

Statement of Matt Woodruff

on behalf of

Kirby Corporation

before the

Committee on Environment and Public Works

United States Senate

May 6, 2010

Chairwoman Boxer, Ranking Member Inhofe, committee members and staff, I am Matt Woodruff, from Houston, TX. I work for Kirby Corporation, the nation's largest operator of inland tank barges. We operate throughout the inland waterway system from the Gulf Coast to the Mississippi River and its tributaries, including the Ohio and Illinois Rivers. I am here today representing Kirby, but wish to point out that I am a member of the Inland Waterways Users Board, the committee established in WRDA '86 to advise the Corps and Congress on matters related to construction on our inland waterways. I am also the General Counsel of the Waterways Council, Inc. and a director of the American Waterways Operators. I serve as an active member, officer or director of several regional waterways associations.

Our inland waterways are a national treasure. Low cost waterways transportation helps our farmers and manufacturers stay competitive in tough world markets. When you talk about the future of the waterways, you are talking about the future of a large segment of our economy. Today, I want to tell you about a 20-year plan to keep our waterways reliable and bring billions of dollars in benefits to our economy, creating and maintaining a host of jobs along the way. We need this committee's help for this vision to become a reality.

In addition to being the most cost-efficient way to transport the bulk commodities that are the building blocks of our nation's economy, barge transportation is the greenest, safest and most energy efficient mode of surface transportation. Let me give you some statistics to back up that claim:

- A truck can move a ton of cargo 155 miles on a gallon of fuel. A train can move that ton 413 miles. A barge will move it 576 miles on that same gallon of fuel.
- Barges have the lowest CO₂ emissions. Moving cargo by rail generates 39% more CO₂ than barges. Moving that same cargo by truck generates 371% more.
- A typical 15 barge river tow can take 1050 truckloads of cargo off the highways. That same cargo would fill 216 rail cars and require 6 locomotives to move them.
- A member of the public is 125 times more likely to be injured in a train accident or over 2,000 times more likely to be injured in a truck accident than in a barge accident.

If the cargo transported by barges was instead transported by trucks on our interstates, heavy truck traffic would nearly double. Put it all on trains and rail traffic would increase by 25%. That only tells part of the story, since that traffic would be concentrated in certain regions of the country, causing far worse problems in key transportation hubs. Attached to my written testimony are materials summarizing these and other facts related to barge transportation.

America without barges would be a more congested, polluted, costly and dangerous place.

In recent years, our inland waterways infrastructure construction projects have been underfunded, over budget and years past their planned completion dates. We have spent the surplus in the Inland Waterway Trust Fund but have too little to show for our investment. We place much emphasis on starting projects, but very little on finishing them.

We must fix the system. An ill-advised lock tax was proposed and we applaud Congress for dismissing that idea. Against this backdrop, several years ago the senior leaders of our industry began to meet with the leadership at the Army Corps of Engineers and ultimately decided to put a team together to search for a comprehensive solution to the challenge that faces us. The team, comprised of experts from within the Corps and members of the inland waterway industry, spent nearly a year and a half addressing this challenge. I have here a copy of the team's final report, which on April 13th was unanimously adopted by the Inland Waterways Users Board and transmitted to the Assistant Secretary of the Army for Civil Works and the Congress. This report lays out a comprehensive solution to our inland waterways infrastructure challenges.

We extensively reviewed the Corps project delivery system. We recommended a set of improvements, some of which are already being implemented, that will help bring future projects in on time and on budget. Our goal is to have an 80% confidence level that the price tag put on a project when it is authorized by Congress is in fact the price it can be built for.

We developed a realistic, real-world budget. The \$380 million per year budget for new construction and major rehabilitation is in line with funding levels in recent years.

We apply that budget to a dynamic 20-year construction plan that prioritizes projects based on risk and consequences of diminished future performance. The plan focuses on spending money each year on only those projects that can be efficiently funded with the available funds. While this means some vital projects may have to wait a few years to be started, these projects will still be finished far sooner than if we maintain the status quo. This is a critical feature of the plan. If projects don't get all the money they need when they need it, we cannot accomplish all we have to do with the resources that will be available. This means we will have to find a mechanism to smooth out some of the vagaries of the annual appropriations process.

