APPENDIX D

WRITTEN STATEMENTS SUBMITTED AT THE WORKSHOPS

- St. Louis, Missouri
  - WS72699-Illinois Grain and Feed Association
  - WS72699-Marc 2000

- Quincy, Illinois
  - WS72799-Upper Miss., Ill., and Missouri Rivers Association
  - WS72799-Illinois Grain and Feed Association
  - WS72799-Marc 2000

- East Peoria, Illinois
  - WS72899-Lock Capacity Process Action Team*

- Bettendorf, Iowa
  - WS72999-Pocha
  - WS72999-Davenport Chamber of Commerce
  - WS72999-Bartelt*
  - WS72999-Illinois Soybean Association
  - WS72999-Upper Miss. River Conservation Comm.
  - WS72999-Marc 2000

- Des Moines, Iowa
  - WS80399-Marc 2000*
  - WS80399-Reed
  - WS80399-Soelberg
  - WS80399-Sand
  - WS80399-Hildebrand

- La Crosse
  - WS80499-Upper Miss. Waterway Assoc.
  - WS80499-Overlie
  - WS80499-Frank
  - WS80499-McDaniel
  - WS80499-CF Industries, Inc.
  - WS80499-Unidentified

- St. Paul
  - WS80499-Inst. For Ag. And Trade Policy
  - WS80499-Minn. Farm Bureau Federation
  - WS80499-Minn. Soybean Growers Assoc.
  - WS80499-Unidentified
  - WS80599-Upper Mississippi Waterway Assoc.

* Written statements containing statistical or technical data not reflected in detail in the Appendix B and G comment summaries.

Comment Sheet
Upper Mississippi-Illinois Waterway System Navigation Study
US Army Corps of Engineers-Public Workshops

The Grain and Feed Association of Illinois supports the 7-1200 ft. lock option (20 thru 25 on the Mississippi River and La Grange and Peoria on the Illinois River) along with 1200 ft. guidewall extensions (14 thru 18 on the Mississippi River).

1) The Chicago Board of Trade will shift the delivery point for it's corn and soybean contracts from Chicago and Toledo to the Illinois River beginning in the year 2000. The Illinois River was determined to be the best outlet to access the export market via the Gulf and provide routes to domestic markets. The success of this shift is dependent on the Illinois Waterway to handle current and projected traffic. The need for efficient locks is critical.

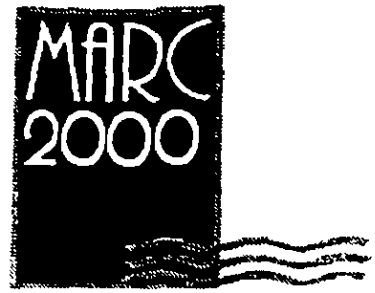
2) Recent studies show that the demand for barges remains constant, even though there are major changes in barge rates. This low elasticity is a major benefit to the nation in that barge transportation is recognized as the most environmentally friendly, most economical and the safest means of moving bulk commodities. Also, in estimating the barge demand on the Illinois River, the State of Illinois Economic Coordinating Committee strongly objects to the exclusive use of Iowa data.

3) The Corps has reported an average delay of six hours per tow in moving through lock 25, however an average delay has little significance when tows are waiting six days during peak export times. The Upper Mississippi River System handles 66 percent of all grain exports. We cannot afford to loose the export market, due to the fact that we cannot get our products to market.

4) The fuel tax that is paid by commercial navigation is to be used for improvements on the nations waterway system. Forty percent of the money in the trust fund has come from the Upper Mississippi Region, which has only received 15 percent of the money for improvements. The money in the trust fund needs to be used to the benefit of our nations economy. Historically, for every dollar invested in our inland waterway system, the nation has received a six dollar benefit.

5) Five billion dollars worth of Illinois agriculture products, mostly corn and soybeans for export, use the river to get to market. Illinois consumers rely on the river to move another eight billion dollars worth of products.

6) Navigation, flood protection, environmental restoration, water supply, and other civil works programs serve the country in countless ways, providing benefits far beyond their actual cost to the taxpayer. These programs deserve funding that meets the nations growing water resources needs.



MARC 2000 endorses the U.S. Army Corps of Engineers' alternative H, 5-1200' locks on the Mississippi (20-25), 2-1200' locks on the Illinois (Peoria & LaGrange), and 5 guidewall (14-18) extensions on the Mississippi along with any needed mooring cells or buoys. We agree with the Corps of Engineers, the 60-year old lock & dam system on the Upper Mississippi River System (UMRS) must be modernized. However, the assumptions used to derive the Net Annual Benefits to the nation were far too conservative and/or erroneous. When correct economic and real world assumptions are considered, the Net Annual Benefits for this alternative will be far greater. Alterations must be made to the economic assumptions to derive the full impact on our nation's economy.

- *The U.S. Army Corps of Engineers' (Corps) model assumes a small increase in prices will cause a large movement of grain and other commodities off the river to other forms of transportation (large elasticity). Past experience and documentation indicates this to be an erroneous assumption.* Over the last 10 years there has been a 55-65% change in the barge rates with constant demand for commodity barge use. The Corps is assuming ~~1.2-1.5~~ elasticity, the literature suggests .21-.50. When the proper elasticity is used, benefits for this option will skyrocket.
- *Iowa grain flows cannot be used to determine demand elasticities on the Illinois River.* Other research (Hauser/Baumel) has shown demand elasticities on the Illinois River have been half of that on the Upper Mississippi.
- *The maximum willingness of shippers to pay for barge freight is set in the Corps' model assumptions with the restriction that rail freight rates will not rise with barge freight rates.* Shippers who utilize both rail and barge challenge this assumption. Rail rates mirror barge rates, always have and always will under the free market system. This assumption arbitrarily restricts benefits to our nation's economy.
- *The Corps used an "expert elicitation' panel to set elasticity numbers. This panel disagrees over the outcome.* The panel agrees that more work needs to be done because no data was presented to substantiate the "N"(elasticity) number. More published data must be studied and utilized in the Corps' model.
- *Future grain production is too conservative.* Over the next 50 years, new technology will increase production beyond historical levels. Key groups, such as the U.S. Grains Council, have already begun adjusting their models to reflect the increase.
- *Capacity is not addressed in this model.* Average delays mean nothing when tows are waiting 6 days to lock through one lock during peak grain export months. This hinders our competitiveness.
- *This alternative will create over 24,200 man-years construction jobs.*

MARC 2000 members' request that the Corps also reviews the need for 12-1200' locks on the UMRS (10 on the Mississippi and 2 on the Illinois). Under the best case scenario, the project will not be completed until 2015. We must address the needs of our nation's economy now. Our forefathers were visionaries with the construction of the lock & dam system on the UMRS. Because of their foresight, the Midwest enjoys a high standard of living envied by the world. We too must be visionaries and act now!

The modernization of the UMRS is imperative to our nation's economy and environmental soundness.

- *Who benefits? The nation.*
  - The river supports over 400,000 jobs, including 90,000 industry jobs.
  - Lower consumer prices. Some areas of the UMRS will pay $0.10 more/gallon of gasoline without river transportation.
  - The pools created by the lock & dam system provide areas for hunting, fishing, recreational boating, fly ways for migratory birds, hydroelectric power, lessens potential impact during flooding season, and provides a reliable water supply for many cities.
- *Without an improved water transportation infrastructure, the U.S. farmer will continue to lose market share to South America and China.*
  - The American farmer has never been, nor will ever be the low-cost producer.
  - The American farmer depends on low-cost transportation to compete in the world grain markets.
- *Is this a good use of federal funds?*
  - 50% of this project will be funded with taxes collected ($0.20/gal) on commercial river traffic, and hence, the American farmer. These dollars are sitting in a trust fund set up to use for construction projects on the river system. The UMRS (our region) has put 40% of all dollars into this fund, while receiving only 15% back. We are a donor region.
  - Historically, for every $1 invested in the inland waterway system there has been a $6 return to the nation in benefits.
- *Is this environmentally sound? Yes, river transportation is the most environmentally friendly mode of transportation.*
  - One barge carries the same as 15 rail cars or 59 semi trucks.
  - According to the EPA, towboats emit 35-60% fewer pollutants than rail or trucks.
  - According to the USSDOT, one gallon of fuel in a towboat can carry one ton of freight 2.5 times further than rail and 9 times further than truck.
  - The Corps estimates that $100-300 million is saved in foregone air emission clean-up cost (using river transportation vs. other forms).
  - None of the studies performed by the Corps, to date, indicate any significant environmental impact of increasing barge transportation.
- *MARC 2000 's members continue to consider environmental concerns.*
  - MARC 2000 supports the EMP (Environmental Management Plane).
  - MARC 2000 supports environmental mitigation in future legislation.
  - MARC 2000 supports and participates in the annual River Summit in an effort to find solutions to concerns.
  - MARC 2000 envisions a system that is used extensively by navigation, recreation, and nature in harmony.

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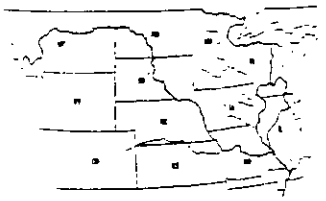

UPPER MISSISSIPPI
ILLINOIS & MISSOURI
RIVERS ASSOCIATION

616 N. 24TH ST. • QUINCY, IL 62301
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Formerly
UPPER MISSISSIPPI
FLOOD CONTROL ASSOCIATION

Affiliated Members:
Illinois Valley Flood Control Association
Missouri Levee & Drainage District Association

STATEMENT

Upper Mississippi River-Illinois Waterway System Navigation Study

Michael D. Klingner, P.E.
Vice-Chairman
Upper Mississippi, Illinois, & Missouri River Association

UMIRMA represents cities, businesses, and levee and drainage districts in Illinois, Missouri, and Iowa, along the Upper Mississippi from Cairo, Illinois, north to Rock Island, the Illinois River drainage districts and Missouri River districts throughout the state of Missouri. Current membership is over 200 members.

The study's main objective should be researching the requirements to have a navigation system that will allow the United States to compete and to lead in global markets. Agricultural commodities represent the majority of products that are shipped in the United States. Other than entertainment, agricultural products are the only positive trade balance item the United States can claim In order to improve its balance of payments and to maintain a viable food production and processing industry, the United States must upgrade its navigation infrastructure to be economically efficient.

The study should recognize that barge transportation provides competition for rail and road shipping rates. A comparison of river, rail and road rates for shipping the same products from 1992 to 1996 will show a marked increase in rail and road prices during peak flood events. Having a third major option for shipping keeps transportation prices competitive.

The study should consider multiple facets of the environment in assessing the impact of river transportation on the environment. Air, water and soil quality and "viewscapes" (includes aesthetics such as scenery and noise levels) should be considered as separate environmental components in the study. Each transportation option should be modeled using the same type and quantities of product and timing of shipments. Additional impacts on physical infrastructure should also be quantified. For example; market forecasts call for increase demand and increase production. If the product is hauled by road, increased truck traffic will damage roads more quickly. Additional revenue will be needed for expansion (including land acquisition, mitigation for habitat, planning and construction) and intensive maintenance of state and federal roads.

We would like to recommend the Corp of Engineers move forward, as soon as possible, with 1200 foot locks (20-25, Peoria, LaGrange) and Guidewalls (Locks 14-18). We would also like to recommend additional moorings be placed at strategic locations to prevent erosion along existing levees. UMIMRA recommends the design and construction proceed now and that the work be closely coordinated with the Comprehensive Plan, supporting improvements in all five major areas: Flood Protection, Navigation, Economic Development, Recreation, and Environmental Quality.

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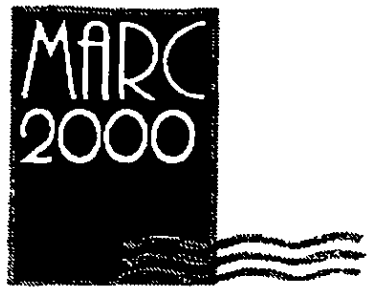
Greg Dalbeare
Transportation Chairman
IL Grain & Feed Assoc.
217-425-1023

12-21

Lynn Muench



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- *Future grain production is too conservative.* Over the next 50 years, new technology will increase production beyond historical levels. Key groups, such as the U.S. Grains Council, have already begun adjusting their models to reflect the increase.
- *Lock improvements on the Illinois River are important for two key reasons.* Despite periodic open pass situations, our grain export competitiveness is significantly affected by lock delays comparable to the Upper Miss. With the Illinois River as a delivery point for grain contracts beginning with the year 2000, the river system must be able to minimize any disruption to their fulfillment.
- *This alternative will create over 24,200 man-years construction jobs.*

MARC 2000 members' request that the Corps also reviews the need for 12-1200' locks on the UMRS (10 on the Mississippi and 2 on the Illinois). With appropriate grain demand elasticities for the Upper Miss and Illinois River benefits may support this alternative. This proposal would provide the most capacity, accommodate the highest percentage of projected traffic growth, and provide the greatest number of system NED savings.

