

Upper Mississippi River-Illinois Waterway System Restructured Navigation Study
Public Meeting Minutes
March 21, 2002
Best Western SteepleGate Inn, Davenport, Iowa

1. Attendance

230 members of the public attended the meeting. Officials and staff of the Corps of Engineers, state and local governments, and non-governmental organizations also attended. Organizations in attendance included the Propeller Club, Illinois Corn Growers Association, Illinois Farm Bureau, Prairie Premium Ag Coalition, LaFarge North America, Illinois Soybean Association, Tri City Buildings Trade Council, Rock Island Farm Bureau, Audubon Society, Alder Barge Line, Izaak Walton League and the Iowa Corn Growers Association.

2. Welcome

At 6:30 Bill Wiedman introduced the meeting structure, procedures and basic information. Mr. Wiedman introduced Jerry Lack, a staff assistant to Congressman Lane Evans, and Joe Huber, District Representative for Congressman Jim Nussell. He then introduced the project manager, Denny Lundberg.

3. Formal Presentation

Denny Lundberg gave a formal presentation describing the Upper Mississippi River-Illinois Waterway System Restructured Navigation Study. He then introduced the following people:

John Hey – State of Iowa

Ken Bromett – Missouri Department of Conservation

Rick Nelson – U.S. Fish and Wildlife Service

Bill Bertrand – Illinois DNR

Bernie Schonhoff – Iowa DNR

Dan McGuinness – Audubon Society

Rich Manguno – Corps of Engineers, New Orleans District, Economics Team Leader

Ken Barr – Corps of Engineers, Rock Island District, Environmental Team Leader

Paul Bertels – National Corn Growers Association

4. Question and Answer Period

The public submitted written questions which were answered below:

Question: Has there been any discussion about establishing an environmental trust fund?

Ken Barr, Corps of Engineers: There has been considerable interest in this, and this issue has come up several times. The discussion of a trust fund has come up in the context of an administrative program. The Corps of Engineers doesn't know of any examples of this for ecological restoration across the country, so it would be necessary to establish some sort of authority to do this trust fund. This would provide for continued funding in the future.

Question: If such a trust fund were established, would projects have to be cost shared or undergo a cost/benefit analysis?

Ken Barr, Corps of Engineers: It is hard to put a dollar value on a duck or fish, so the Corps of Engineers uses something called incremental analysis. The Corps looks at the cost of individual environmental features that would be necessary for restoration and then compares that with what sort of habitat return comes from the feature. This is very different from the standard economic analysis that would be used with only dollars and cents.

Question: I noticed corn prices were a little higher at one of the river elevators yesterday, but know that is not always true in the harvest season. If the navigation improvements will give me a better price for my crops, can anyone tell me what the price of corn was at the grain terminals in 1930?

Rich Manguno, Corps of Engineers: No.

Question: One of your non-structural approaches under analysis is tradable permits. Wouldn't tradable permits add additional costs to navigation, increase the potential for market manipulation, and create a whole new bureaucracy?

Rich Manguno, Corps of Engineers: Tradable permits are an attempt to allocate blocks of time at each of the locks to provide a clear sailing path for a particular tow as it moves through the system. The logistics would have to be worked out. There would have to be some sort of management structure or bureaucracy would be required to level demand and make it as even as possible. This scheduling would hopefully reduce or minimize the actual delays at each individual structure.

Question: How much has barge traffic increased in the last 5 years on the upper Mississippi and why hasn't scheduling of barges at locks been implemented?

Rich Manguno, Corps of Engineers: Over the last few years, traffic has bounced up and down but it hasn't shown a significant trend over the last two decades. Scheduling has not been implemented because there isn't currently an authority to implement such a scheme. It will be studied as part of the final feasibility report.

Question: If the feasibility studies aren't completed until 2004, when will any new locks be built?

Denny Lundberg, Corps of Engineers: The study that the Corps of Engineers is working on now is a very broad based system-wide study. If the Corps of Engineers recommends that new locks need to be built, and the country agrees with that, then there would be an additional 2-3 years of site specific studies and another 2-4 years of additional design work prior to construction. So that would be 6-7 years once the country decides that new locks are needed.

Question: What would be the time table to start to widen the locks if everything went as planned?

Denny Lundberg, Corps of Engineers: If study gets done in 2004, and it was a recommendation that the country decided to go forward on new locks, then it would take upwards of seven years to get to construction provided that the money was still available in the budget.

