Good morning! Thank you for being here and many thanks to River Action for inviting me to speak. I feel privileged to be the only speaker at this event representing the navigation industry, although I know you have had navigation speakers in your past events. I should add that I don't officially speak for anyone but myself!

I first saw the Mississippi River from the deck of a towboat, the motor vessel Frank Rader, as a young man. I spent 10 years as a merchant seaman, although mostly on blue water. Since 2008, I have been covering the barge and towing industry at The Waterways Journal, which has published continuously since 1887 and is the only maritime trade weekly focusing on the "brown water" navigation industry. Many people at the time thought the year 1887 was an odd year to begin a magazine focusing on the barge industry, which was almost moribund at that point, but we'll get to that later.

Alexis de Tocqueville famously called voluntary associations "schools of democracy" because they foster the democratic arts of discussion, negotiation and collaboration. Last night's workshop hosted by Brent Newman of the Audubon Society was a perfect illustration of that observation. The Mississippi River and inland waterway network and its network of associations and groups, formal and informal, through which industry and government collaborate to keep cargoes moving and the system working, form one of the clearest and most enduring "schools of democracy" in the United States. This network shows how necessity, crisis, and collaboration can teach citizens and government to build and redefine the common good—together.

When I began attending meetings of industry groups, I often heard Coast Guard or Corps of Engineers guest speakers praise collaboration from the barge industry and say they couldn't do their jobs without it. At first I thought these were just polite things to say. But I soon realized the level of daily public-private collaboration that is required to keep cargoes moving on the river system is something truly unique among regulated industries.

The slide shows just a small selection of the many groups and committees, formal and informal, that keep the river system running, from harbor and port committees to Congressionally chartered advisory committees, the Inland Waterways Users Board that advises the Corps of Engineers on lock and dam projects, and advocacy groups like the Waterways Council Inc. that advocates for infrastructure projects in ways the Corps of Engineers is not allowed to. There are far too many groups of all sorts to put on one slide. As with any large cooperative endeavor, collaboration doesn't mean everything goes smoothly, or that there are no tensions or conflicting interests that need continuous balancing. During the first Trump administration, the term "public private partnership" was used to designate very narrow and specific forms of collaboration, such as having private interests operate locks and dams and charging tolls (which the barge industry consistently opposes). But in a larger sense, the entire navigation industry itself is a gigantic public-private partnership—and has been for a long time.

But it wasn't always this way. So how did we get here? Five major crises drove closer collaboration on the rivers.

I: World War I, Wilson and the Inland Waterways Corporation

In the decades just prior to World War I, the barge industry barely existed. The pre-Civil War glory days of the Mark Twain riverboat era were long gone. Rail rate competition had just about driven barges from the rivers—with the exception of some steel barge movements near Pittsburgh, some coal movements on the Monongahela River and some activity in the Lower Mississippi. When World War I arrived the railroad industry was found to be totally inadequate for wartime needs. The various railroads didn't cooperate with each other, resulting in highly inefficient and wasteful rail movements. Nine months after the U.S. declared war, President Woodrow Wilson announced in 1917 that the federal government had nationalized railroad operations—with the welcome and support of many railroad executives themselves. Wilson appointed William McAdoo as Director General of Railroads. By the time Wilson turned the railroads back over to their private owners in 1920, the federal government had invested more than a billion dollars in rail infrastructure, built 100,000 new rail cars, and made routing more efficient.

But the federal government did something else in response to the logistics crisis. The Transportation Act of 1920 formed the Inland Waterways Corporation (IWC), a government-owned barge line intended to revitalize river transportation. War needs had shown that barge transportation was a much cheaper and more efficient way to move certain bulk cargoes like coal, grain, cement, fertilizer, steel and salt. Maj. Gen. Thomas Q. Ashburn became the IWC's head, and he soon became hated by the railroads.

From the beginning, the IWC was nicknamed Federal Barge Line. The IWC pioneered advanced towboat designs using diesel engines and screw propellers instead of paddle-wheels and coal-burning steam engines, although it built some of those too. It experimented with building bigger towboats, both screw and paddlewheel-powered.