QUINCY

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  - MARC 2000 envisions a system that is used extensively by navigation, recreation, and nature in harmony.
- *The cost of human life should be considered.* Average commercial fatalities per year: Truck >4,000, Rail >1,000, and Water <50.

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Lock Capacity Process Action Team for the Illinois Waterway

Recommendations for Improvement

July 25, 1999

General... The purpose of the Lock Capacity Process Action Team was to identify, evaluate and compare all structural and non-structural means for improving navigation efficiency and increasing lock capacity for the locks on the Illinois waterway from LaGrange Lock to Thomas O'Brien Lock. The work group circulated questionnaires to mariners as well as lock personnel to solicit comments of recommendations for improvement. Approximately 290 individual comments were collected and assembled into a preliminary report. Meetings were held at each facility where the report was discussed among mariners and lock personnel to form this report of recommendation for improvements.

There were 7 meetings held...at Marseilles 6/10, Starved Rock 6/11, LaGrange and Peoria 6/15, Dresden Isl 6/16, Brandon Rd 6/17, Lockport 6/18 and Thomas O'Brien 7/9...these meetings were well attended with a combined total of 105 participants...

The recommendations will be divided into 2 groups, structural and non-structural. Structural will include items such as lock modifications, cells, dredging, equipment upgrade, signs, etc. Non-structural will include items such as communication, policies or procedures, ques, etc. The order that the recommendation is placed in the report in no way prioritizes the item. Prioritization of items for action planning is recommended by this committee at a future meeting between industry and COE members.

Team members... This effort would not have been possible without the following members of the team... Mr. Rick Granados, co-team leader, COE...Luke Moore, co- team leader, WKN...Captain Ed Henleben, Orgulf...Captain Ron Wunderlich, Artco...Captain Tony Webb, Material Service...Jim Hart, Lkmstr Marseilles...Larry Collins, Lkmstr Starved Rock...Dick Moss, Lkmstr Peoria...Dave Hood, Lkmstr LaGrange...Roy Chapman, Lkmstr Dresden Island...Bob Smolka, Lkmstr Brandon Road...Pat Wharry, Lkmstr Lockport...Bob Balamut, Lkmstr Thomas O'Brien...

PEDR

Non-structural...

* All vessels while in lock monitor channel 14 at all times...vessels shall notify lock when working on another channel so lock can reach mate if emergency arises...

* All lock personnel should have an all-channel walky talky with remote microphone...

* More information is needed in chart about each lock...info to include call-in places above and below each lock...details of walls (i.e. tie-off pins, ladder recesses), hold up spots, out-draft conditions at certain gate settings, particular info of each location...

* Lock personnel should be notified when a green deckhand is on tow...they will keep a closer watch over crewmember if identified during locking...

* Vessels should re-emphasize basic lock rules with crews before entering (i.e. 2 bumpers on head of tow, lines of sufficient length and good condition, coupling ready to break, usable fittings at couplings, etc.)...

* All deckhands should have a walky talky during locking...

* Tows of 7 barges that could be made into a single with reconfiguring in chamber should not be penalized if captain/pilot feels such a maneuver would be a risk to his crew and would rather make a quick double (tow first then Vessel) as long as the tow is configur - ed as follows...1st tier out 3 wide, 2nd tier out 3 wide and a spike barge in the center on the head...this will prevent wedging of the tow and provide the lock a flat side to pull from...**but**...even though this would no longer be an "illegal" double, mariners are still encouraged to make a single out of any locking if possible to expedite lockings...less than 7 regulation barges will be an "illegal" double per COE guidelines...

* Vessels while in chamber are encouraged to dim floodlights whenever practical as the bright lighting blinds the lock personnel making monitoring of crews on tow difficult... also ask mariners to be aware of searchlight beam during locking citing same concerns...

* From Starved Rock to Lockport locks to have established pleasure craft locking schedule for weekends or holidays when small boats are present...these times could be published at local marinas in an effort to create ques for small craft...

* Any pleasure craft wishing to lock through any lock facility should have a 2 way radio and establish radio contact with lock personnel...this could be phased in over a 2 year period...also life vests should be worn by all pleasure craft inhabitants...this too could be phased in similar fashion...

* If a vessel requires assistance at Marseilles lower wall catching a line please notify lock personnel and they will assist...

* Vessels are reminded to be prompt when asked to move onto wall...some vessels have been observed "dragging their feet" when asked to approach wall causing lock delay for other vessels...

* It is recommended each vessel provides a ladder on tow for their crews to get on and off the tow while locking doubles...locks will not provide...

* Radio broadcasts for each lock with a "looped" message giving lock information on an a.m. channel (similar to state parks and tourist info) to be investigated by COE...

* Industry to provide locks with Self-help guidelines...

* Any towing vessel which is observed operating in an unsafe manner or disrupts normal locking procedures is to be reported to Rick Granados so that he may contact IRCA representative...

* The majority of attendees at all meetings stated their appreciation to be able to participate in the work group and recommend future meetings with similar format to further discussion of topical items...also recommend ride-along trips on towing vessels for lock staff to see their pool and to get to know mariners...all the locks have extended invitations to all mariners to visit lock facilities and see operations first hand...

Structural...

* All locks need to be expanded to 1200' chambers to facilitate traffic efficiently...

* The sign regulations need revised...the signs that have been placed on lock walls are too reflective for use by towing vessels...

* A mooring buoy is recommended for Ballards Island...

* An alignment cell is recommended at Dresden Isl lower approach just beneath short wall bullnose...

* A mooring cell is recommended above Dresden Island lock mile 272.1 RDB...

* The EJ&E bridge below Dresden needs altered or removed...

* Guides on the handrails to floating pin recesses to keep lines from hanging up on recess works well and is recommended for all floating pin recesses...

* A ladder recess is recommended on Dresden Isl lower wall close to where cuts are secured...

* There are 5 waiting areas above Peoria lock among the Tabor fleeting area that should be sounded by COE and place mooring buoys where possible...areas should be added to river chart and clearly marked...these waiting areas should support 8 s/b tows waiting lock turn...(see attachment)

* Lighted windsocks on the upper and lower walls at locks recommended...

* Flow charts for LaGrange and Peoria made available to mariners is recommended... there is much concern of outdrafts and backlashes when operating tainter gates...

* A mooring buoy above LaGrange is recommended...

* A mooring cell at Delbridge Isl above Starved Rock is recommended...also COE should survey a possible hold up area just above lock on RDB in recess area...

* Dredging the channel alongside Plum Island creating a waiting area below Starved Rock is recommended...channel should be dredged within 35' of Island with a cell placed at upper end so tow may "flatten out"...

* The rock shelf below Starved Rock lower land wall recommended to be cut back 20' to allow mariners more room to maneuver tow as they approach/depart chamber...

* The canal above Marseilles is too narrow and shallow...recommend widening to allow tows to wait in canal for lockage...also recommend dredging from upper canal to Ballards Island as during higher flow periods water is drawn down below normal...

* The channel from Starved Rock to Delbridge Isl is shallow and narrow...recommend dredging of this area...

* Recommend a cell below Marseilles at the "point" mile 243.3...also this area requires dredging to provide a waiting area...

* Below Lockport tie-off pins are recommended on the LDB at mile 290.6...

* More lighting at break coupling area at Lockport is recommended...

* Channel below O'Brien from lower wall along RDB to mile 325 recommend survey and dredging to allow waiting area for n/b tows...

* Recommend Rangers provide more areas for public viewing, more information of what visitors will see at lock...public support for our industry is paramount...

* Recommend "Dam Safety" type sign at local public access sites to educate public of locking procedures...

* Recommend posting locking procedure sign below O'Brien lock to inform pleasure craft as they approach lock...

* Recommend dredging the following areas...the area above Vermillion River mile 226.5 to Deer Park Light mile 226.9....Beardstown Highway bridge RDB mile 88.0...Chillicothe bridge mile 182.0 RDB...Marseilles lock light mile 243.3 to Milliken Creek mile 242.5... widen channel from Detweiller to Blue Creek Point miles 173.0 to 171.0...

* Ask that the COE identify any area of the Illinois River where a less than 300' wide channel exists and target for dredging to allow 2 way traffic in all areas from Grafton to Lemont citing Section 5 of the River and Harbors Act, "...and the channel dimensions specified shall be understood to admit of such increase at the entrances, bends, sidings, and turning places as may be necessary to allow free movement of boats." ...and also citing Public Law 102-575 Reclamation Projects Authorization and Adjustment Act of 1992 Section 224"...to allow dredging outside authorized dimensions to enhance previous works..." and data from EM 1110-2-1611 Engineering and Design-Layout of Shallow-Draft Waterways, change 2, Oct 29, 1982 "...operating experience has indicated the *minimum* clearance required for *reasonably safe* navigation in straight reaches should be at least 20 feet between tow and channel limits for 2 way traffic...with at least 50 feet between passing tows...tows of 105 feet in width would require a channel of 300 feet..."

* Recommend COE survey above Lockport lock from Old Butterfly mile 293 to mile 299 for feasibility of widening canal 150' to accommodate tows 105' wide, promote industry expansion and to provide increased water storing capacity to minimize fluctuations during high flow periods...

7-29-99 Mississippi River barks

1. Being aware of the environment is important.It should not be a priority over everything, at any cost, with no holds barred.I think the word used is progress. There are people killed in cars and trucks every day-do we stop all construction of highways? 2. The only reason that the National Trade Deficit is not worse than it is now, is because of the ag products traded to foreign governments. We can compete on the world market because of river barge transportation at a reasonable cost.(sometimes)
3. If the environmentalist need something to be concerned about,and want to stage a big show,keep on big oil about using MTBE as an additive in gasoline. Once MTBE comes out of exhaust pipes,it is here forever-in the air, water, and soil killing the ozone. Thank you,environmentalists for what you have done so far with MTBE.
4. The farm economy: The American farmer does such a good job of raising the best food at cheap prices that there is now an oversupply .We need to move our products to people around the world.The river is the only way to do that economically in the Midwest. If farmers are not making money,they aren't spending .I have 2 brothers who are laid off from Case in E.Moline,because there are no orders for new combines.When they are not drawing a paycheck their buying also slows down.One brother was going to trade pick ups,but will now wait to see what happens at work.

Mike Pocha Scott Co
(319) 285-8257

DAVENPORT
CHAMBER OF
COMMERCE

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Davenport, Iowa 52801

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July 29, 1999

TO: U. S. Army Corps of Engineers

RE: Navigation Study

The Davenport Chamber of Commerce strongly supports the U. S. Army Corps of Engineers evaluation navigation improvements for the Upper Mississippi River (UMR) for upgrading or replacing Locks 12, 14-18 and 20-25 including the various continuations, installing mooring buoys, constructing cells and guide walls and extending locks from 600 ft. to 1200 ft. to accommodate the commercial and pleasure boat traffic on the UMR.

The effect on shipping of grain, fertilizer, petroleum and coal for use within the Midwest economy and the use of the river for recreation and pleasure boating will all be enhanced by the upgrading of the river system. The American farmer and in particular, the states bordering on the UMR must be able to compete in a world economy and in particular, the exporting of grain is dependent upon efficient and cost effective transportation of our products in the world market place.

The need to balance the environmental interest is also related to the need to support the navigation study to assure that commercial, recreational and protection of the environment will produce the optimum result.

We believe the navigation study provides a balance of all the various river interests in their recommendations and justifies investment in calling for five 1200 ft. locks on the Upper Mississippi River, two 1200 ft. locks on the Illinois River (LaGrange and Peoria) and five guidewall expansions.

We believe the modernization of the locks and dams can take place concurrently with continued care and maintenance for the environmental and recreational benefits of the river system and support the objectives set forth in the navigation study.

DAVENPORT CHAMBER OF COMMERCE

Ralph H. Heninger, Past Chairman and Current Director

RHH/mlh

Duane and Shirley Bartelt
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Polo, IL 61064

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My name is Shirley Bartelt. My husband Duane and I farm 750 acres of corn and soybeans near Polo, Illinois, in Ogle and Lee counties. Transportation of our grain is our primary interest in the Mississippi and Illinois Rivers and that will be the focus of my comments today.

The majority of our grain is sold into the export market. As the livestock industry in our area continues to decline the export market will continue to become more important to us.