We looked at where the money would come from. We recognized this program will require a level of investment greater than current revenues entering the trust fund will support under the current system, so we propose a 30-45% increase in the fuel taxes currently paid by industry. We also propose adjustment of certain elements of the cost sharing formula to better reflect the multiple beneficiaries of these projects and to stop placing an undue share of the burden of rebuilding the system on just one group of users.

I am happy to report that water resources interests all across the country have signed on as endorsers of this plan. Our message to Congress is that we are willing to accept this level of tax increase if it is part of this comprehensive plan to ensure the future reliability of the system.

What are the benefits of this plan? We should finish 25 projects in the next twenty years, instead of 6 if we maintain the status quo. At a minimum, we should avoid between \$350 million and almost \$1.2 billion in project cost growth. We also will recognize at least \$2.8 billion in benefits from these projects that would be foregone if the projects' completions were delayed.

For all of these reasons, I respectfully request that this committee join more than 200 companies and associations and embrace this plan and approve legislative language this year that will allow it to be implemented.

I would be happy to address any questions you might have.



NATIONAL WATERWAYS
FOUNDATION



WATERWAYS: Working for America

*Waterways transportation keeps commerce on the move,
with fewer adverse societal impacts than truck or rail.*



Highlights of "A Modal Comparison of Freight
Transportation Effects on the General Public"

A study by the Texas Transportation Institute,
Center for Ports and Waterways

America's Waterways:

Easing Rail and Highway Congestion in Our Communities

Our waterways provide great capacity to ease congestion by carrying cargo that would otherwise travel by truck or rail. The annual traffic on America's inland navigation system, including the Gulf Intracoastal Waterway and the Ohio, Mississippi and Columbia-Snake River systems, carries the equivalent of 58 million truck trips each year.

A Costly Scenario:

If waterborne cargo were diverted to highways or rail

Diverting waterborne cargo to the nation's Interstates would cause heavy truck traffic to nearly double. Or, if the current waterway freight traffic were diverted to rail, the tonnage on the nation's railroad system would increase by nearly 25%, with the heaviest burden being placed on the Eastern U.S. railroads, which are already operating at near capacity.

- **To highways:** Two inches of asphalt would be needed to increase the pavement thickness of 126,000 lane-miles of intercity Interstate. The effects would be greater for highways parallel to the waterways.
- **To rail:** To transport coal used in more than 50 electric generating plants adjacent to the Ohio River System, CSX railroad would need 156 new locomotives and 5,616 new coal cars. The system's average train velocity would drop by one-third.

Hypothetical Case Study:

Waterways Closure on the Mississippi & Illinois Rivers

What would happen if the Mississippi and Illinois Rivers were shut down in the vicinity of St. Louis? Using the Federal Highway Administration's HERS_ST model, the Texas Transportation Institute estimated the resulting impacts of shifting millions of tons of cargo from the river system to the city's already crowded Interstate arteries.

Assuming that cost-effective roadway improvements were undertaken, the analysis concluded that highway costs over 10 years would increase from \$345 million to over \$721 million.

- **Truck traffic on St. Louis roadways would increase by 200%**
- **Traffic delays would increase by almost 500%**
- **Injuries and fatalities on Interstates would increase by 36% to 45%**
- **Maintenance costs would increase by 80% to 93%**

While a permanent river shutdown cannot be anticipated, this case study demonstrates that the loss of river transportation would have a dramatic negative impact.



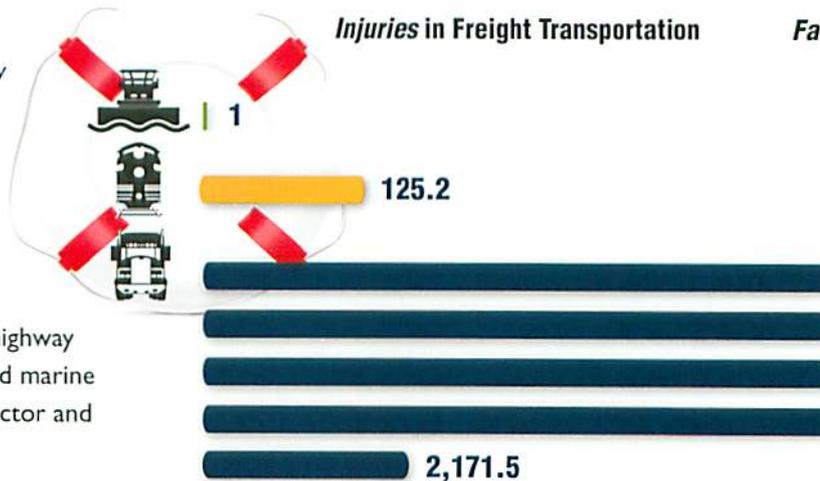
Advantages of Inland Waterways Transport:

Safeguarding Our Health and the Environment

Maintaining Safety

Inland waterways transport has a low injury and fatality record compared to rail or truck.

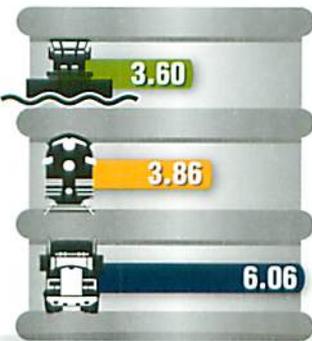
Safety-related statistics for all modes of freight transportation show one injury in the inland marine sector for every 125.2 in the rail sector and 2,171.5 in the highway sector; and one fatality in the inland marine sector for every 22.7 in the rail sector and 155 in the highway sector.



Fatalities in Freight Transportation



Rate of Spills in Gallons per Million Ton-miles

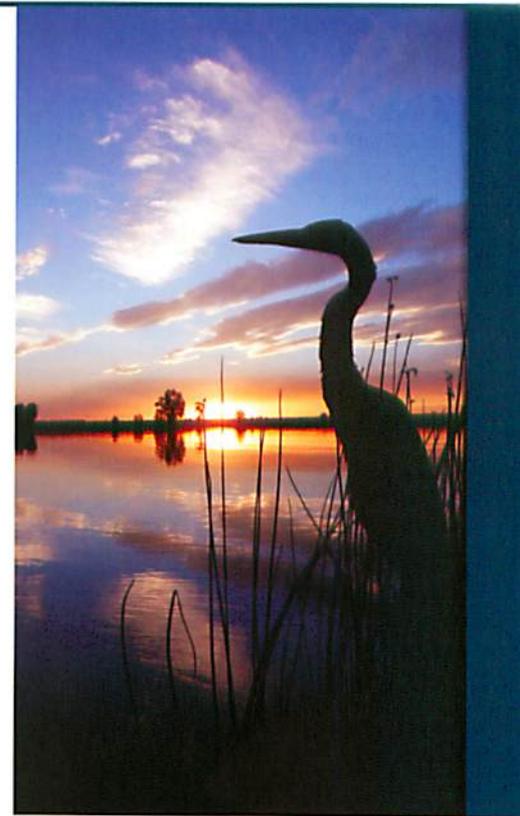


Spills of more than 1,000 gallons

Protecting Communities

Inland waterways transport moves hazardous materials safely.

All transport modes work hard to prevent accidents, human errors and other causes of spills, including groundings in the case of barge transportation. Overall, spill rates are very low – with trucks losing only 6.06 gallons per one million ton-miles, rail cars only 3.86 gallons and barges 3.6 gallons per one million ton-miles.



Ensuring Cleaner Air

Inland waterways transport generates fewer emissions than rail or truck.

The emission comparison between inland towing, rail and truck transportation shows that fewer air pollutants are generated by moving products on America's inland navigation system. These pollutants include:

- Particulate matter (PM)
- Hydrocarbons (HC)
- Carbon monoxide (CO)
- Nitrogen oxides (NOx)

Emissions (Grams/Ton-mile)



PM = Particulate matter ■ HC = Hydrocarbons ■ CO = Carbon monoxide ■ NOx = Nitrogen oxides

America's Waterways Are Ready to Meet Growing Demands

Except for a few congested locks scheduled for replacement, our navigable inland waterways system has an abundance of unused capacity. Waterways will transport the bulk commodities needed today and tomorrow while also moving an increasing share of intermodal cargo in the years to come. By relieving growing transportation congestion with the least impact of any surface mode on air quality, public safety and the environment, waterways really are our transportation solution for the future.