Question: What was the total cost of the previous study and the anticipated cost of the present study?

Denny Lundberg, Corps of Engineers: To date, the Corps of Engineers has spent about \$57 million on the study since 1993. All of that work went into the systems approach and defining the effects of system flow traffic on the environment, all of which is good information and will be used in the new study as well. The additional costs are uncertain at this time because we have expanded the focus. The interim report will pull together the anticipated cost of the present study.

Question: What is the estimated cost to implement the expansion of locks to 1,200 feet and add guide walls?

Denny Lundberg, Corps of Engineers: There will be many different alternatives, and the costs depend on which alternative is chosen. A lock extension costs between \$100 and \$120 million; a new lock costs between \$200 and \$250 million.

Question: How will the lock improvements be paid for?

Denny Lundberg, Corps of Engineers: If the lock improvements were recommended, 50% would come from Congress, and 50% would come from an Inland Waterways Trust Fund. The Trust fund is built up by marine fuel taxes paid by the navigation industry.

Question: How flexible are you going to be in planning and design of small scale or large scale improvements? Even such small scale improvements as guide walls can cause impacts not related to navigation or the environment (i.e., boat ramps, tail water fisheries, aesthetics, etc.).

Denny Lundberg, Corps of Engineers: The work done to date is very system oriented and global. If Congress approved recommendations, there would be a need to do site specific work and take some of those considerations into account. That applies to any navigation or ecosystem improvements that we might go forward with.

Question: How much money has been spent on studies so far?

Denny Lundberg, Corps of Engineers: \$57 million

Question: Cost estimate of a lock renovation.

Denny Lundberg, Corps of Engineers: A lock extension costs \$100-120 million and a new lock costs \$200 - \$250 million.

Question: Why have the river biologists from the state DNR's from Minnesota, Wisconsin, Iowa, Illinois, and Missouri been involved in this recent portion of the restructured study?

Bill Bertrand, Illinois DNR: The DNR has been involved in the entire study since 1993, and will hopefully play a larger role in the new study now that ecosystem sustainability is being considered. The DNR will help design measures which will sustain the ecosystem and maintain the navigability.

Question: How will Audubon collaborate in the restructured study?

Dan McGuinness, Audubon Society: Audubon is collaborating and involved in preparing the report *A River that Works & A Working River*. The Audubon Society is providing their best advice on workable solutions regarding habitat degradation. Collaboration with the Corps helps us to provide input and stay up to speed on what is happening.

Question: And what does Audubon think about what elements of the Upper Mississippi River can be revitalized?

Dan McGuinness, Audubon Society: The report *A River that Works & A Working River* has a nine point plan for revitalization. It boils down to trying to mimic or restore natural processes that a natural river would have if it weren't diked, dammed, and dredged. This doesn't recommend taking out locks and dams but rather using dams to manage water levels in a way that will rejuvenate backwater and mud flats in the river and restore diversity and habitat. It means restoring backwater side channels, managing re-creation of islands in lower parts of pools, looking at opportunities to lower or remove levees and managing the land that is behind the levees for fish and wildlife rather than corn and soybeans. This is probably the most controversial recommendation. In other words, connect the floodplains back into the river system.

Question: Why does it take so long for the Federal Government to act on studies/completion? Costs go up each year. We get less for our \$ as time goes by.

Denny Lundberg, Corps of Engineers: This study was the first of its kind. It was the first systems-wide analysis on this scale. There are many Federal guidelines and NEPA requirements that the Corps must comply with. It is a very difficult and complex task to forecast 50 years into the future and get enough information on the table to make a reasonable decision.

Question: All locks should be managed to operate 24 hrs per day before any other structures would be needed. We already have an environmental system that works. We already have locks that work very effectively and with timely management for operation for 24 hr system, there are no reasons to spend any money other than upkeep. Unless there are certain locks that run 110 to 120% of the time.

Denny Lundberg, Corps of Engineers: The locks are currently open 24 hours per day. The Corps of Engineers is looking at nonstructural measures (scheduling, congestion fees, etc.) to relieve congestion. The difficulty with waiting until locks are running at 110 to 120% of the time is predicting when that will happen and to then be ready for it.

Question: If the 1,200 ft locks were to help farmers, wouldn't it help only those on the river?

Paul Bertels, National Corn Growers: Absolutely not. In Clinton, Iowa there is a big processing plant. They base their price off the river.