The federal government continued to operate the IWC through World War II, and finally sold it to private operator St. Louis Shipbuilding and Steel Company in 1953. It had conclusively demonstrated the economic viability and potential for profitability of barge transportation and established a permanent place for it in the suite of transportation modes.

What the IWC demonstrated—and what made the effort continue to operate until 1953—was the ton-mile advantage of barging. That is, the amount of fuel used to move one tone of cargo one mile was by far the lowest for barging compared to trucks of railroads. The United States enjoys the largest navigable river system in the world, flowing exactly the right way to facilitate commerce among some of the most fertile and productive land in the world. Geo-strategic writer Peter Zeihan even credits America's river system (along with its coastlines) with making it a superpower to begin with. That

ton-mile advantage only grew wider as innovation in towboat, powertrains and barge designs made barge transport ever-more efficient and cost-effective.

II: Mississippi Flood of 1926-7

The 1927 Mississippi River Flood was the most destructive flood in U.S. history up to that time. Its effects on infrastructure reform were sweeping and lasting, right up to the present. It exposed the limitations and shortcomings of the "levees-only" policy that had previously guided flood management. Before 1927, the Corps of Engineers and local levee boards had relied almost entirely on building and raising levees to confine the river. Floodwaters broke through more than 130 levees, inundating 27,000 square miles. This failure revealed that levees alone could not contain the river in extreme conditions. Local levee boards lost much of their autonomy, as the federal government took the lead in funding, designing, and building river-control infrastructure.

The Flood Control Act of 1928 gave the Corps of Engineers sweeping new powers and resources to design and maintain the Lower Mississippi River flood-control system. The post-1927 system added floodways, spillways, reservoirs, cutoffs, and channel improvements to spread and divert water during extreme floods. Major projects included the Birds Point New Madrid Floodway (Missouri), Bonnet Carré Spillway (Louisiana), and Morganza Floodway (Louisiana).

These projects created a multiple-lines-of-defense strategy—no longer putting all faith in levees. The Corps also built taller, wider, and stronger levees along the main river. Engineering standards were centralized, eliminating the patchwork of uneven local efforts that had characterized the levee system before 1927. The post-flood reconstruction linked flood protection with navigation improvements, including river channel stabilization and deepening for barge traffic. This helped lay the groundwork for the Mississippi River's dual role as both a transportation artery and a flood-control system. The new system represented not just engineering, but a commitment to permanent federal responsibility for the river. The 1927 flood marked the end of levees-only and the beginning of a federalized, system-wide flood control regime that still defines Mississippi River infrastructure today.

III: Depression and New Deal Lock and Dam Program on Upper Mississippi River

U.S. farmers never really recovered from the post-WWI crash that followed the wartime boom. They didn't share in the 1920's business expansion, and were then hit by the triple whammy of the 1927 flood, the Depression and the Dust Bowl.

The Rivers and Harbors Act of 1930 federalized the river system further. It authorized a 9-foot channel project on the Upper Mississippi (from Minneapolis, MN, to St. Louis, MO). A total of 23 lock and dam sites between Minneapolis (Lock & Dam 1) and Alton, Illinois (Lock & Dam 26 at the time) were built.

On the Illinois Waterway, 7 locks and dams were completed by 1933. The Upper Mississippi River lock and dam system is one of the few (only?) large infrastructure projects without a dual-use justification for defense. The Wilsonian barge revival had such a dual purpose, as did President Dwight Eisenhower's federal highway project of the 1950s and 1960s (inspired by Eisenhower's observations of how Marshal Petain's road network contributed to French defense logistics during World War I). But the Upper Mississippi (and associated) lock and dam project was and remains purely commercial in purpose. That's why farm and agriculture organizations are so concerned with it and involved with its support and even investment.