This brochure summarizes the study titled "A Modal Comparison of Freight Transportation Effects on the General Public" by the Texas Transportation Institute, Center for Ports and Waterways. It was conducted over a one-year period and was peer-reviewed by independent university-based experts.

For the full report, visit our website:
www.nationalwaterwaysfoundation.org



The mission of the National Waterways Foundation is to develop the intellectual and factual arguments for an efficient, well-funded and secure inland waterways system.

The Foundation needs your support. To find out how to get involved, learn how your organization can benefit from the foundation's research, or to make a tax-deductible donation, please call or visit our website.



This study was co-sponsored by the U.S. Department of Transportation Maritime Administration (MARAD).



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Advantages of Inland Waterways Transport:

Moving Freight Efficiently Throughout America

Increasing Cargo Capacity

A typical cargo barge moves much more cargo than a single truck or rail car.

Modal Freight Use	Standard Capacity
Barge - Liquid Bulk	27,500 Barrels
Barge - Dry Bulk	1,750 Tons
Rail - Bulk Car	110 Tons
Highway Tractor-Trailer	25 Tons

Units to Carry 1,750 Short Tons of Dry Cargo

- 1 barge
- 16 rail cars
- 70 trucks



One loaded covered hopper barge carries 58,333 bushels of wheat, enough to make almost 2.5 million loaves of bread.

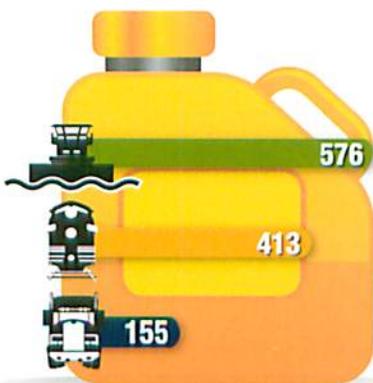
A loaded tank barge carries 27,500 barrels of gasoline, enough to keep about 2,500 automobiles running for an entire year.

Units to Carry 27,500 Barrels of Liquid Cargo

- 1 barge
- 46 rail cars
- 144 trucks

Moving Forward, Saving Energy

Transporting freight by water is the most energy-efficient choice.



The most energy-efficient way to move commodities such as coal, grain, iron, steel, aggregates, petroleum and chemical products is to use the nation's navigable rivers. Barges can move one ton of cargo 576 miles per gallon of fuel. A rail car would move the same ton of cargo 413 miles, and a truck only 155 miles.