I would like to give you an example of the value of the river navigation system to our operation. The barge freight rate on Wednesday, July 28, 1999, from Savanna, Illinois, to the Gulf of Mexico was 36 cents per bushel for corn and 38 cents per bushel for soybeans. The total cost of moving our average annual production of corn and soybeans from our farm to the Gulf of Mexico by barge on Wednesday would have been $35,860*. It would all fit in two barges.

For comparison the truck freight rate of $2 per loaded mile to the Gulf of Mexico would be approximately $2.18 per bushel for corn and $2.31 per bushel for soybeans. These rates make it obvious why trucks aren't used for this type of hauling. The total cost of moving our average annual production by truck on Wednesday would have been $217,250**. It would take 111 trucks on 1,960 miles of highway round trip – a total well over 200,000 miles. I will leave the estimated cost of those miles in highway repairs, traffic accidents, etc. to someone else.

I might also note that the cash price for corn in New Orleans Wednesday was $2.10 per bushel. It wouldn't make much sense to pay $2.18 to haul it there.

Thank you for the opportunity to present this information.

*160 bushels per acre x 550 acres =88,000 bushels of corn x $.36=$31,680; 55 bushels per acre x 200 acres=11,000 bushels of soybeans x $.38=$4,180

**88,000 x $2.18=$191,840; 11,000 x $2.31=$25,410

Tom Wallace President of Il. Soybean Assoc.

CORP OF ENGINEERS PUBLIC WORKSHOPS
SOYBEAN INDUSTRY TALKING POINTS

- Our inland waterways are of vital importance in the transportation of soybeans and soybean products. Barge transportation is the most efficient and economical way to move bulk soybeans and farm inputs.

- Soybean production has grown 120% in the past 25 years. U.S. Soybean production has been at record levels the past two years (2.7 & 2.8 bil. Bushels) and projections for 1999 crop are for continuing increased production (2.9 bil. Bu. forecast).

- The demand for soy products—internationally and in the U.S.—continues to grow. Export levels have trended higher the past ten years and are expected to reach record levels in 1999 (930 mil. Bu).

- Over 75% of U.S. soybean exports leave the U.S. via the Mississippi River Gulf Ports.

- Barge demand stays the same despite large changes in barge rates—Over the last 10 years there has been a 55-65% change in the barge rates with relatively constant demand for commodity barge use. Railroad consolidation and crumbling rural roadways will divert more grain to inland waterways.

- The need for grain transport capacity during peak export times must be addressed. Average delays mean nothing when tows are waiting 5 days during the peak export times. We simply can't get our product to the export markets. In the last two years, soybean producers have lost the export market for six months due to inefficiencies in the export transportation system.

- The lock and dam system, developed nearly fifty years ago, is outdated. The present system is unable to satisfy the increased grain transportation demands of a growing population.

- All seven locks and dams must be upgraded to meet current and future transportation needs. (20, 21, 22, 24 & 25 on the Mississippi and the LaGrange and Peoria on the Illinois). The locks are so neglected and obsolete that they are causing long delays in moving goods—resulting in higher and higher prices that reduce farm profitability.

- The Corp's study ignores the growing demand for soy products, the trend toward higher soybean yields, increasing global market demand, and the need for a competitive transportation system.

- Brazil is spending $183 million to revive its water transport network that will span Brazil's interior. This project will reduce shipping cost for soybeans and grain by at least 75 percent. The remote regions of Brazil with fertile soil but poor infrastructure could now become major soybean production regions.

- Improvements in our river transportation system are needed now to keep us competitive in the future.

- Support Alternative Plan

UPPER MISSISSIPPI RIVER CONSERVATION COMMITTEE

OFFICIAL STATE CONSERVATION AGENCIES COOPERATING:
ILLINOIS -- IOWA -- MINNESOTA -- MISSOURI -- WISCONSIN

NEWS RELEASE

July 1999

UMRCC Statement of Continuing Concern Regarding the Corps of Engineers Systemic Navigation Study for the Upper Mississippi and Illinois Rivers

Having been the collective voice of Upper Mississippi River biologists, scientists, and managers since 1943, The Upper Mississippi River Conservation Committee feels compelled to issue a statement with respect to the Corps' navigation study environmental investigations conducted to date. The US Army Corps of Engineers began studying systemic navigation improvements for the Upper Mississippi River System (UMRS) in the early 1990's. In November 1994, the UMRCC issued a statement with respect to the Corps study plan for investigating the environmental effects associated with proposed navigation improvements. In that statement, the UMRCC advised that: (1) insufficient study time was allocated to investigate navigation impacts, (2) the long-term effects of continued navigation operation and maintenance activities needed to be addressed, and (3) a fish and wildlife plan for protecting the River's fish and wildlife resources should be developed concurrently with any navigation improvements.

After five years we have now begun to see the results of the Corps' planning efforts. Most of the 40 or so environmental investigations conducted in order to describe navigation related impacts have been either completed or now undergoing review. A preliminary array of navigation improvement alternatives has recently been presented to the public, although the analysis of environmental effects associated with those alternatives is yet to be completed. Based on the information reviewed thus far, the UMRCC believes that several of the completed studies and collected data are insufficient to determine the significance of increased navigation traffic upon the fish and wildlife resources of the UMRS.

The lack of response to the UMRCC's recommendations, to increase time scheduled for field studies, is reflected in such weak and uncertain study findings for certain fish and wildlife resources that they are virtually useless for predicting navigation impacts. The investigation into the effects of commercial tow traffic upon main channel fish populations developed a good sampling methodology, but collected too little field data (only 41 entrainment samples were collected) to model increased traffic effects. The UMRCC recommends that an additional 3 to 5 years of main channel fishery sampling be conducted while the Corps conducts advanced engineering and design studies.

Another critical flaw is the failure to include a "cause and effect" analysis of continued navigation

channel operation and maintenance. The Corps of Engineers continues to spend approximately $130 million dollars annually to operate and maintain the existing navigation channel, yet we still do not understand the long-term cumulative consequences of these actions. The Cumulative Effects Study conducted by the Corps forecasts future UMR habitat changes, but fails to analyze and quantify the effects of such activities of dredging, dam regulation, fleeting and terminal development, revetments and regulating works, introduction of exotic species, and impeded fish passage. We still do not know the extent of avoid and minimize actions that must be taken to preserve existing resources such as bottomland hardwoods, backwater wetlands, and overwintering fish habitat, and aquatic vegetation.

Without the inclusion of such information in the Corps Systemic Navigation Study, the UMRCC believes it will be impossible to determine the significance of increased traffic effects on fish and wildlife resources. In addition it will be difficult, if not impossible, for the COE Mississippi Valley Division to fulfill its long overdue obligation to implement an avoid and minimize program for the UMRS. The UMRCC believes that a thorough analysis of the Nine-foot Navigation Channel Project's operation and maintenance activities must be accomplished within the current navigation study frame-work in order to determine the environmental significance of additional navigation traffic.

Thanks in large part to the Long Term Resource Monitoring Program, a significant amount of biological information relative to understanding navigation O&M effects has been generated since the Corps' navigation project environmental impact statements (EIS) were prepared in the 1970's. (Reference the recently released report *Ecological Status and Trends of the Upper Mississippi River*). In light of this, it is indefensible for the Corps of Engineers to continue to claim these outdated EIS documents adequately addressed O&M impacts.

The UMRCC position has been that it is not opposed to economically justified navigation improvements as long as those improvements do not jeopardize the long-term well being of UMR fish and wildlife resources. With respect to the recently released navigation improvement alternatives, the UMRCC has no comment to offer with respect to their economic validity. As for the environmental component, the UMRCC believes that a decision regarding the environmental significance of the proposed improvements cannot be made until the above information is provided.

For further information regarding the UMRCC position on navigation, please contact: UMRCC Chairperson, 4469 - 48th ave ct., Rock Island, Illinois 61201, telephone 309/793-5800, ext 522, FAX 309/793-5804, or e-mail <UMRCC@Mississippi-River.com>.

Take PRIDE in the MISSISSIPPI

MARC 2000

29 July 99

MARC 2000 endorses the U.S. Army Corps of Engineers' alternative H, 5-1200' locks on the Mississippi (20-25), 2-1200' locks on the Illinois (Peoria & LaGrange), and 5 guidewall (14-18) extensions on the Mississippi along with any needed mooring cells or buoys. We agree with the Corps of Engineers, the 60-year old lock & dam system on the Upper Mississippi River System (UMRS) must be modernized. However, the assumptions used to derive the Net Annual Benefits to the nation were far too conservative and/or erroneous. When correct economic and real world assumptions are considered, the Net Annual Benefits for this alternative will be far greater. Alterations must be made to the economic assumptions to derive the full impact on our nation's economy.

- *The U.S. Army Corps of Engineers' (Corps) model assumes a small increase in prices will cause a large movement of grain and other commodities off the river to other forms of transportation (large elasticity). Past experience and documentation indicates this to be an erroneous assumption.* Over the last 10 years there has been a 55-65% change in the barge rates with constant demand for commodity barge use. The Corps is assuming an elasticity of 3, the literature suggests 0.21-1.00. When the proper elasticity is used, benefits for this option will skyrocket.
- *Iowa grain flows cannot be used to determine demand elasticities on the Illinois River.* Other research (Hauser/Baumel) has shown demand elasticities on the Illinois River have been half of that on the Upper Mississippi.
- *The maximum willingness of shippers to pay for barge freight is set in the Corps' model assumptions with the restriction that rail freight rates will not rise with barge freight rates.* Shippers who utilize both rail and barge challenge this assumption. Rail rates mirror barge rates, always have and always will under the free market system. This assumption arbitrarily restricts benefits to our nation's economy.
- *The Corps used an "expert elicitation' panel to set elasticity numbers. This panel disagrees over the outcome.* The panel agrees that more work needs to be done because no data was presented to substantiate the "N"(elasticity) number. More published data must be studied and utilized in the Corps' model.
- *Future grain production is too conservative.* Over the next 30 years, new technology will increase production beyond historical levels. Key groups, such as the U.S. Grains Council, have already begun adjusting their models to reflect the increase.
- *Lock improvements on the Illinois River are important for two key reasons.* Despite periodic open pass situations, our grain export competitiveness is significantly affected by lock delays comparable to the Upper Miss. With the Illinois River as a delivery point for grain contracts beginning with the year 2000, the river system must be able to minimize any disruption to their fulfillment.
- *This alternative will create over 24,200 man-years construction jobs.*

MARC 2000 members' request that the Corps also reviews the need for 12-1200' locks on the UMRS (10 on the Mississippi and 2 on the Illinois). With appropriate grain demand elasticities for the Upper Miss and Illinois River benefits may support this alternative. This proposal would provide the most capacity, accommodate the highest percentage of projected traffic growth, and provide the greatest number of system NED savings.

The modernization of the UMRS is imperative to our nation's economy and environmental soundness.

- *Who benefits? The nation.*
  - The river supports over 400,000 jobs, including 90,000 industry jobs.
  - Lower consumer prices. Some areas of the UMRS will pay $0.10 more/gallon of gasoline without river transportation.
  - The pools created by the lock & dam system provide areas for hunting, fishing, recreational boating, fly ways for migratory birds, hydroelectric power, lessen potential impact during flooding season, and provide a reliable water supply for many cities.
- *Without an improved water transportation infrastructure, the U.S. farmer will continue to lose market share to South America and China.*
  - The American farmer has never been, nor will ever be the low-cost producer.
  - The American farmer depends on low-cost transportation to compete in the world grain markets.
- *Is this a good use of federal funds?*
  - 50% of this project will be funded with taxes collected ($0.20/gal) on commercial river traffic, and hence by the American farmer. These dollars are sitting in a trust fund set up to use for construction projects on the river system. The UMRS (our region) has put 40% of all dollars into this fund, while receiving only 15% back. We are a donor region.
  - Historically, for every $1 invested in the inland waterway system there has been a $6 return to the nation in benefits.
- *Is this environmentally sound? Yes, river transportation is the most environmentally friendly mode of transportation.*
  - One barge carries the same amount of cargo as 15 rail cars or 59 semi trucks.
  - According to the EPA, towboats emit 35-60% fewer pollutants than rail or trucks.
  - According to the USSDOT, one gallon of fuel in a towboat can carry one ton of freight 2.5 times further than rail and 9 times further than truck.
  - The Corps estimates that $100-300 million is saved in foregone air emission clean-up cost (using river transportation vs. other forms).
  - None of the studies performed by the Corps, to date, indicate any significant environmental impact caused by an increase of barge transportation.
- *MARC 2000 's members continue to consider environmental concerns.*
  - MARC 2000 supports the EMP (Environmental Management Plan).
  - MARC 2000 supports environmental mitigation in future legislation.
  - MARC 2000 supports and participates in the annual River Summit in an effort to find solutions to concerns.
  - MARC 2000 envisions a system that is used extensively by navigation, recreation, and nature in harmony.
- *The cost of human life should be considered.* Average commercial fatalities per year: Truck >4,000, Rail >1,000, and Water <50.

