Good morning, my name is Darren Melvin. I am currently employed by Hanson Material Service as the Marine Operations Manager based in Romeoville, Illinois. I have been employed by Hanson Material Service since 1989 in various capacities. The positions I have held were all related to commercial navigation within the Chicago Area Waterway System (CAWS) including the Chicago River, the Chicago Sanitary and Ship Canal (CSSC), and the Lower Des Plaines River (LDPR). I have also been an active member of the Illinois River Carriers Association and the American Waterways Operators (AWO), both of which interact with the U.S. Coast Guard and the U.S. Army Corps of Engineers. My interactions with these two agencies have primarily involved issues regarding development and safety along the aforementioned waterways.

I am testifying today as a representative of AWO, the national trade association for the tugboat, towboat and barge industry. I am a member of the Board of Directors for AWO. I will be providing AWO’s perspective on the proposal by the Illinois Environmental Protection Agency (IEPA) to amend water quality standards in the CAWS and the LDPR, as the amendments relate to aquatic life uses.
My testimony will focus on the following items: (1) the importance of preserving navigation in the CAWS to the regional economy, environment and road traffic; (2) the impact of potential strategies employed by federal and state agencies to limit the transfer of invasive species on companies engaged in waterborne commerce, and the relationship between this proposal and that effort; (3) the impact of increased recreational traffic in the waterways on safety; and, (4) the federal requirement to protect navigation. I believe that the arguments I will set forth in these areas will convince the Board that it should refrain from amending water quality standards in these waterways.

1. The Importance of Preserving Navigation in the CAWS to the Regional Economy, Environment and Road Traffic

AWO represents 350 member companies in an industry of nearly 4,000 towing vessels, more than 27,000 dry and liquid cargo barges and over 30,000 mariners. About twenty AWO members transit through or are based on the CAWS and at least six non-AWO towing companies also rely on this system.

These companies in our association, and more broadly, the companies that are part of our industry, rely on the free flow of commerce on the waterways. Additionally, the customers that these companies serve are dependent on waterborne commerce, as are the citizens of the greater Chicago region. The products imported and exported by barge through the CAWS include petroleum products, agricultural products, coal for regional power plants, road salt, steel, cement and countless raw materials for processing or manufacturing. The supply of products that are critically important to the Great Lakes-Midwest region during the winter months, such as road salt, home heating oil and
aircraft-deicing fluid, depend heavily on the towing industry and the use of the CAWS. Transport by barge and towing vessel is the most cost-effective and environmentally friendly way to move these materials.

The impact of the activity described above is substantial, as can be seen by the reality that in 2008, 12.4 million tons of cargo transited Lockport Lock, over 6 million tons of commodities moved through the Calumet-Sag Channel, 1.3 million tons of commodities traveled on the Chicago River and 1.1 million tons of materials transited Lake Calumet. Moreover, nearly 16 million tons of commodities moved through the CSSC during that year. The CSSC figure is significant because, although the canal would remain a non-recreational water under IEPA’s proposal, interruptions in barge traffic through a significant part of the CAWS will impact all portions of the system. The transport of materials frequently move through different bodies of water within the system, making the CAWS an integrated network incompatible with the type of fragmentation that would result from adoption of this proposal. The other bodies of water referenced above would be directly impacted by the introduction of increased recreational traffic, as envisioned through IEPA’s proposal.

The significance of continued barge transportation to the regional economy has been analyzed and quantified. For example, a recent study by the Ports of Indiana (Attachment 1) found 17,655 jobs and $1.9 billion in economic activity in northwest Indiana attributable to barge movements through O’Brien Lock alone during 2008. Additionally, a study by DePaul University in April (Attachment 2) concluded that the conservative and preliminary economic value of the industry is $4.7 billion.
While discussing the economic impact of the industry, it is also important to touch on some of the claims made by the U.S. Environmental Protection Agency (EPA) in its letter to the Board from April 15 regarding use attainability analysis (UAA) Factor 3. EPA states that, in order to allow for more recreation, “place, time and manner restrictions could be placed on barge and commercial boat traffic.” This statement does not take into account the logistics of arranging for the pickups and deliveries of essential commodities such as coal, iron ore, concrete and petroleum products to and from locations as far away as Pittsburgh, New Orleans, Milwaukee, Detroit, Montreal and all points in between. Consumers and businesses rely on the timely movement of these items, and placing arbitrary restrictions on their transport will have negative impacts upon the region as a whole. This was seen in August 2009 when the CSSC was closed for a week due to safety testing of the electric barriers, and stalled vessels cost the regional economy hundreds of thousands of dollars a day in increased transportation costs.