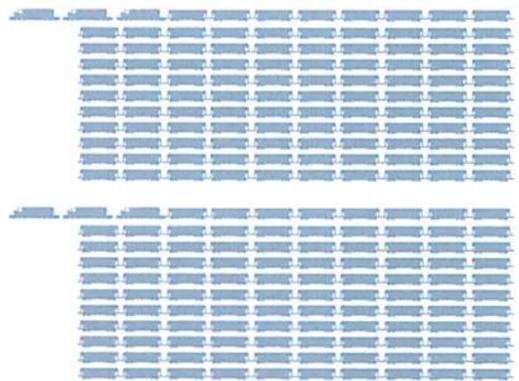
Ton-miles Traveled per Gallon of Fuel

One Common Barge Tow Carries the Load of Hundreds of Rail Cars or Trucks

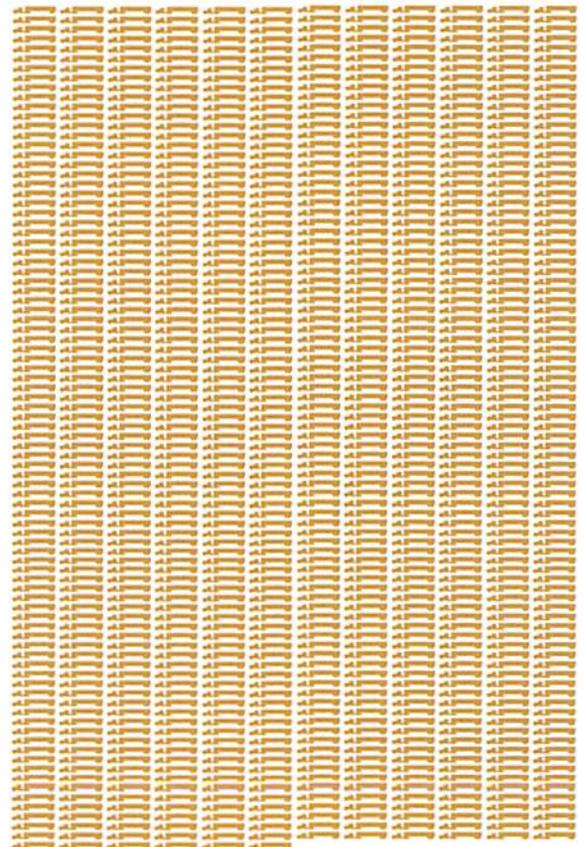
One 15-Barge Tow



216 Rail Cars + 6 Locomotives



1,050 Large Semi Tractor-Trailers



An “Inland Marine Highway” for Freight

America’s inland river barge system moves freight more safely and more efficiently than rail or truck. It is a key component of the transportation network and essential to our country’s economic strength.

Connecting our communities

The inland waterways system includes about 12,000 miles of commercially navigable channels and some 240 lock sites. America’s “inland marine highways” move commerce to and from 38 states throughout the nation’s heartland and Pacific Northwest, serve industrial and agricultural centers and facilitate imports and exports at gateway ports on the Gulf Coast.

Moving the nation’s commodities

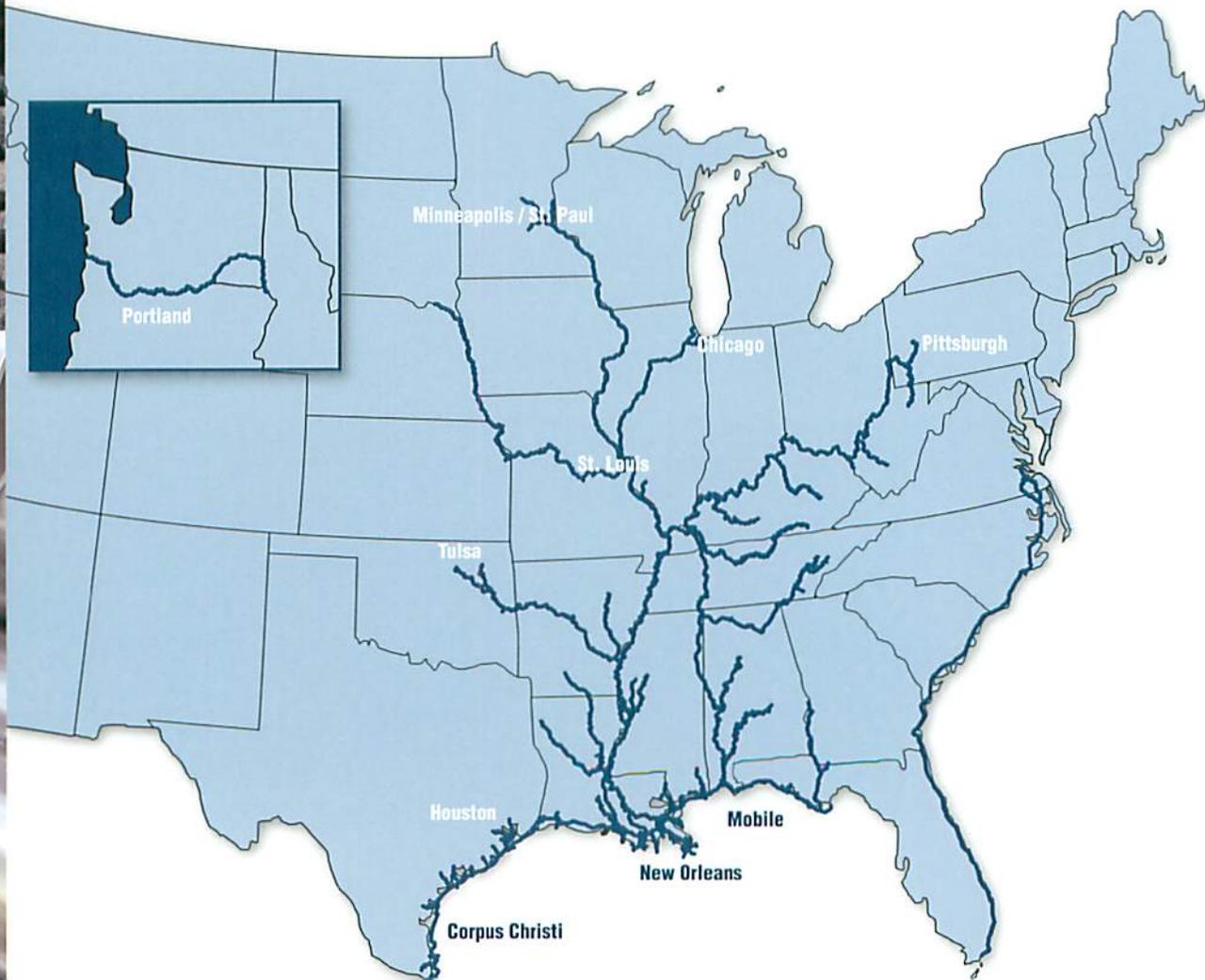
Waterways transport more than 60% of the nation’s grain exports, about 22% of domestic petroleum and petroleum products and 20% of the coal used in electricity generation.