Challenge Corps & Congress

Under the best case scenario, the project will not be completed until 2015. We must address the needs of our nation's economy now. Our forefathers were visionaries with the construction of the lock & dam system on the UMRS. Because of their foresight, the Midwest enjoys a high standard of living, envied by the world. **We too must be visionaries and act now!**

Midwest Area River Coalition 2000
200 North Broadway, Suite 1725 – Saint Louis, MO 63102
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B

INTRODUCTORY TALKING POINTS

- Navigation on the Upper Mississippi and Illinois Rivers supports over 400,000 jobs, including 90,000 high-paying manufacturing jobs.

- The U.S. Army Corps of Engineers estimates that every $1 invested in navigation projects yields $6 in benefits returned to the nation.

- In any given year 60% of the bulk agricultural exports are moved to world ports via the Upper Mississippi and Illinois Rivers.

- In the 1990s, bulk agricultural exports ranged in value from $14-$18 Billion. These exports were one of the leading positive sectors in the U.S. balance of trade.

- Barge transportation impacts the lives of all citizens of the Upper Midwest. It keeps rail rates on coal lower, reducing utility bills, removes untold trucks off the nation's highways, reducing net fuel consumption and air emissions; and in some areas helps reduce gasoline costs at the pump by as much as 10 cents per gallon.

- The American farmer's competitive advantage in exporting grain has always hinged on efficient transportation, not being the low-cost producer. Our major competitors--Argentina, Brazil and China--have made investments in their transportation systems and are dramatically reducing their costs for moving grain. We must modernize ours in order to maintain our strategic advantage.

- Lock delays in the Upper Mississippi Basin have cost U.S. farmers and businesses an average of $94 million per year during the mid 1990s according to independent analysis performed for the National Corn Growers Association.

- Failure to make major capital improvements (1200-foot locks and guidewall extensions) will depress the value of midwestern corn, soybeans and wheat by $364 million by the year 2020.

- Currently, barge companies pay a 20 cents per gallon fuel tax to fund waterway construction improvements. To date, the Upper Mississippi Basin has contributed 40 percent of the revenue annually into this fund, but has only received 15 percent of the disbursements. It's time to put back into this region the investments necessary to secure the future of the waterway transportation system.

→ Support Alt H.

SEDIMENT

SPECIFIC POINTS TO MAKE ABOUT THE CORPS ALTERNATIVES

- We are pleased that the Corps of Engineers is considering a range of economically justified alternatives that provide capital improvements to the Upper Mississippi and Illinois rivers. However, we believe that some of the assumptions used to reach these conclusions are off the mark or patently absurd.

- First, on the assumptions. Three key variables that drive the benefit calculations include the freight demand curves used for products, the maximum willingness of shippers to pay for barge freight, and the growth projections for traffic on the river.

- The Iowa source data used to determine the demand curves for grain were arbitrarily given values depending on distance from the river. The values assigned grain demand were determined without any empirical testing and are too conservative. The Corps' assumption of an "N" value of 1.2 for grain conflicts with published literature that would put "N" at .75 on the high side. Considerable benefits are lost due to this difference.

- The Corps of Engineers has used an "expert elicitation" panel to set these parameters. Interviews with those panel members reveal disagreement over what was agreed to. In fact all agree that the conclusion that should have been used from this panel was that more work needed to be done to determine elasticities. No data was presented to substantiate the conclusion that the "N" values for grain should be between 1 and 2. These experts should be provided with additional published reports to help clarify this issue.

- Iowa grain flows cannot be used to determine demand elasticities on the Illinois River. Historically, other research (Hauser/Baumel) has shown that the demand elasticities on the Illinois River have been half that on the Upper Mississippi. The Corps' model needs to be adjusted accordingly. This inaccurate reflection on the Illinois River lowers potential benefits and skews alternatives with capital improvements on the Illinois with lower net annual benefits.

- The maximum willingness of shippers to pay for barge freight is set in the Corps' model assumptions with the restriction that rail freight rates will not rise with barge freight rates. Interviews with barge companies and shippers who utilize both rail and barge challenge this assumption as erroneous. Barge and rail rates mirror each other, always have and always will under the free market system. This assumption arbitrarily restricts benefits.

- Finally, one of the key assumptions that may be too conservative revolves around future grain production capabilities with the growing use of production agriculture improvements focusing on quality and yields. Over the next 50 years, new technology will increase production beyond historical levels. Key groups, such as the

U.S. Grains Council have already begun adjusting their models to reflect this potential.

- All these points lead to the concern that the overall benefits assigned key alternatives with capital improvements are incorrect.

- Two of the alternatives presented, with relatively similar highest net annual benefits, provide for five 1200-foot locks on the Upper Mississippi, five guidewall extensions (or seven in the second case) and five mooring cells or buoys. However, this alternative lacks key ingredients. First, it does not provide for needed lock improvements on the Illinois River, nor does it provide as great capacity increases as other alternatives. These choices would leave the basin with half a loaf.

- In its current configuration, the proposal that provides balance in the region, the greatest increase in future capacity, and still offers a justified investment is the one calling for five 1200-foot locks on the Upper, two 1200-foot locks on the Illinois River (LaGrange & Peoria) and five guidewall extensions on the Upper Mississippi. **THIS IS THE ALTERNATIVE APPROVED BY THE MARC 2000 BOARD OF DIRECTORS AT THEIR QUARTERLY BOARD MEETING ON JULY 9, 1999.**

- It is important to have lock improvement on the Illinois River for two key reasons. First, the delays on the Illinois River are just as bad as on the Upper Mississippi except during times of open pass. However, key product movements occur during the delay times and therefore hinder our competitiveness as much as those on the Upper Mississippi locks. Second, with the Illinois River as a delivery point for corn and soybean contracts beginning with year 2000, the river system must be able of minimize any disruption to their fulfillment.

- If the Corps properly reflects the elasticity of demand for barge freight on the Illinois River, the net annual benefits for this alternative should increase considerably; thus changing the rankings based on the model run alone. However, it is important to reflect that decisions cannot just be made on this basis.

- This leads us to the final comments that need to be made concerning where we are and where we need to go. The need for capacity during peak export times must be addressed. Average delays mean nothing when tows are waiting 6 days during the peak export times. We simply can't get our product to the export markets at good prices. It is important to move rapidly with these improvements because it will take 12-15 years to complete. Therefore, when an alternative indicates a "Date in Place," that means that we must have all the construction completed by that date to avoid significant loss of benefits and markets. Any of the alternatives chosen need to be started as soon as possible.

- The U.S. faces the threat of losing an even larger share of the international grain and oilseed market if we do not keep pace with the major increases in transportation

infrastructure spending now taking place in many of our primary competitors, especially Argentina and Brazil.

- Our region's contribution to the Inland Waterway Trust Fund continues to fuel a surplus in that account (over $300 million). With a share of this surplus and our annual contribution, there should be sufficient funds available to cover half the cost of these projects. It's time to get our fair share of the investment dollars.

- MARC 2000 will ask the Corps to consider the underlying assumption concerns we have articulated and request that an additional alternative be considered that provides for ten (10) 1,200-foot locks on the Upper Mississippi (their existing 10-lock option provides second best capacity increase and most effective reduction of lock delays in the system) and two (2) on the Illinois river with mooring buoys as appropriate. We don't know if this alternative is economically justified, but may be if the proper assumptions are utilized.

- Finally, MARC 2000 will also request that the Corps evaluate the concept of new 1200-foot locks versus "lock extensions" with the backdrop of the current backlog of deferred maintenance. The Upper Mississippi region has over $300 million in deferred maintenance. There should be considerable concern with extending existing locks when we can't even perform the necessary maintenance on the 60-70 year old structures. How much would new locks cost, versus the foregone need to provide maintenance to old locks?

ENVIRONMENTAL CONSIDERATIONS

- ✓ Water transportation is the most environmentally friendly means of moving bulk commodities long distances. One barge carries the same as 15 rail cars or 59 semi trucks. Thus, the movement of 100 million tons in the Upper Mississippi River Basin by barge keeps 1 million rail cars or 4 million trucks away from our communities and available for more appropriate, shorter term movements.

- ✓ According to the EPA, towboats emit 35-60% fewer pollutants than rail or trucks. According to the USDOT, one gallon of fuel in a towboat can carry one ton of freight 2.5 times farther than rail and 9 times farther than a truck.

- ✓ A preliminary assessment of a modal shift conducted by the Corps estimated that anywhere from $100-300 million in foregone air emission clean-up cost were saved by moving products by water.

- ✓ Replacing the existing 600-foot locks with new 1200-foot locks or even extending the old ones will help the environment, not hurt by transiting tows faster, saving fuel and minimizing churning while waiting to lock through.

- ✓ None of the studies performed by the Corps, to date, indicate any significant impact of increasing barge transportation. In fact, barge transportation is not the real issue, but the accumulation of sediment is. We should address ways to remove sediment from the river and devise means to restrict sediment flow into the impounded river system.

- ✓ Over the last few years considerable efforts have been made to address concerns with the river through the Summit process. Those efforts are ongoing and include water level management practices (lowering pools where possible), avoid and minimize practices (newly designed buoys for tie-off areas), dredging placement practices (take out of river & provide for beneficial use), watershed practices (sediment and nutrient control).

- ✓ On average, barges are 10 decibels quieter than trains or trucks. Additionally, tows traveling on the river rarely interface with road traffic, unlike the other modes of transportation.

- ✓ Barge transportation is the safest mode available. In 1991, motor vehicle accidents resulted in 41,508 fatalities. 1,194 people died due to railroad accidents, whereas only 30 waterborne transport-related accidents resulted in death.

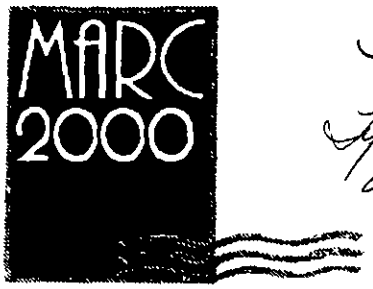
- ✓ The Federal government has spent $25-30 billion historically on flood control projects. Over the past decade alone, these implements have saved $170 billion.

- ✓ Federal rehabilitation projects have reaped success. In Brown's Lake on Pool 13, an attempt was made to reintroduce bass into the oxygen-starved pool. Immediately after the project's completion, angler effort increase 58% and total catch increase 117%, indicating the viability of restoration projects.

- ✓ Impoundment created habitat for macro invertebrates like midges and mayflies. These miniscule macroinvertebrates are critical to river health because they recycle nutrients and purify sediments.

- ✓ Habitat restoration efforts are succeeding. In 1987, Pool 26 on the Mississippi contained 351 egret nests. By 1991, it had tripled to 1,099. During the same time period, heron nests increased from 2,111 to 5,045 along the stretch of river that borders Illinois.

- ✓ Careful review of all the documentation provided by the Corps of Engineers on barge traffic impacts reveal no significant impacts. Anyone bringing up wave actions, fish impacts, bank erosion etc... is only providing an opinion based on certain isolated areas of the river, which the Corps will address through mitigation. These are not significant system concerns and should be not allowed to stand on the record as detriments to the environment. We should not let the environmental community stand on generalizations. Please use the examples provided to respond to concerns.



3 august 99

Lynn M Wenck
Vice President

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  - According to the USSDOT, one gallon of fuel in a towboat can carry one ton of freight 2.5 times further than rail and 9 times further than truck.
  - The Corps estimates that $100-300 million is saved in foregone air emission clean-up cost (using river transportation vs. other forms).
  - None of the studies performed by the Corps, to date, indicate any significant environmental impact caused by an increase of barge transportation.
- *MARC 2000 's members continue to consider environmental concerns.*
  - MARC 2000 supports the EMP (Environmental Management Plan).
  - MARC 2000 supports environmental mitigation in future legislation.
  - MARC 2000 supports and participates in the annual River Summit in an effort to find solutions to concerns.
  - MARC 2000 envisions a system that is used extensively by navigation, recreation, and nature in harmony.
- *The cost of human life should be considered.* Average commercial fatalities per year: Truck >4,000, Rail >1,000, and Water <50.