EPA’s other statement concerning navigation and UAA Factor 3 would lead to misinterpretations of the appropriate uses for the waterways if taken to be true. Specifically, the agency suggests that “there may be certain times when barge traffic is less intense, such as holidays or weekends.” There is no evidence to support this assertion and no reason to believe that it is accurate. Due to already building in time for travel through locks and events such as inclement weather, towing companies do not have the luxury to arrange for vessels not to be in transit on certain days of the week or periods of the year. EPA’s perspective on this matter, therefore, severely misstates underestimates waterborne commerce movement.
Beyond the commercial impact, limiting navigation would also do a great deal of harm to the Chicago region’s air quality and its quality of life. This is due to the reality that if essential commodities are moved along the waterways in smaller amounts, they will likely travel by train or truck instead. The result of this would be a net negative for the regional environment. As reported in a study by the Texas Transportation Institute (TTI), sponsored by the Maritime Administration of the U.S. Department of Transportation and the National Waterways Foundation, if the annual amount of ton-miles of activity on the nation’s inland waterways were transferred to rail or truck, the former mode would produce 2.1 million additional tons of carbon dioxide, while the latter mode would generate 14.2 million additional tons of the pollutant.

The TTI study also found that a cessation of waterborne commerce in the smaller metropolitan area of St. Louis would increase that region’s traffic delays by almost 500%, and increase the injuries and fatalities on the region’s highways by up to 45%. By way of comparison, the Chicago region has an estimated population of 9.7 million, while the St. Louis region has an estimated population of only 2.8 million. Barges also assist congestion relief by providing greater carrying capacity than their counterparts in other modes. For example, one barge on the inland river system is able to carry the same amount of dry cargo as 70 trucks, and the same amount of liquid cargo as 144 trucks.

As a result of these factors, if IEPA’s recommendations on revisions to proposed recreational uses in the waterways are adopted, the economy, air quality and automobile traffic flow of the Chicago region would be significantly harmed. By encouraging a greater amount of recreational activity in the waterways, IEPA would increase air emissions and highway fatalities. A decreased amount of commercial navigation is likely
given the safety issues introduced by more recreational vessels, as described below in the section of the testimony on safety. This is important to consider when determining the appropriate use designations for the waterways.

2. The Impact of Potential Strategies Employed by Agencies to Limit the Transfer of Invasive Species on Companies Engaged in Waterborne Commerce, and the Relationship Between this Proposal and that Effort

Concern about the entry of invasive species into Lake Michigan via the CAWS has led to a number of actions and considerations of additional actions by various federal and state agencies over the last several years. An electric dispersal barrier designed to prevent the transfer of Asian carp was installed in 2002 in the CSSC by the U.S. Army Corps of Engineers. In the years since, an additional barrier has been added and a third barrier is scheduled for completion this fall. In order to ensure the safety of mariners and vessels traveling through this area, the U.S. Coast Guard has established Regulated Navigation Areas (RNA) with conditions for travel through the barriers over this period of time. The conditions of the RNAs have varied based on the voltage of the barriers and whether or not they are undergoing safety testing at a particular time. In August 2009, for example, the voltage of one of the barriers was increased, leading to a week-long closure of the CSSC.

Action to address the potential for Asian carp transfers have increased significantly since late 2009. In December of that year, the Illinois Department of Natural Resources (IL DNR) applied rotenone, a fish poison, to portions of the CSSC and the Cal-Sag Channel in an attempt to kill carp that were believed to be in those areas.
These actions were undertaken in response to positive eDNA tests conducted in the two bodies of water, even though eDNA does not have widespread support in the scientific community and has not been peer-reviewed. While the application took place, the waterways were closed to vessel traffic. These closures took place without warning, and caused disruptions to pickups and deliveries that had been scheduled for this time period. The rotenone application led to the discovery of only one carp, and that fish was found several miles south of the electric barriers. A second application of rotenone that took place in May 2010 in the Cal-Sag Channel also revealed no carp. As in the case of the first application, the waterway was closed with limited warning to industry. During the May application, the waterway was closed for one week. In addition to the fish poisoning, electro-fishing and netting have been occurring in parts of the CAWS since November 2009, and no Asian carp believed to have crossed the electric dispersal barriers has been identified.

In February 2010, a consortium of federal and state agencies known as the Asian Carp Regional Coordinating Committee (ACRCC) released a Framework with a number of actions and plans for actions designed to counteract the spread of Asian carp. A revised version of this Framework was released in May 2010. Included in the actions being considered and investigated in the Framework is hydrological separation of the Great Lakes and the Mississippi River basin. This action, which has also been supported by some states in the Great Lakes region and some members of the U.S. Congress, is currently being studied by the Corps, a member of the ACRCC. That study is scheduled to be released in 2012. Physical separation would be devastating for the towing industry, as well as to the customers, businesses and employees that rely on the timely, safe and
environmentally efficient transportation of essential commodities. AWO has worked to educate officials at the federal and state levels about the shortcomings of hydrological separation.