IV. World War II

Government again coordinated closely with barge operators. This time, though, the importance of inland shipping was appreciated by all. Inland shipyards—the "brown water Navy"—became vital to the war effort, especially in the construction of Higgins landing craft, but also other types of small vessels. Small patrol and military boats of all kinds were built on inland shipyards and taken down the inland river system. War industries, when possible, were located 200 or more miles from the seaboard. Seven of the twelve designated strategic production areas were served by about 6,000 miles of navigable inland waterways. In short, our inland waterways and river system offered the kind of geo-strategic depth none of our allies or adversaries could match.

V: Earl Butz' Export Boom

Our last "crisis" is the boom in farm exports fostered by the revision of U.S. farm supports beginning in the 1950s. If it sounds odd to call a boom a crisis, we should remember that the Greek word "crisis" embraces both danger and opportunity.

In the early 1930s, about a quarter of the U.S. population still farmed and the farm vote was a major concern for politicians, including FDR. In the post-war period, agriculture modernized and mechanized, becoming vastly more productive but requiring far fewer farmers.

By the mid-Seventies, farmers made up only 2-3% of the population. This led, not to an

abandonment of price supports for farmers, but to an overhaul in incentives—a shift from the protectionism and supply regulation of the FDR era (which had helped farm incomes but paradoxically made food more expensive for consumers during the Depression), to making low consumer prices the priority and encouraging farmers to produce more and export more. Organizations like the Farm Bureau continue to be important in Washington to this day, but the farm vote is less important than it was in the 1930s, when a guarter of all U.S. households had some direct connection with farming.

The shift in ag support policies began in the 1950s but accelerated under President Richard Nixon's Secretary of Agriculture Earl Butz (1971-6), who famously pushed

farmers to plant "fencerow to fencerow" and to increase exports. He wasn't the first ag official to tell farmers "Get big or get out," but he did say it often and became known for that saying.

In the Butz era, U.S. grain exports—mostly wheat, corn and soybeans—jumped from about \$9.4 billion in 1972 to \$34.7 billion by 1979. Barges' share of grain exports rose from about 20% in 1973 to 39% by 1978–1979.

By the 1970s, the Army Corps of Engineers had already built the Upper Mississippi and Illinois River lock-and-dam systems (1930s–1960s), so the infrastructure was sitting there, waiting to be fully exploited. Also during the 1970s, the failures of Soviet collectivized agriculture meant that the Soviet Union was turning to international grain markets to make up shortages, using various cut-outs and third-party buyers. The news that the Soviet Union had quietly bought most of the U.S. wheat surplus during one year in the early 1970s was not well received; one cartoon showed a Kansas wheat field with a sign, "Welcome to Kansas, Breadbasket of the Soviet Union." Barge bubble

Tonnage on the Mississippi system nearly doubled compared to the early 1960s. The Gulf became (and remains) the largest single grain export gateway in the world. Grain companies like Cargill, ADM, and Continental rapidly expanded river elevators and barge fleets to move Midwest crops down the Mississippi to Gulf export terminals. A barge building boom drew in inexperienced investors—doctors, lawyers and dentists with extra money to invest who though building barges was a good investment. This led to massive overbuilding.

On the plus side, barge competition finally spurred rail lines to invest in innovations like unit trains and improved technology. The 1970s export surge forced a balance between the two modes and whittled away the long-standing enmity of rail interests toward barging, while not eliminating it completely. Instead, each mode took its place in the expanded logistics ecosystem: barges became the backbone for long-haul bulk grain to the Gulf, while rail increasingly served as feeder lines. Ultimately rail and barge went from bitter competitors to cooperators. The "pie" of export cargoes had expanded to the point where cooperation made more sense than the competition of the past.

Recovery and A Seat At the Table

The grain export boom to the Soviet Union ended abruptly when President Jimmy Carter imposed a grain embargo to punish it for its invasion of Afghanistan. The embargo devastated barging. It halted 17 million metric tons of grain shipments and stranded barges loaded with corn, wheat, and soybeans en route to Gulf export ports. It triggered immediate backups on the Mississippi River system, idled fleets, and canceled transport contracts worth hundreds of millions, amplifying the post-boom downturn.