Under the best case scenario, the project will not be completed until 2015. We must address the needs of our nation's economy now. Our forefathers were visionaries with the construction of the lock & dam system on the UMRS. Because of their foresight, the Midwest enjoys a high standard of living, envied by the world. **We too must be visionaries and act now!**

Midwest Area River Coalition 2000
200 North Broadway, Suite 1725 - Saint Louis, MO 63102
314/436-7303 Voice - 314/421-3374 Fax - Marc2K@aol.com

3 aug 99
Lynn M Muench
Vice President

INTRODUCTORY COMMENTS

- Navigation on the Upper Mississippi and Illinois Rivers supports over 400,000 jobs, including 90,000 high-paying manufacturing jobs.

- The U.S. Army Corps of Engineers estimates that every $1 invested in navigation projects yields $6 in benefits returned to the nation.

- In any given year 60% of the bulk agricultural exports are moved to world ports via the Upper Mississippi and Illinois Rivers.

- In the 1990s, bulk agricultural exports ranged in value from $14-$18 Billion. These exports were one of the leading positive sectors in the U.S. balance of trade.

- Barge transportation impacts the lives of all citizens of the Upper Midwest. It keeps rail rates on coal lower, reducing utility bills, removes untold trucks off the nation's highways, reducing net fuel consumption and air emissions; and in some areas helps reduce gasoline costs at the pump by as much as 10 cents per gallon.

- The American farmer's competitive advantage in exporting grain has always hinged on efficient transportation, not being the low-cost producer. Our major competitors--Argentina, Brazil and China--have made investments in their transportation systems and are dramatically reducing their costs for moving grain. We must modernize ours in order to maintain our strategic advantage.

- Lock delays in the Upper Mississippi Basin have cost U.S. farmers and businesses an average of $94 million per year during the mid 1990s according to independent analysis performed for the National Corn Growers Association.

- Failure to make major capital improvements (1200-foot locks and guidewall extensions) will depress the value of midwestern corn, soybeans and wheat by $364 million by the year 2020.

- Currently, barge companies pay a 20 cents per gallon fuel tax to fund waterway construction improvements. To date, the Upper Mississippi Basin has contributed 40 percent of the revenue annually into this fund, but has only received 15 percent of the disbursements. It's time to put back into this region the investments necessary to secure the future of the waterway transportation system.

SPECIFIC POINTS TO MAKE ABOUT THE CORPS ALTERNATIVES

- We are pleased that the Corps of Engineers is considering a range of economically justified alternatives that provide capital improvements to the Upper Mississippi and Illinois rivers. However, we believe that some of the assumptions used to reach these conclusions are off the mark or patently absurd.

- First, on the assumptions. Three key variables that drive the benefit calculations include the freight demand curves used for products, the maximum willingness of shippers to pay for barge freight, and the growth projections for traffic on the river.

- The Iowa source data used to determine the demand curves for grain were arbitrarily given values depending on distance from the river. The values assigned grain demand were determined without any empirical testing and are too conservative. The Corps' assumption of an "N" value of 1.2 for grain conflicts with published literature that would put "N" at .75 on the high side. Considerable benefits are lost due to this difference.

- The Corps of Engineers has used an "expert elicitation" panel to set these parameters. Interviews with those panel members reveal disagreement over what was agreed to. In fact all agree that the conclusion that should have been used from this panel was that more work needed to be done to determine elasticities. No data was presented to substantiate the conclusion that the "N" values for grain should be between 1 and 2. These experts should be provided with additional published reports to help clarify this issue.

- Iowa grain flows cannot be used to determine demand elasticities on the Illinois River. Historically, other research (Hauser/Baumel) has shown that the demand elasticities on the Illinois River have been half that on the Upper Mississippi. The Corps' model needs to be adjusted accordingly. This inaccurate reflection on the Illinois River lowers potential benefits and skews alternatives with capital improvements on the Illinois with lower net annual benefits.

- The maximum willingness of shippers to pay for barge freight is set in the Corps' model assumptions with the restriction that rail freight rates will not rise with barge freight rates. Interviews with barge companies and shippers who utilize both rail and barge challenge this assumption as erroneous. Barge and rail rates mirror each other, always have and always will under the free market system. This assumption arbitrarily restricts benefits.

- Finally, one of the key assumptions that may be too conservative revolves around future grain production capabilities with the growing use of production agriculture improvements focusing on quality and yields. Over the next 50 years, new technology will increase production beyond historical levels. Key groups, such as the U.S. Grains Council have already begun adjusting their models to reflect this potential.

- All these points lead to the concern that the overall benefits assigned key alternatives with capital improvements are incorrect.

- Two of the alternatives presented, with relatively similar highest net annual benefits, provide for five 1200-foot locks on the Upper Mississippi, five guidewall extensions (or seven in the second case) and five mooring cells or buoys. However, this alternative lacks key ingredients. First, it does not provide for needed lock improvements on the Illinois River, nor does it provide as great capacity increases as other alternatives. These choices would leave the basin with half a loaf.

- In its current configuration, the proposal that provides balance in the region, the greatest increase in future capacity, and still offers a justified investment is the one calling for five 1200-foot locks on the Upper, two 1200-foot locks on the Illinois River (LaGrange & Peoria) and five guidewall extensions on the Upper Mississippi. **THIS IS THE ALTERNATIVE CURRENTLY SUPPORTED BY THE MARC 2000.**

(Insert NED Alternative Document)

- It is important to have lock improvement on the Illinois River for two key reasons. First, the delays on the Illinois River are just as bad as on the Upper Mississippi except during times of open pass. However, key product movements occur during the delay times and therefore hinder our competitiveness as much as those on the Upper Mississippi locks. Second, with the Illinois River as a delivery point for corn and soybean contracts beginning with year 2000, the river system must be able of minimize any disruption to their fulfillment.

	Upbound	Downbound	Total	Grain	Locks	Use	Delays
January	1027322	2044341	3071663	1598390	Delay	11%	30
February	1302738	1665754	2968492	1232076	Delay	8%	18
March	1069794	1482588	2552382	855228	Open	3%	0
April	1121814	1168610	2290424	729286	Open	2%	0
May	1289857	1141724	2431581	707192	Open	2%	1

June	1132556	1449631	2582187	902516	Delay	5%	8
July	1332955	1270357	2603312	748881	Delay	16%	36
August	1658223	1298003	2956226	796067	Delay	57%	183
September	1276924	757178	2034102	368324	Delay	57%	157
October	1444118	945749	2389867	535029	Delay	60%	186
November	1508137	1423453	2931590	968585	Delay	66%	220
December	1360618	2431867	3792485	1926444	Delay	84%	335
					August-Decem		1081
Total	15525056	17079255	32604311	11368018			1174

- If the Corps properly reflects the elasticity of demand for barge freight on the Illinois River, the net annual benefits for this alternative should increase considerably; thus changing the rankings based on the model run alone. However, it is important to reflect that decisions cannot just be made on this basis.

- This leads us to the final comments that need to be made concerning where we are and where we need to go. The need for capacity during peak export times must be addressed. Average delays mean nothing when tows are waiting 6 days during the peak export times. We simply can't get our product to the export markets at good prices. It is important to move rapidly with these improvements because it will take 12-15 years to complete. Therefore, when an alternative indicates a "Date in Place," that means that we must have all the construction completed by that date to avoid significant loss of benefits and markets. Any of the alternatives chosen need to be started as soon as possible.

- The U.S. faces the threat of losing an even larger share of the international grain and oilseed market if we do not keep pace with the major increases in transportation infrastructure spending now taking place in many of our primary competitors, especially Argentina and Brazil.

- Our region's contribution to the Inland Waterway Trust Fund continues to fuel a surplus in that account (over $300 million). With a share of this surplus and our annual contribution, there should be sufficient funds available to cover half the cost of these projects. It's time to get our fair share of the investment dollars.

- MARC 2000 requests that the Corps consider the underlying assumption concerns we have articulated and request that an additional alternative be considered that provides for ten (10) 1,200-foot locks on the Upper Mississippi (their existing 10-lock option provides second best capacity increase and most effective reduction of lock delays in the system) and two (2) on the Illinois river with mooring buoys as appropriate. We don't know if this alternative is economically justified, but may be if the proper assumptions are utilized.

- Finally, MARC 2000 will also request that the Corps evaluate the concept of new 1200-foot locks versus "lock extensions" with the backdrop of the current backlog of deferred maintenance. The Upper Mississippi region has over $300 million in deferred maintenance. There should be considerable concern with extending existing locks when we can't even perform the necessary maintenance on the 60-70 year old structures. How much would new locks cost, versus the foregone need to provide maintenance to old locks?

ENVIRONMENTAL CONSIDERATIONS

- ✓ Water transportation is the most environmentally friendly means of moving bulk commodities long distances. One barge carries the same as 15 rail cars or 59 semi trucks. Thus, the movement of 100 million tons in the Upper Mississippi River Basin by barge keeps 1 million rail cars or 4 million trucks away from our communities and available for more appropriate, shorter term movements.

- ✓ According to the EPA, towboats emit 35-60% fewer pollutants than rail or trucks. According to the USDOT, one gallon of fuel in a towboat can carry one ton of freight 2.5 times farther than rail and 9 times farther than a truck.

- ✓ A preliminary assessment of a modal shift conducted by the Corps estimated that anywhere from $100-300 million in foregone air emission clean-up cost were saved by moving products by water.

- ✓ Replacing the existing 600-foot locks with new 1200-foot locks or even extending the old ones will help the environment, not hurt, by transiting tows faster, saving fuel and minimizing churning while waiting to lock through.

- ✓ None of the studies performed by the Corps, to date, indicate any significant impact of increasing barge transportation. In fact, barge transportation is not the real issue, but the accumulation of sediment is. We should address ways to remove sediment from the river and devise means to restrict sediment flow into the impounded river system.

Env Report #1: Impact of waves on submersed aquatic macrophytes: "direct damage from navigation-generated secondary waves may be partially responsible for the paucity of submersed macrophytes."

Env Report #2: Rate of Net Fine Sediment Accumulation in Backwaters of Pool 8: "Study was inconclusive. The Corps found little correlation between selected variables, making "extrapolation on the basis of them not possible. Average accumulation rate for the 147 sites was .46 cm/yr. Much of the impact depends on: (1) the number of outlets and inlets to a backwater; (2) proximity to barge traffic. Most backwaters, barge wakes are not a significant source of sediment—mitigation measures. "Barge wakes are not a significant impact ."

Env Report #3: Physicial Forces Study: "No Conclusions"

Env Report #4: Prediction of Vessel-generated waves: "No Conclusions"

Env Report #5: Physical Forces Study: "No Conclusions"

Env Report #6: Upper Miss Navigation & Sedimentation Field Data Collection:

"measured the effects of barge traffic on wave heights & sediment accumulation at Pool 8 and 26 on the Upper and LaGrange on the Illinois. Interesting findings on Illinois: **Barge wave heights .06-.12 meters Recreation craft: .24 - .3 meters. Sediment concentrations rose from 225 mg/L to up to 400 mg/L (so?)**

Env Report #7: Site-Specific Impact of Modernization:
Habitat replacement would cost between 48.4 – 67.852 million. Total loss would be about 1340 Annual Average Habitat Unites (AAHU) over the course of 50 years, with 1100 on the MS and the balance on the Illinois. Locks 20 & LaGrange would gain 24-47 AAHUs. For a maximum of $70 million, modernization can move forward at little environmental cost.

Env Report #8: Effects of Commercial Navigation on Bank Stability
Determined through extrapolation and best guesses that commercial navigation contributes to erosion on 2.8 % of banks on the Upper and 4.8% on the IWW.

- Over the last few years considerable efforts have been made to address concerns with the river through the Summit process. Those efforts are ongoing and include water level management practices (lowering pools where possible), avoid and minimize practices (newly designed buoys for tie-off areas), dredging placement practices (take out of river & provide for beneficial use), watershed practices (sediment and nutrient control).

Recreate Dynamic River Forces -	Water Level Management Practices Pool 25; 13; 5;10 & 8
Tributary Restoration	Whitewater River, MN Mill Creek, IL Need more participation from USF&WS (acquire floodplain land, surveys, outreach)
Create Diversity of Water Depths	Seed islands near LaCrosse, WI Chevron dikes – Quad Cities Small-sclae training structures – St. Louis
Wake Effects	Spent $20 million measuring wake effects One mooring buoy installed Others under consideration
Dredge Material Placement	St. Paul District plan Rock Island plan St. Louis management different
Exotic Species	Keep out of the river Design dispersal barrier at Chicago Develop ballast water control technologies

	Should review lock modifications (?)
Spill Control	Eliminate hazardous cargo in single-hulled barges by 2000 Responsible Carrier program OPA 90 compliance Emergency Reaction Programs
Reduce Sedimentation & non-point Source Pollution	No net increase in sediment by 2010 Sediment & Nutrient Initiative

✓ Corn farmers have reduced the amount of fertilizer they apply to their fields by 27% since the mid-1980s./EPA concludes that 14% of the nation's rivers are impaired by nutrients. Farm groups reject reducing production as an alternative because someone else will fill the demand, thus keeping prices down globally.