Other actions that were considered by the ACRCC for a period of time were closures of the Chicago and O’Brien locks. These are still being considered as part of proposals before Congress. Closing locks would also be an unfortunate step as it would severely limit the amount of barge transportation in the region. Furthermore, as has been acknowledged by various parties in this matter, locks were not designed as fish barriers and would not be able to interrupt carp movement. Officials have also acknowledged that locks would have to be opened periodically during flooding.

Through its work with federal and state agencies, AWO and its members have been supportive of a variety of methods to prevent carp migration into the Great Lakes, and have stated this to the appropriate agencies. These methods include: commercial fishing and targeted fish sampling; increased law enforcement options to prevent invasive species importation; expedited completion of the third electric barrier; the discovery of the response of the carp to pheromone products; the identification of selective toxicants to control the carp; and, the introduction of acoustic bubble barriers to the waterways. The goal of AWO is to protect the ecosystem of the Great Lakes while ensuring that waterborne commerce can continue in the region.

Given our interest in prevention of invasive species transfer, we are very concerned about the apparent contradiction between the IL DNR and other agencies seeking to continue engaging in efforts to eradicate carp throughout the waterway system, while the IEPA simultaneously seeks to alter the water quality of the CAWS to make the
northward movement of carp more likely through this proposal. This is particularly troubling to us as the rotenone applications that have taken place thus far have resulted in substantial numbers of fish killed. The May 2010 application, for example, killed more than 11,000 fish. As indicated above, none of these were Asian carp. If IEPA’s proposal results in more carp movement, it would be unfortunate to have one of the results be a greater necessity to harm more fish and further disrupt the local ecosystem. In general, we respectfully suggest that there should be more coordination between state and federal agencies on what appropriate goals are with respect to the future of the fish population, including Asian carp, in the waterway system.

3. The Impact of Increased Recreational Traffic on Safety in the Waterways

An increase in the amount of recreational vessels on the CAWS and the LDPR will severely compromise the safety of all those who travel on the waterways, and will negatively affect the ability of commercial vessels to safely transport necessary commodities to businesses and consumers in the Chicago region. Due to requirements placed on them by federal and state agencies as well as by their trade association, in the form of the Responsible Carrier Program, towboat operators place safety as the highest priority when traveling through the nation’s waters. This is not always the case with recreational vessels. In fact, operators of recreational vessels are not required to be licensed in most states, meaning that they have not gone through the safety training that their counterparts who operate commercial vessels have. This discrepancy in training levels often results in poor communication between vessels, as commercial operators have limited means to gain the attention of recreational operators, making accidents more
likely. Poor communication will have even greater consequences if great numbers of recreational vessels transit through locks, an action that demands pinpoint accuracy and an extended level of attention.

Limited exposure to the nature of towing vessels is another factor which lessens the ability of recreational boaters to navigate the same waterways as commercial vessels in large numbers. For example, it may often appear to a recreational boater, rower or kayaker that a towing vessel can come to a halt quickly. This frequently causes recreational boaters to perform actions aboard their boats in a manner that puts them closer to towing vessels than safety dictates. This danger, combined with the bending and curving nature of rivers and lakes within the waterway system as well as the limited visibility that occurs frequently due to weather, requires the spatial relationship between different vessels to always be very carefully managed. Adding an unlimited amount of recreational vessels to this environment will only heighten the level of unsafe conditions for recreational vessels, towboats and valuable cargo.

4. Federal Requirement to Protect Navigation in the Waterways

It is the responsibility of state officials to ensure that federal requirements are complied with. In the case of navigation in the CAWS and the LDPR, it is clear that federal law prohibits the changes that IEPA are urging to be undertaken. Specifically, the federal Clean Water Act prohibits states from removing or downgrading “those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.” (40 CFR 131.3(e)). The use of these
waterways for navigational purposes qualifies for this protection because navigation in those locations existed as of that date and continues to exist today.

Clarity on what constitutes a protected use is provided by Section 2.1.5 of the EPA Water Quality Handbook where the agency states that navigation is a use classification designed “to protect ships and their crews and to maintain water quality so as not to restrict or prevent navigation.” Introducing a dramatic increase in recreational vessels to the waterways, as envisioned by IEPA, would negatively impact the ability of towing vessels to operate safely, as described earlier.

**Conclusion**

Based on these factors, it is my judgment, speaking on behalf of AWO, that IEPA’s proposed actions to amend water quality standards in the CAWS and the LDPR should not be allowed. The primary reasons for this are: the decrease in the economic, environmental and quality of life standards that would fall on the Chicago region and the nation as a result of a decrease in barge transportation; the contradiction among agencies in their strategies for managing the water quality and fish population of the waterways; the safety challenges that increased recreational traffic would introduce; and, the violation of federal law.

Darren Melvin