Lake Michigan and the O'Brien Lock. If the O'Brien Lock is closed now, as requested by the State of Michigan, many municipalities in northeastern Illinois will not have access to salt shipped through the Sanitary and Ship Canal.

In the winter of 2008, the salt industry experienced shortages causing price spikes in road salt. The price increases forced some municipalities such as Naperville—a large Western suburb of Chicago—to ration their use of road salt. The shortage was worsened by freezing waters that stranded salt barges. Because municipalities were unable to receive salt from barges due to the freezing waters, salt had to be lifted from barges in Peoria and then shipped by truck—drastically increasing the cost of road salt. If the O'Brien Lock is closed, the problems of the 2008 winter will be replicated to a slightly lesser degree in 2010 because many municipalities will be forced to receive their salt shipped by truck from stockpiles located on the other side of the O'Brien Lock.

The budget shortfalls currently facing many municipalities are well documented, particularly in Illinois. I believe that the closure of the O'Brien Lock will cause a spike in the price of salt. Because municipalities are already scrounging for funds to provide basic services for their residents, the increased price of salt will limit the ability of these local governments to obtain an adequate amount of salt to keep the region's roads safe, resulting in greater risks to life and property.

No mode of transportation is more regulated or has a better safety record than the commercial navigation industry when shipping hazardous materials. If the O'Brien and

Chicago Locks are closed, these hazardous materials, such as petro chemical and jet fuel, will be increasingly forced onto the region's roadways and railways.

Finally, the lock closures will increase traffic congestion, thereby reducing commuter safety. As an example, on a given work day in downtown Chicago, there are approximately one million commuter crossings over the bridges spanning the south branch of the Chicago River. Simultaneously, 80 truckloads of aggregate products frequently move by barge beneath them en route to cement plants on the north branch of the river. If those truckloads were forced onto Chicago's roads, there would be a large increase in local traffic congestion. While difficult to quantify, the increased traffic and congestion would add delays for commuters of many industries, further raising the costs of doing business in the Chicago area. More importantly, the increased traffic would likely reduce commuter safety in the region.

Environmental Harm

The damage done by the closure of the locks does not end with the region's economy and the safety of its citizens, but extends to the environment of the Great Lakes Region as well. As mentioned, the steel industry accounts for much of the traffic through the O'Brien Lock. As part of its everyday operations, the regional steel industry removes recyclable metals and ships them by barge to markets worldwide. Without barge access, it will likely be uneconomical for the steel industry to ship these recyclable materials. For example, the cost of shipping these materials by truck to Lemont, Illinois—an alternative of intermodal transit that is often suggested by proponents of the lock closure—is equivalent to the cost of shipping the same materials by barge all the way to New Orleans, Louisiana or Houston, Texas. From June 2008 to June 2009, 31,516 truckloads of recyclable metals left the region

by barge to be reused. Closure of the locks would mean that instead of recycling these metals, the steel industry will be forced to discard them in the region's landfills. (It should also be noted that the steel industry's inability to recycle discarded metal will increase the region's supply of scrap metal. This increase in supply will depress the price of scrap metal—in turn reducing the amount of cash companies will receive from scrap metal, resulting in an overall rise to the cost of doing business.)

Closure of the locks will also increase carbon emissions. A river barge can move one ton of material 576 miles on one gallon of fuel while a truck can move that same ton of material only 155 miles. In addition, one towboat originating from the Gulf of Mexico pushes 15 barges (each carrying 80 truckloads of cargo) up the Mississippi and Illinois Rivers to the Chicago region. In other words, one towboat can move the same amount of cargo as 1,200 truckloads. The carbon footprint of two trucks equals the carbon footprint of one towboat. Thus, shipping by towboat effectively removes 1,198 trucks from the road. Such numbers make clear that the closure of the locks will inevitably increase the region's carbon emissions if materials are shipped by truck rather than by barge. (As mentioned, because of the costs associated with loading and unloading goods, many businesses will elect to ship solely by truck or barge—as opposed to shipping part-way up the Mississippi River by towboat and then unloading the materials onto trucks for the remainder of the trip to Chicago.)

Private and Public Cooperation

The cooperation of the U.S. Army Corps of Engineers, the U.S. Coast Guard, the Metropolitan Water Reclamation District of Greater Chicago, the Illinois Department of Natural Resources, and the commercial navigation industry has been exceptional in

coordinating efforts to control the potential threat of Asian Carp entering Lake Michigan. The commercial navigation industry has cooperated fully as a partner with government agencies, including temporary shut downs for maintenance of the fish barrier and recent fish kills. The industry is committed to continuing this cooperation. The industry has asked for appropriate notification of shut downs and a reasonable duration of these shutdowns to accommodate their customers. Recent fish kills and harvest nettings prompted assurances from Cameron Davis, Senior Advisor to the Administrator of the U.S. Environmental Protection Agency, that no lock closures were required. Despite this assurance from the Environmental Protection Agency, Michigan still elected to sue. Because of its unfortunate decision to sue, the State of Michigan has brought this cooperation to a halt while all parties focus their attention on litigation—rather than solving the problem at hand.

I understand that Michigan is concerned about the potential impact to the Great Lake's \$7 billion fishery. Michigan's position, however, ignores the certain damage that the lock closures will have on the more than \$16 billion worth of goods transported annually to, from, and through Illinois by river barge—much of which are raw materials and component parts that are critical to generating revenue far beyond the base value of these goods. Similarly, Michigan ignores that the lock closures will cause significant harm to the region's safety and environment. Given these facts, I believe the scales are tipped heavily in favor of keeping the locks open and allowing the region's commerce to proceed. Michigan's lawsuit provides no guarantee of gain, but absolute guarantee of loss on many levels to the region's businesses, consumers, and economy.

I have reviewed the assertions made in this affidavit and if called as a witness in this matter, I would testify as set forth herein.

James P. Farrell

Subscribed and sworn to before me
on January 4, 2010

Edna Hardy, Notary Public
Cook County, Illinois