✓ On average, barges are 10 decibels quieter than trains or trucks. Additionally, tows traveling on the river rarely interface with road traffic, unlike the other modes of transportation.

✓ Barge transportation is the safest mode available. In 1991, motor vehicle accidents resulted in 41,508 fatalities. 1,194 people died due to railroad accidents, whereas only 30 waterborne transport-related accidents resulted in death.

✓ The Federal government has spent $25-30 billion historically on flood control projects. Over the past decade alone, these implements have saved $170 billion.

✓ Federal rehabilitation projects have reaped success. In Brown's Lake on Pool 13, an attempt was made to reintroduce bass into the oxygen-starved pool. Immediately after the project's completion, angler effort increase 58% and total catch increase 117%, indicating the viability of restoration projects.

✓ Impoundment created habitat for macro invertebrates like midges and mayflies. These miniscule macroinvertebrates are critical to river health because they recycle nutrients and purify sediments. In Pool 8, open water and marsh land have increased from 8,900 acres in 1891 to 23,430 acres in 1989 at the expense of shallow mid-channel islands.

✓ Habitat restoration efforts are succeeding. In 1987, Pool 26 on the Mississippi contained 351 egret nests. By 1991, it had tripled to 1,099. During the same time period, heron nests increased from 2,111 to 5,045 along the stretch of river that borders Illinois.

✓ Careful review of all the documentation provided by the Corps of Engineers on barge traffic impacts reveal no significant impacts. Anyone bringing up wave actions, fish

impacts, bank erosion etc... is only providing an opinion based on certain isolated areas of the river, which the Corps will address through mitigation. These are not significant system concerns and should be not allowed to stand on the record as detriments to the environment. We should not let the environmental community stand on generalizations. Please use the examples provided to respond to concerns.

✓ Water level management plans provide for exposing 2,575 acres of habitat in Pool 8 under carefully controlled conditions agreed to by all parties undertaking this type of cooperative effort to renew the underwater ecology of the region.

✓ Fish passage in the currently lock and dam system provides appropriate conditions 20% of the time at 5 locations and 15% of the time at 6 additional locations. Operating conditions need to be further studied to determine ways of enhancing fish passage. There are 143 species of indigenous fish, both recreational and commercial. A total of 25 species are thought to be migratory. Species such as bass don't seem to be hindered by the lock and dam system, but other species may need different conditions.

✓ "Most of the problems facing the Mississippi River are not caused by barges – rather most problems are caused by the dams and training structures built to aid the movement of barges, a subtle but important distinction lost on most policy-makers." Scott Faber, Mississippi Monitor, July 1999.

✓ Problems according to the UMRCC:
(1) Increasing sedimentation
(2) Continued stream channelization
(3) Levees separating the river from its floodplain
(4) Water level control for navigation

✓ EMP program has constructed 24 projects, protecting or restoring 28,000 acres of habitat. When 12 more are completed, a total of 60,000 acres of habitat will be enhanced.

✓ The number of barges will accelerate the loss of side channels, backwaters and marsh plants. What would happen without barge traffic?

✓ **Pallid Sturgeon & two mussels – key to USF&WS conclusion?**

✓ According to the EMP Report to Congress shows that management of the ecosystem has created environmental benefits. Damming the river created habitats used by vital macro invertebrates at the expense of others—in essence, lake-type environments were created. To the hardcore environmentalist, this is not acceptable.

Thank the Corps for holding these hearings.

MARC 2000 VISION STATEMENT

Vision: MARC 2000 members expects for the Upper Mississippi River Basin an inland waterway transportation system that enhances their quality of life, economic development and well-being while equally preserving the ecological integrity of the river system and its multiples uses.

We believe that the inland waterway transportation infrastructure needs can be met without adversely affecting the ecology of the river. Our vision assumes continued dialogue with the natural resource community to assure continued restoration projects, monitoring of the ecosystem and transportation system, and development of improved integration in the management of the river system for multiple purpose uses. We also strongly support the continued use of the river system as an asset for economic development, for both commercial and tourism growth in the region.

Our vision for the river includes an efficient navigation system with infrastructure capacity that allows worldwide market growth to occur in the least costly fashion. This vision relies on the fact that transportation freight demand will grow in the future in a similar fashion to the past, in terms of its variability. In order to fully capture the benefits of global demand, our nation and region must have a transportation system that is virtually ahead of the curve, rather than finding itself burdened with congestion costs or questions of federal commitment to the system.

Our ability to compete with other nations currently replicating our transportation concepts will depend on our ability to modernize the existing system to maintain the transportation cost differential between the U.S. and our competitors. Therefore, our vision presumes a likely near-term spike in demand over the next five to 10 years that we must be prepared to meet. The downside to making modernization investments over a linear growth pattern could easily doom our nation limiting export growth in grain, the principal commodity moved on the Upper Mississippi and Illinois Rivers, or worse, resulting in a decline in regional and national living standards and income.

Based on existing traffic patterns, growth projections, and historical market variability, we support a priority investment schedule that will allow for 1200 foot lock completions for at least seven locations within the next 10 years (L&D 25,24,22,21,20, LaGrange, Peoria). In terms of small-scale investments, we strongly endorse guidewall extensions to facilitate traffic movement in parts of the system where 1200 foot locks will not be possible.

Lock & Dam #	Location	Improvements Needed
Mississippi River		
27	Granite City, IL	Major Rehab/Maintenance
26	Mel Price - Alton, IL	Maintenance
25	Winfield, MO	1200 Foot Lock
24	Clarksville, MO	1200 Foot Lock
22	Hannibal, MO	1200 Foot Lock
21	Quincy, IL	1200 Foot Lock
20	Canton, MO	1200 Foot Lock
19	Keokuk, IA	Maintenance
18	Burlington, IA	Guidewall Extension
17	New Boston, IL	Guidewall Extension
16	Muscatine, IA	Guidewall Extension
15	Quad Cities (IA, IL)	Guidewall Extension
14	Quad Cities (IA, IL)	Guidewall Extension
13	Clinton, IA	Major Rehab/Maintenance
12	Belleville, IA	Major Rehab/Maintenance
11	Dubuque, IA	Major Rehab/Maintenance
10	Guttenburg, IA	Major Rehab/Maintenance
1,2,3,4,5,5A,6,7,8,9,	Twin Cities,MN-Harper's Ferry,IA	Major Rehab/Maintenance
Illinois River		
LaGrange	LaGrange, IL	1200 Foot Lock
Peoria	Peoria, IL	1200 Foot Lock
Others		Major Rehab/Maintenance

PETER REED

THE UPPER MISSISSIPPI RIVER IS A GREAT RESOURCE. THE FORESIGHT OF THOSE WITH VISION WHO CONCEIVED THIS PROJECT HAS BEEN REWARDED WITH A COMMERCIAL TRANSPORTATION SYSTEM WHERE 3 MODES COMPETE TO MOVE GOODS TO AND FROM THE UPPER MIDWEST. THE RESULTANT PROSPERITY OF OUR AGRICULTURAL HEARTLAND IS THE ENVY OF FARMERS, CONSUMERS AND GOVERNMENTS THROUGHOUT THE WORLD. IT IS IMPERATIVE THAT WE PROTECT AMERICA'S GREAT AGRICULTURAL RESOURCE. FERTILE LAND NORMALLY BLESSED WITH ADEQUATE RAINFALL IN A TEMPERATE CLIMATE TILLED BY A WELL EDUCATED FARMERS THAT ARE BECOMING MORE ENVIRONMENTALLY FRIENDLY WITH ADDED EDUCATION. THERE IS NO CHOICE BUT TO PROTECT THIS GREAT AGRICULTURAL RESOURCE AND WE MUST MAINTAIN AN ENVIRONMENTALLY SOUND, ECONOMICALLY VIABLE RIVER SYSTEM FOR OUR NATION.

5979 Dogwood Circle
Johnston, Iowa 50131
August 3. 1999

Army Corps of Engineers

I would like to comment on the possible expansion of the barge system on the Mississippi River. I vacation at my daughter's trailer on the Mississippi River and have seen, first hand, the environmental price that has been paid in lost habitat, decline in wildlife diversity, and degraded water quality on the Mississippi River. It seems to me that we are at a "fork in the river" in terms of policy; we can either make the river a faster ditch for barges, or we can seek to restore habitat and river health.

The answer to the current question being asked--should the lock and dam system be expanded--is really rather obvious. Even without taking environmental concerns into account, it just isn't worth the enormous cost. Why should the taxpayers heavily subsidize the barge navigation system for a few huge corporations? A recent Iowa State University study indicates that rail is the most fuel-efficient means of shipping corn and soybeans from the Midwest. Barges should not be given an economic advantage over rail and truck transport, especially at such a huge environmental cost.

I urge you to consider a moratorium on new construction of the lock and dam system on the Upper Mississippi River and put your resources into study and programs designed to restore habitat and river health.

Sincerely,

Virginia H Soelberg

Virginia H. Soelberg

Comments by Duane Sand, Norwalk, IA. citizen and taxpayer.

The water belongs to the people.
The river belongs to the people.
The fish, wildlife, & living creatures of the river belong to the people.

The locks and dams of the Upper Mississippi & Illinois River are an ecological disaster that must come to an end. Our public investment in in redesigning the river to meet the needs of the barge industry is a foolish use of tax dollars.

The only policy that can end this ecological disaster is to phase out the lock & dam system as soon as possible.

It is time to tell the navigation industry to redesign their equipment to work in a healthy river without locks and dams. The public will no longer modify the river to meet their needs. Instead they must redesign their equipment to navigate undammed channels. If they are unwilling to retool for the 21st century, the public should help expand the nation's rail systems to meet transportation needs.

I endorse the no action alternative in your current study. I also urge the Corps to begin planning for timely removal of the dams.

August 3, 1999

To the Army Corps of Engineers:

I am writing this letter to comment on the proposal to expand the barge system on the Upper Mississippi River. Since I cannot attend the meeting at the Des Moines Botanical Center on August 3rd, I have asked a friend to submit these comments on my behalf.

I strongly support a moratorium on any expansion of the locks and dams on the Mississippi River, and the Illinois River as well. I also strongly support the proposal for a comprehensive federal study of the cumulative environmental effects of the commercial navigation system now in place.

The Mississippi River is already in deep trouble. It is slowly deteriorating, and numerous studies show that unless environmental improvements are made, the river will continue to deteriorate into what amounts to an ecological coma. Expanding the locks and dams would not only accelerate the river's decline toward that coma, but essentially yank out the river's life support system, at a cost of billions of taxpayer dollars.

It would be tragic enough if Americans were forced to pay a vast amount to sacrifice the Mississippi River because that sacrifice was essential to the national economy. But that sacrifice and that cost are not essential. Barges are not the most fuel-efficient means of transporting corn and soybeans. The benefits of the proposed expansion do not justify the costs. And to expand the locks and dams without even studying the cumulative environmental impacts of what we've already done to the Mississippi River would be so short-sighted as to be absurd.

Americans are now spending large amounts of money to try to reverse the horrendous damage done to the Everglades by human engineering mistakes that were made decades ago. Back then, we didn't know what we were doing to the Everglades. But now, we do know what we would be doing to the Mississippi River. We should use our new engineering and ecological knowledge to help restore the river, not destroy it. The Mississippi River offers an opportunity for the Army Corps of Engineers to use its knowledge, talents, and energy on behalf of environmental restoration and common sense.

Thank you for the opportunity to submit these comments.

Cindy Hildebrand

Cindy Hildebrand
57439 250th St.
Ames, IA 50010

Before the
U.S. Army Corps of Engineers
Upper Mississippi River - Illinois Waterway System Navigation Study
Public Workshop
University of Wisconsin
La Crosse, WI
August 4, 1999

Freight transportation is a derived demand - meaning that a commodity only moves when it has more value elsewhere than where it currently is. Movement of freight traffic will increase as population increases simply because more people will need essential goods and services. And if freight does not move by barge, it will move by modes which pollute the environment more.

The Upper Mississippi Waterway Association supports the following Corps alternative:

1,200 foot Locks (20-25, Peoria,LaGrange) and 1,200 foot Guidewalls (Locks 14-18). I believe this is referred to as alternative 'H'.