The embargo coincided with a farm crisis that cut grain exports by 8% in 1980. Barge companies that had over-invested and were in debt went bankrupt and consolidated. The number of barge and towing companies dropped from around 1,800 in 1980 to about 1,000 by 1987. Tonnages didn't reach 1980 levels again until 1988.

Meanwhile, the Inland Waterways Users Board had been created as part of the Inland Waterways Revenue Act of 1978 (Public Law 95-502). It established the fuel tax on barges that financed the Inland Waterways Trust Fund (IWTF). The IWUB advises the U.S. Army Corps of Engineers and Congress on prioritization, funding, and management of IWTF projects for the inland and intracoastal waterways system. Most barge leaders pushed for this self-tax, under the "you pay, you say" policy.

In fights over lock and dam funding, the barge industry has always bristled at being dismissed as a "special interest." Barge industry representatives argue—correctly, I believe—that the internal and international trade supported and fostered by efficient barge transport benefits the entire nation, not just the barge industry—although of course they benefit as well. Barge exports support jobs in ports and export industries, and cheaper goods transported by barge—like fertilizer, cement, salt steel and petroleum products—benefit industrial customers and ultimately consumers.

During the era of conflict with railroads, barge interests had always strenuously objected to the charge that they were a "selfish interest." They argued—correctly—that cheap barge transportation benefitted everyone by supporting farm exports and lowering transports costs for all bulk cargoes.

The history of organizations concerned with the Mississippi River is a perfect case study of how private associations can move beyond "selfish interests" and embody the common good—while also sometimes having narrower or competing agendas. River commerce groups give shippers and farmers a voice; conservation groups speak for wildlife and recreation; flood control groups voice local safety needs. Over time, many of these local groups merged, federated, or evolved, showing the dynamic of expanded cooperation and collaboration.

Conflicts (e.g., navigation and flood control vs. conservation) forced negotiation. The "common good" of the river was not dictated by government alone, nor by the market alone, but instead was and is hammered out in dialogue between state agencies and private associations.

Small, local associations—levee boards, port groups, fish clubs—merged into larger federations (MVA, UMRBA, conservation coalitions), demonstrating how civil society scales up to meet broader challenges.

The history of Mississippi River organizations shows how private associations moved from narrow, local advocacy into broader regional coalitions embodying the common good—sometimes by merging into larger organizations that balanced navigation, flood control, ecology, and community well-being.

The Mississippi River story shows that the "common good" isn't a fixed, eternal thing handed down from on high. Instead, it's something that evolves historically, through the push-and-pull of groups with different interests. The catastrophic 1927 flood showed the limits of local self-reliance. Competing levee boards and civic associations had to join forces to demand regional and federal solutions. The "common good" was redefined: not just protecting individual farms, but managing the whole river system for millions of people. Navigation advocates wanted deeper channels; conservationists wanted wetlands preserved. These were once seen as opposed. Over time. associations representing these causes learned to bargain, leading to compromises (multi-use reservoirs, habitat protections alongside navigation projects). The "common good" here wasn't either/or, but a negotiated synthesis. By the late 20th century, the idea of the river's "common good" had expanded further: not just shipping and flood control, but also ecology, recreation, water quality, and cultural heritage. Modern umbrella coalitions (like the Mississippi River Network) explicitly speak of the river as a shared national treasure—something that transcends narrow constituencies.

In political-philosophical terms, the collaboration around the Mississippi River and its systems shows that the common good emerges from democratic pluralism. It's neither pre-defined by the state, nor totally emergent from market interests alone, in the manner of Friedrich Hayek. It is developed in dialogue, shaped by changing circumstances, crises, and compromises. Competing goods (safety, profit, conservation, recreation) become reconciled into a larger conception of shared welfare—something that none of the groups could have envisioned alone at the beginning.

The Mississippi River's organizational history illustrates how the common good itself evolves, and how private associations, by negotiating, federating, and learning from crises, work with public authorities to create a richer, more inclusive vision of the common good over time.