Barges are ideal for hauling bulk commodities and moving oversized or overweight equipment.

- Coal
- Iron & Steel
- Chemicals
- Petroleum
- Grain
- Aggregates
- Project Cargoes
- Intermodal Containers

Strengthening our economy

Every year, roughly 624 million tons of waterborne cargo transit the inland waterways, a volume equal to about 14% of all intercity freight and valued at nearly \$70 billion.



Advantages of Inland Barge Transportation:

A Smaller Carbon Footprint

Inland barge transportation produces far fewer emissions of carbon dioxide for each ton of cargo moved compared to transport by truck or rail, according to a recent study conducted by the Texas Transportation Institute. Comparing transport emissions per ton-mile (emissions generated while shipping one ton of cargo one mile), researchers calculated that transport by rail emits 39% more CO₂, and transport by truck emits 371% more CO₂, than transport by inland barge.

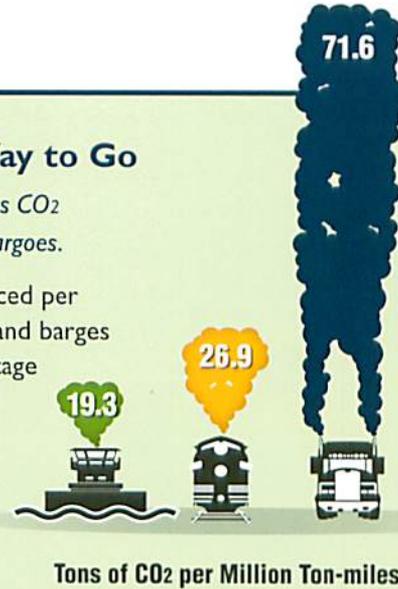
According to the study, if the 274.4 billion ton-miles of activity on America's inland waterways in 2005 were shifted to rail or truck, rail transport would have generated 2.1 million additional tons of CO₂ and truck transport would have generated 14.2 million additional tons of CO₂. This assumes these modes had the capacity to handle the additional cargo with no change in efficiency.



The Greener Way to Go

Inland barges produce less CO₂ while moving America's cargoes.

In terms of CO₂ produced per ton of cargo moved, inland barges have a significant advantage over trains and trucks.



Transport on America's Waterways Means Fewer Emissions

Following a scientific review ordered by the U.S. Supreme Court, the EPA recently issued a proposed finding that "greenhouse gases contribute to air pollution that may endanger public health or welfare." The agency estimates that 33% of our nation's annual carbon dioxide emissions come from transport-related activity.** Compared to rail or truck, inland barges offer America a more fuel efficient, safer and carbon friendly transportation alternative. Our inland waterways are a sound investment in America's future.



From a study titled "A Modal Comparison of Domestic Freight Transportation Effects on the General Public," November 2007, amended March 2009, by the Texas Transportation Institute, Center for Ports and Waterways. For the full report, visit our website: www.nationalwaterwaysfoundation.org. This study was a joint project of the National Waterways Foundation and the United States Maritime Administration.

* Environmental Protection Agency - Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act - <http://epa.gov/climatechange/endangerment.html> (24 April, 2009)

** Environmental Protection Agency - Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2007 <http://www.epa.gov/climatechange/emissions/usinventoryreport.html> (20 April, 2009)