Question: Won't this really only help the Cargills of the world?

Paul Bertels, National Corn Growers: Absolutely not. The Cargills are middlemen and they move grain on a margin. There are also co-ops owned by local farmers. If prices go up because of increased efficiency, the co-op benefits, and therefore the farmers benefit.

Question: How do farmers intend to justify the need for 1,200 ft locks when exports have stayed flat?

Paul Bertels, National Corn Growers: Exports have been relatively flat for 20 yrs but Gulf exports have gone up, while Atlantic exports went down. Back in 1980, one of our major markets was the European Union and the former Soviet Union. One of them no longer exists and the other one is now a major export competitor. The share of imports from the US have gone down, share of exports to parts like Mexico, Caribbean, North Africa, Middle East have gone up. What the Corn Growers Association has seen is basically a tradeoff and that is why it has stayed relatively flat. North Africa is growing at 7 or 8% a year, and that trend is probably not going to just stop because a plateau has been reached. There is market potential out there.

Question: Would farmers be able to abide by scheduling of locks?

Paul Bertels, National Corn Growers: The Corn Growers Association respects that the Corps needs to study this idea as put to them by the National Academy of Science. Scheduling is foolishness because of unpredictable natural events such as fog, sudden rain events, or six week river freezings of the Illinois River like we had last year.

Question: I have heard of two recent studies showing rail traffic more efficient than water. Current US DOT figures show: water - 400 BTU/ton mile, rail - 350 BTU/ton mile. This is considerably different. Does the Corps have comments?

Rich Manguno, Corps of Engineers: Perhaps there is some mis-notation in here because the figures appear to be the same. I think the question was attempting to show that there were a couple of studies showing different things regarding the relative fuel efficiency of the different modes. As part of this study, the Corps hired Dr. Denver Tolliver from North Dakota State University to look at relative fuel efficiencies of rail vs. water. Fuel emissions, as it applies to air

quality, was ultimately the primary purpose of the study. There are a number of different conditions that are evaluated in the report, so it is hard to single out a specific number. That detailed document is on the web page.

Question: Is US DOT reviewing the studies?

Rich Manguno, Corps of Engineers: Don't know the status of that.

Question: Who benefits from improved navigation efficiency?

Rich Manguno, Corps of Engineers: When the Corps of Engineers does transportation studies, they look at net gains in efficiency from a national perspective, but the Corps of Engineers does not identify who specifically gains from improvements to the navigation infrastructure.

Question: Are there guarantees that corporations will pass any savings on to farmers?

Rich Manguno, Corps of Engineers: The distribution of potential savings will be decided in the marketplace. There are never any guarantees.

Question: With world population at 6 billion now going to 8-10 billion by 2020 without improvements to the lock and dam system, will we be able to economically compete and serve the future world markets?

Rich Manguno, Corps of Engineers: The degree to which U.S. producers will be able to compete in the world market depends on a lot of factors: population is one, developments in competing producing countries is another. Within each scenario, the varying assumptions related to each of these key factors will be considered.

Question: Why does the Corps continue to use models for forecasting barge traffic that are not proven to be accurate?

Rich Manguno, Corps of Engineers: The NRC criticized the forecasts used in earlier studies, so that particular approach is no longer used to forecast traffic, and the scenario approach is now used instead.

Question: Will there be an Environmental Impact Statement for the navigational study?

Ken Barr, Corps of Engineers: Yes. The interim report will not have an EIS but the final feasibility study will.

Question: If so, will it include the impacts of the effects of 150 years of dams, dredging, and dikes or will it only address the increase in traffic if locks are enlarged?

Ken Barr, Corps of Engineers: Under the previous study, the Corps of Engineers was very focused on the impacts of improvements; however, under the restructured study, not only are we looking at the traffic that might result from any lock development or construction, but we are also looking at the ongoing effects of the continued operation and maintenance of that 9 foot channel project. So those would both be included in the restructured study.

Question: Isn't it time to update the 1973 EIS and do an EIS that includes cumulative impacts over the past 150 years?

Ken Barr, Corps of Engineers: Since the study began in 1993, F&WS, EPA and other stakeholders have asked the Corps of Engineers to update old EIS's. After considerable consideration, the Corps of Engineers HQ guidance said to look forward and not to look at past activities since we understand what the ongoing effects are. If it goes from 8 to 12 boats per day in Davenport, IA, we knew we had to get a good handle not only on 4 boats a day, but also on sediment runoff, and water quality issues. The Corps of Engineers in 1994 spent \$5 million to quantitatively look at cumulative effects from the 1930's to 1989. An interdisciplinary team of

geomorphologist, ecologists, and hydrologists took a best shot at how the system might change over the next 50 years. The Corps of Engineers is considering this as they look at modifications to the operations and maintenance system.