We have the following concerns about the Corps' alternatives:

1. The Iowa source data used to determine the demand curves for grain were arbitrarily given values depending on distance from the river. The values assigned grain demand were determined without any empirical testing and are too conservative.
2. The Corps of Engineers has used an 'expert elicitation' panel to set these parameters. Interviews with those panel members reveal disagreement over what was agreed to. In fact, all agree that the conclusion that should have been used from this panel was that more work needed to be done to determine elasticities. These experts should be provided additional published reports to help clarify this issue.
3. Iowa grain flows cannot be used to determine demand elasticities on the Illinois River. Historically, other research (Hauser/Baumel) has shown that the demand elasticities on the Illinois River have been half that on the Upper Mississippi. The Corps' model needs to be adjusted accordingly. This inaccurate reflection on the Illinois River lowers potential benefits and skews alternatives with capital improvements on the Illinois with lower net annual benefits.
4. The maximum willingness of shippers to pay for barge freight is set in the Corps' model assumptions with the restriction that rail freight rates will not increase with barge freight rates. This is absurd. Interviews with barge companies and shippers who utilize both rail and barge challenge this assumption as erroneous. Barge and rail rates mirror each other, always have and always will under the free market system. This assumption arbitrarily restricts benefits.
5. Finally, one of the key assumptions that may be too conservative revolves around future grain production capabilities with the growing use of production agriculture improvements focusing on quality and yields. Over the next 50 years, new technology will increase production beyond historical levels. Key groups, such as the US Grains Council have already begun adjusting their models to reflect this potential.

6. All these points lead to the concern that the overall benefits assigned key alternatives with capital improvements are incorrect.

It is important to have lock improvement on the Illinois River for two key reasons.

1. The delays on the Illinois River are just as bad as on the Upper Mississippi except during times of open pass. However, key product movements occur during the delay times and therefore hinder our nation's competitiveness as much as those on the Upper Mississippi locks.

2. With the Illinois River as a delivery point for corn and soybean contracts beginning with the year 2000, the river system must be able to minimize any disruption to their fulfillment.

3. Further, if the Corps properly reflects the elasticity of demand for barge freight on the Illinois River, the net annual benefits for this alternative should increase considerably thus changing the rankings based on the model run alone. However, it is important to reflect that decisions cannot simply be made on this basis.

We have two final comments that need to be made concerning where we are and where we need to go.

1. The commercial navigation industry will ask the Corps to consider our underlying concerns and request an additional consideration of an alternative. This alternative provides for ten (10) 1,200-foot locks on the Upper Mississippi (their existing 10-lock option provides second best capacity increase and most effective reduction of lock delays in the system) and two (2) 1,200-foot locks on the Illinois River, with mooring buoys as appropriate. We don't yet know if this alternative is economically justified, but may be if the proper assumptions are utilized.

2. Finally, the industry will request that the Corps evaluate the concept of new 1,200-foot locks versus "lock extensions" against the backdrop of $300 million in current deferred maintenance in the Upper Mississippi region. It is bad policy to merely extend locks when we can't even perform the necessary maintenance on existing 60-70 year old structures.

Russell J. Eichman
Executive Director
Upper Mississippi Waterway Association
651-776-3108

I support H. (Alternate). I have farmed all my life. Most of our is trucked to Savage to be barged down the Mississippi. This is the most economical way to move our grain. The best environmentally too. We are at the end of pipeline for supplying grain

Don Overlie Lake Crystal Mn

Statement - COE Mtg. 8/4/99
LaCrosse WI

I'm Barbara Frank. I'm from LaCrosse and am a longtime Sierra Club River activist

The Upper Miss. Riv. is a tremendous natural resource. It's a fabulous fishery & wildlife habitat. It is used by hunters & fishermen, boaters, bird-watchers, & swimmers - and by countless people drawn to its natural beauty, who appreciate that great scenic beauty - as they hike, bike, boat & drive along the corridor.

These environmental assets bring in $1.1 billion in annual revenues & generated 13 million visitors.

In addition, 26 million people get their drinking water from the Miss. in Upper.

The River is still relatively natural, tho it is showing significant signs of being degraded and compromised. Backwaters are filling in with sedimentation, loss of river vegetation and other habitat resources, invasive species, & water quality to name some of those.

But the River is also a navigation system. And we accept that. But we want it balanced equally with environmental considerations.

Ecologists tell us the River is still stabilizing from construction of the first locks & dams.

We don't want the present precious balance to be further disturbed. There are inevitable conflicts & we need to address the ones we already have before we add more.

And longer barges & bigger

locks + dams + more traffic would create problems.

We urge you to defer the decision to expand navigation on the Upper Miss. River.

EMP + water level manipulation studies can help give us management know-how to better deal with navigation/environmental resource conflicts.

In conclusion; The COE last year stated this project was not economically feasible. We need time to better evaluate your new economic rationales. And that's a further reason to delay.

Thank you.

August 4th, 1999

U S. Army Corps of Engineers
UMR-IR Waterway System Navigation Study
La Crosse, Wisconsin Workshop

REMARKS BY: W. VAUGHN MCDANIEL OF BLUE GRASS, IOWA

My name is Vaughn McDaniel and I am from Blue Grass, Iowa, a small rural town outside of Davenport, Iowa. I am employed by Alter Transportation Group of Bettendorf, Iowa, which is a locally owned and operated company of the Quad Cities Area in the states of Iowa and Illinois. I have served in various positions in the marine transportation industry for the past 23 years. I am also a descendant of a farmer and was raised on a small family farm. I was raised to become a farmer, but chose not to do so. As I reflect back on this decision, I feel I made the right decision not to farm. That is one of the reasons I am here in La Crosse tonight, to talk about the American Farmer and his plight. Make no mistake about it, the American Farmer is a true **hero.** He is one of the hardest working class of people you will ever meet. Unfortunately, in today's farm economy the American Farmer is on the verge of disappearance from the landscape. He is no longer able to compete in foreign markets with the competition from South America and China. This inability to export our goods to the marketplace abroad is a large part of our trade deficit we currently face today. As we debate solutions of this problem here tonight, the United States Senate is debating a "Farm Rescue Bill" that will eventually cost the United States Taxpayers between 7.0 and 10.0 ***Billion*** dollars. Although I personally support this bill, is this the solution to their problem?? I think not. The American Farmer does not want handouts. He just wants a level playing field and a transportation system capable of getting his goods to market. As everyone in this room is aware, the current River Transportation System was developed in the 1930's and is woefully inadequate and in disrepair. The Corps of Engineers has before us a "Matrix of Alternatives" of which was derived from the study discussed here tonight.

I, as a concerned American citizen, want to go on record here tonight in support of " ***Alternative H"*** as outlined in your handout. This proposal will provide for "new 1200' locks on the Upper Mississippi River at Locks 20- 25, new locks at Peoria and LaGrange on the Illinois River and 1200' guide walls at Locks 14-18 on the Upper Mississippi River. This in my opinion, offers the best "hope" for the American Farmer as well as the River Transportation System for the twenty first century. In support of this alternative, I offer the following facts in which I feel are relevant to this plan:

- Navigation on the Upper Mississippi River and Illinois River supports over 400,000 jobs, including 90,000 high-paying manufacturing jobs.

- The U.S. Army Corps of Engineers, by its own account, estimates that for every single

dollar invested in navigation related projects, **six** dollars have been returned to the nations economy .

- In any given year over 60% of the nations bulk agricultural exports are transported via the Upper Mississippi and Illinois Rivers.

- In the decade of the 1990's. bulk agricultural exports ranged in value from $ 14 - $ 18 Billion. These exports were one of the leading positive sectors in the United States balance of trade.

- Barge transportation impacts the lives of **all** citizens of the Upper Midwest Region. It keeps rail rates on coal lower, reducing utility bills, removes untold trucks off the nations highways, reducing net fuel consumption and air emissions. In some areas helps reduce gasoline costs at the pump by as much as 10 cents per gallon.

- The American farmer's competitive advantage in exporting grain has always hinged on efficient transportation, not being the low-cost producer. Our major competitors–Argentina, Brazil, and China–have made investments in their transportation systems and are dramatically reducing their costs for moving grain. We must modernize ours in order to maintain our strategic advantage.

- Lock delays in the Upper Mississippi Basin have cost U.S. farmers and businesses an average of $94 million per year during the mid 1990s according to independent analysis performed for the National Corn Growers Association.

- Failure to make major improvements (1,200-foot locks and guidewall extensions) will depress the value of midwestern corn, soybeans, and wheat by $364 million by the Year 2020.

- Currently, barge companies pay a 20 cents per gallon fuel tax to fund waterway construction improvements. To date, the Upper Mississippi Basin has contributed 40 percent of the revenue annually into this fund, but has only received 15 percent of the disbursement. It's time to put back into this region the investments necessary to secure the future of the waterway transportation system.

- The U.S. faces the threat of losing an even larger share of the international grain and oilseed market if we do not keep pace with the major increases in transportation infrastructure spending now taking place in many of our primary competitors, especially Argentina and Brazil.

- Water transportation is the most environmentally friendly means of moving bulk commodities over long distances. One barge carries the same cargo as 15 rail cars or 59/60 semi trucks. One unit tow of 15 barges equals 2.5 units trains or approx. 900 trucks. By comparison, 100 million tons of product moved on the upper Mississippi River by barge keeps 1 million rail cars or 4 million trucks off of our nations highways!

- According to the Environmental Protection Agency, towboats emit 35-60% fewer pollutants than rail or truck. According to the U.S. Department of Transportation, one gallon of diesel fuel in a towboat can carry one ton of freight 2.5 times farther than rail and 9 times farther than a semi truck.

- A preliminary assessment of a model shift conducted by the Corps of Engineers estimated that anywhere from $ 100 -300 million in foregone air emission clean up costs were saved by moving products by water.

- Replacing the existing 600-foot locks with new 1200-foot locks will **help** the environment not hurt it as others have suggested. Tows will move faster, saving fuel and minimizing "churning" while waiting to lock through.

- Tows traveling on the inland waterways rarely interface with road traffic, unlike the other modes of transportation.

- Barge transportation is by far the safest mode of transportation available. In 1991, motor vehicle accidents resulted in 41,508 fatalities. Another 1,194 people died due to railroad collisions, whereas only 30 waterborne transport-related accidents resulted in death.

It is essential that we act now, since completion is at least 15 years away. We as waterways users are prepared to pay for 50% of this project, or in the case of alternative "H", approx. $ 500-600 million dollars. This leaves a $500-500 million cost to the taxpayers of this country. I feel this cost in an era of a 3 **Trillion** dollar budget surplus over the next 10 years is a very "small" investment to help so many people. After all we spend over $ 500 million dollars for just one Guided Missile Destroyer, and **over** 1.5 **Billion** dollars on a B-2 Bomber!! What an investment this is!!

I would like to close my remarks by thanking the Corps of Engineers personnel here tonight for the opportunity to share my input with the group. I would also like to commend them for the efforts put into this study and the manner in which the workshops are being held.

Thank you.

STATEMENT TO U.S. CORPS OF ENGINEERS ON NAV STUDY

August 4, 1999 Lacrosse, WI

Good evening. My name is David Asbridge. I am the Manager of Agri-Business Analysis for CF Industries, Inc. CF is a large, inter-regional cooperative that produces nitrogen and phosphate fertilizers. We also distribute potash fertilizer products. We typically sell over 9 million tons of fertilizer products to our Member/owners in 46 states and two Canadian provinces, worth about $1.5 billion, on an annual basis.

The fertilizer industry moves 11-12 million tons of product on the Mississippi River each year. Of this, about 8-9 million tons move up the Mississippi from production points in Louisiana and Florida (from across the Gulf) as far north as Minneapolis. We also move product up the Ohio and Illinois rivers. It is of crucial importance that we are able to continue to use these rivers as a transportation option since they are a low-cost and efficient method of transporting fertilizers into the Upper Mississippi River area, one of the most productive agricultural areas in the world. Being able to keep the cost of fertilizer products at a reasonable level is extremely important in keeping the U.S. farmer competitive. As the world population continues to grow, it will be imperative that U.S. farmers continue to have a source of reasonably priced inputs to keep them producing foodstuffs as efficiently as possible.

As an economist, I can understand the complexities of trying to model a large section of the U.S. transportation system. Of critical importance, however are the underlying assumptions that drive the model. I believe that some of the assumptions in the NAV study need to be revisited.

Basic economics teaches us that competing entities will tend to make maximum use of the cheapest option. For fertilizers, river transportation is this option, and the industry has maximized and continues to maximize its use of the river system. It is not reasonable to assume that barge demand will diminish with increases in barge rates, especially when competing sources such as rail, also tend to raise their rates when given the opportunity. Changing this assumption in the study should show a higher net annual benefit to the nation's economy.

The "average delay time" assumption is also a problem. Although we try to use the rivers as much as possible, we have two peak seasons when fertilizer products need to move. With delays of 5-6 days during peak season, farmers are being asked to pay more for product than they need to, since we have to pay for that "down time".

As to the environmental aspect, I am not an environmental economist, but it appears to me that any system which can move more product per gallon of fossil fuel would be more environmentally friendly. Barge movement means less fuel used, therefore, lower emissions into the air. It also means less interaction between drivers who do not need to face increased rail traffic or truck traffic.

In summary, I would like to voice our support for the option that I believe will show the highest net benefits once these key assumptions are revised. This would be to provide 1,200 foot capacity at locks 20-25 and LaGrange and Peoria and to extend guidewalls to 1,200 feet at locks 14-18.

Thank you for this opportunity to comment on this study and its importance to the future of U.S. agriculture.

Infrastructure Improvements on the Upper Mississippi and Illinois Rivers
Talking Points for the Corps of Engineers Public Hearing

Background

Navigation on the Upper Mississippi and Illinois Rivers supports over 400,000 jobs, including 90,000 high paying manufacturing jobs.

In any given year, 60 percent of the bulk agricultural exports are moved to world ports via the Upper Mississippi and Illinois Rivers

The American farmers' competitive advantage in exporting grain hinges on efficient transportation, not low-cost production. Our major competitors Argentina, Brazil and China have made investments in their transportation systems and are dramatically reducing their costs for moving grain. Our ability to compete in world grain markets in the future is reliant upon us not losing the transportation cost advantage.

During the mid 1990s, lock delays on the Upper Mississippi and Illinois Rivers have cost farmer and businesses an average of $94 million per year.

Research conducted by NCGA and Texas A&M University indicates the value of corn, soybeans, and wheat will drop by $364 million in 2020 without the necessary lock improvements.

The Corps is currently considering a range of economically justified alternatives that provide capital improvements to the Upper Mississippi and Illinois Rivers. Included in this is the NCGA's goal of 7- 1,200 foot lock chambers and 5 guidewall extensions. While this plan does not have the highest net benefit, it does provide the most system capacity.

The towing companies currently pay a 20 cents per gallon fuel tax to cover half of the cost of major lock construction costs. The Corps estimates this trust fund will have a $1 billion surplus by 2010. In addition the Upper Mississippi River basin contributes 40 percent of this trust funds revenue, but to date has only received 15 percent of the expenditures.

According to the EPA, towboats emit 35-60 percent fewer pollutants than rail or trucks. U.S. Dept. of Transportation has shown that on gallon of fuel in a towboat can carry on ton of freight 2.5 times farther than rail and 9 times farther than a truck.

Preliminary assessment of a modal shift conducted by the Corps estimated that anywhere from $100-300 million in foregone air emissions clean-up costs are saved by moving products by barge.

Specific Points to raise with the Corps

As you know, our major competitors have been making great progress in lowering their inland and ocean freight costs for moving grain. To date, you have not taken this into consideration in your economic models. How do you plan on addressing international competition, and how will this be incorporated into your final decision?

In your new methodology, traffic forecasts and the implied benefits from lock improvements are driven by demand elasticities for barge freight. If grain is the predominant commodity, why didn't the Corps do an empirical analysis to determine grain's elasticities of demand?

We have heard a lot recently about "N values, and elasticities of demand, etc." It has been brought to our attention that given an N value = 1.2 the corresponding export demand elasticity for corn equals a –3.0. However, other studies FAPRI, University of Illinois (Hauser), and even the USDA use export demand elasticity value that are at least half of your number. How do you plan on reconciling your projected number to the numbers from these other groups?

Recently the Chicago Board of Trade has changed the delivery points for corn and soybeans to include the Illinois River Elevators. Have you included the possible impacts on grain delivery in your economic models? Also, if 1,200 foot locks are not included on the Illinois River won't this dramatically alter farmers' ability to deliver grain, and cause abnormal distortions to grain prices?

Much of your study is based upon the assumption that other modes of transportation, notably rail, can handle traffic diverted off of the river. Your study claims that the already overburdened railroads can handle this diverted traffic without raising rates. How did you arrive at this assumption? More importantly given the recent consolidations in the rail industry, doesn't it defy economic logic that the few remaining railroads will not raise rates in the face of reduced competition?

The largest share of your study's budget has gone to do in-depth environmental studies. It appears that the focus of this work was to determine the environmental costs of increased barge traffic. How do you intend to incorporate the environmental benefits, notably air quality improvements, and reduced accidents arising from barge transportation into the final decision? Surely you can understand our concern that the environmental benefits and costs are fairly taken into account.

August 5, 1999

Testimony from the Institute for Agriculture and Trade Policy (IATP)

IATP is an independent nonprofit research and education institute based in Minneapolis, which works for sustainable rural communities.

We support fair and open trade, and believe that farmers benefit from competitive, efficient, environmentally friendly transportation networks. We also support public investments to level the playing field for less damaging transportation methods.

But we take serious issue with the bill of goods which is being sold to farmers and the public as justifications for the expansion of the lock and dam system.

First, the assumption that increased exports provide a safety net under the farm economy. We only have to look at the current catastrophe in the rural Midwest to realize that export dependence, with or without a 4-cent premium from clearing bottlenecks at some locks, is not going to sustain our family farms or rural towns.

Second, the assumption that our exports are feeding hungry mouths. The Mississippi is used to export animal food: corn for hogs and chickens in NE Asia and soybeans for hogs and chickens in Europe. These exports bypass the hungry at home and abroad.

We are also deeply concerned by the environmental and social 'race to the bottom' between North and South America, in which great rivers are taken even further from their natural states so that Cargill, ADM and Dreyfus—who are well positioned in both hemispheres—can source ever cheaper supplies for markets in Europe and Asia.

To summarize, we should ensure that our investments add value—economically, socially and environmentally, rather than subtract value. This particular investment seems to perpetuate a system which drains money, nutrients, people and resilience out of the countryside.

Bill Vorley
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Institute for Agriculture and Trade Policy
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Random thoughts

I would support ≠ AIT. "H"

- Low cost Transportation
- share our expertise & produce into The world
- enviormentaly friendly
- we need To be profitable
  old saying you can't be green if your in The red.

This nation has increased its Commitment Toward the enviorment - a major part due To our countries affluence

Al Christopherson
President

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These aging structures can no longer accommodate the volume of traffic or the current size of the typical 1100-foot tows now employed on the upper Mississippi River.

As a result, shippers suffer costly delays and increased expenses, which result in lower prices paid to farmers.

Minnesota's farmers need an up-to-date and efficient Mississippi River system.

Barge transportation is the most efficient and environmentally-friendly way to move grain.

To transport the amount of grain carried in a single 15-barge tow, it would take the equivalent of **225 jumbo rail cars**, or **870 large semi-trucks**.

Agriculture stands to lose over $105 million dollars per year – and this does not even take into account the huge societal cost of increasing highway and rail congestion and repair costs.

Without these much-needed lock and dam repairs, we will lose both domestic and foreign markets.

Our comparative advantage in the production of agricultural goods must be retained, and an efficient, economical and viable transportation system is needed to maintain that advantage and to keep us competitive in the future.

.....Thank you.

SAFTY

Minnesota Soybean Growers Association Statement
Corps of Engineers Workshop
Thursday, August 5, 1999
Inver Hills Community College-Liberal Arts Building
Inver Grove Heights, MN

Good Afternoon...My name is Roger Dale. I am a soybean farmer from Hanley Falls, Minnesota and I currently serve as the President of the Minnesota Soybean Growers Association.

I am here today to bring to your attention a matter that is of utmost importance to Minnesota's grain farmers. And that is the future for commercial barge use of the Mississippi River for movement of Minnesota's agricultural products.

As farmers, we like to boast that we feed the world – and we do. But our ability to continue to do so depends on an efficient commercial river transport system for our soybeans.

The Minnesota Soybean Growers Association is very concerned about the deteriorating status of the lock and dam system on the Mississippi River. Over 80% of Minnesota's soybeans leave this state. Over 75% of US soybean exports leave the US by the Mississippi River Gulf Ports.

Many of the Mississippi River's locks and dams are over 50 years old and are outdated, and in need of substantial repair. Improvements are badly needed.

I Support Alternative 4.

- Modernizing the locks on the UMRS is important to the economy & ecology of the United States
- Failure to modernize the UMRS will result in the U.S. Surrendering leadership in world grain markets to our competitors
- We need a Modernized UMRS to protect against the environmental degradents of additional fuel use, air emissions and Social loss of income + Shipping options to farmers, rail crossing hazards and road congestion.

Before the
U.S. Army Corps of Engineers
Upper Mississippi River - Illinois Waterway System Navigation Study
Public Workshop
Inver Hills Community College
Inver Grove Heights, MN
August 5, 1999

Freight transportation is a derived demand - meaning that a commodity only moves when it has more value elsewhere than where it currently is. Movement of freight traffic will increase as population increases simply because more people will need essential goods and services. And if freight does not move by barge, it will move by modes which pollute the environment more.

The Upper Mississippi Waterway Association supports the following Corps alternative:

1,200 foot Locks (20-25, Peoria,LaGrange) and 1,200 foot Guidewalls (Locks 14-18). I believe this is referred to as alternative 'H'.

We have the following concerns about the Corps' alternatives:

1. The Iowa source data used to determine the demand curves for grain were arbitrarily given values depending on distance from the river. The values assigned grain demand were determined without any empirical testing and are too conservative.
2. The Corps of Engineers has used an 'expert elicitation' panel to set these parameters. Interviews with those panel members reveal disagreement over what was agreed to. In fact, all agree that the conclusion that should have been used from this panel was that more work needed to be done to determine elasticities. These experts should be provided additional published reports to help clarify this issue.
3. Iowa grain flows cannot be used to determine demand elasticities on the Illinois River. Historically, other research (Hauser/Baumel) has shown that the demand elasticities on the Illinois River have been half that on the Upper Mississippi. The Corps' model needs to be adjusted accordingly. This inaccurate reflection on the Illinois River lowers potential benefits and skews alternatives with capital improvements on the Illinois with lower net annual benefits.
4. The maximum willingness of shippers to pay for barge freight is set in the Corps' model assumptions with the restriction that rail freight rates will not increase with barge freight rates. This is absurd. Interviews with barge companies and shippers who utilize both rail and barge challenge this assumption as erroneous. Barge and rail rates mirror each other, always have and always will under the free market system. This assumption arbitrarily restricts benefits.
5. Finally, one of the key assumptions that may be too conservative revolves around future grain production capabilities with the growing use of production agriculture improvements focusing on quality and yields. Over the next 50 years, new technology will increase production beyond historical levels. Key groups, such as the US Grains Council have already begun adjusting their models to reflect this potential.
6. All these points lead to the concern that the overall benefits assigned key alternatives with capital improvements are incorrect.

It is important to have lock improvement on the Illinois River for two key reasons.

1. The delays on the Illinois River are just as bad as on the Upper Mississippi except during times of open pass. However, key product movements

occur during the delay times and therefore hinder our nation's competitiveness as much as those on the Upper Mississippi locks.

2. With the Illinois River as a delivery point for corn and soybean contracts beginning with the year 2000, the river system must be able to minimize any disruption to their fulfillment.

3. Further, if the Corps properly reflects the elasticity of demand for barge freight on the Illinois River, the net annual benefits for this alternative should increase considerably thus changing the rankings based on the model run alone. However, it is important to reflect that decisions cannot simply be made on this basis.

We have two final comments that need to be made concerning where we are and where we need to go.

1. The commercial navigation industry will ask the Corps to consider our underlying concerns and request an additional consideration of an alternative. This alternative provides for ten (10) 1,200-foot locks on the Upper Mississippi (their existing 10-lock option provides second best capacity increase and most effective reduction of lock delays in the system) and two (2) 1,200-foot locks on the Illinois River, with mooring buoys as appropriate. We don't yet know if this alternative is economically justified, but may be if the proper assumptions are utilized.

2. Finally, the industry will request that the Corps evaluate the concept of new 1,200-foot locks versus "lock extensions" against the backdrop of $300 million in current deferred maintenance in the Upper Mississippi region. It is bad policy to merely extend locks when we can't even perform the necessary maintenance on existing 60-70 year old structures.

Russell J. Eichman
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Upper Mississippi Waterway Association
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