Question: Why is the baseline for the ecosystem the present? Is it possible to go back to 1930 for a baseline?

Ken Barr, Corps of Engineers: Same answer as above.

Question: How much has been spent to date on impact studies, etc since you began in 1993?

Ken Barr, Corps of Engineers: Of the approximately \$50 million spent on the feasibility study, \$25 million of that was spent on environmental components. The Corps of Engineers has a pretty good handle now on the physical effects of a boat going through the river. We examined the following topics: what types of wake waves are generated; how sediment is re-suspended; how does that re-suspended sediment make its way into these fragile backwaters and side channels; what species of fish use the main channels; whether or not the adult fish are basically getting entrained or chopped up by the passing barges; what about the larval fish that can't get out of the way of the big barges; how the loss of these larval fish affects future populations; how sediment re-suspension results in cloudier water and the inability of submerged vegetation to grow in near channel areas. We also studied those areas on the system where navigation traffic is contributing to bank erosion, and we looked at the natural processes of bank erosion as well as the resources there. We looked at whether or not we were losing bottom land forests, and if it is affecting recreation areas or parks.

Question: If navigation operation and maintenance is 100% federally funded, why isn't ecosystem restoration in the floodplain 100% federally funded? (Federally funded dams and dredging have caused the damages done to the river--shouldn't the restoration and mitigation be 100% federally funded?)

Ken Barr, Corps of Engineers: Currently, improvements mitigation would be same as the improvements themselves which is cost shared out of the IWW trust fund. Direct impacts from dredging or wing dams are 100% federally funded. There is a huge federal presence in the river for both maintenance activities, navigation, and also refuges. The EMP project on federal lands is 100% federally funded, but if on state land it is cost shared. The Corps' restoration programs are 65% federally funded and 35% non-federally funded. In the interim report, the Corps of Engineers has been asked to address issues of funding and what baskets certain classes of restoration go in, and that will be a very important decision as we go forward with this effort.

Question: Adaptive Management--how does it work?

Ken Barr, Corps of Engineers: It is a feedback loop. The Corps of Engineers is trying to understand the system, so measures are put in place and the results are monitored. The Corps of Engineers learns from what is done and on the next project, they try something slightly different to see what sort of a difference that makes. In other words, the Corps of Engineers makes an investment and then attempts to see how the fish and plants respond so that that information can be used on the next project. This requires money for construction and monitoring/performance evaluation.

Question: You do what endangered species act demands and the public has no input?

Ken Barr, Corps of Engineers: Most of what is being discussed today falls under NEPA which is based on public disclosure and participation. The ESA has different requirements where the public involvement part is not written into the act. Most of the habitat projects that the Corps of Engineers has discussed today are really habitat-based for all the critters out there.

Rick Nelson, U.S. Fish and Wildlife Service: The ESA actually does require some public input in some instances. The ESA Act says under section 7 consultation, when the Corps activities are going to adversely affect a federally endangered species, there must be a consultation between the F&WS and Corps of Engineers. When that consultation is complete, there are no rules that prohibit seeking public opinion (biological opinion) in order to help implement the decisions of the consultation. The actions that come out of the biological opinion have to have an EA which has a public involvement process under NEPA. The Corps of Engineers still has the final decision on implementation. The public also has input under the recovery of species activities. There is opportunity for public input for EA's. When the recovery plan is set into motion, public input is required. When species are listed or de-listed, public input is mandatory under the ESA.

Question: How many navigable rivers are there in the United States?

Denny Lundberg, Corps of Engineers: There are nearly 12,000 miles of U.S inland and intercoastal waterways

Question: How many locks are on these rivers and what are the sizes of these locks?

Denny Lundberg, Corps of Engineers: These waterways include 191 lock sites with 237 lock chambers. About 15 percent of these chambers are 1000 to 1200 feet, 60 percent are 600 to 999 feet long and 25 percent are 600 feet long.

Question: The Navigation Study references a new level of collaboration and notes NRC encouragement for additional collaborators. The examples given indicate there may be an overlook of some very important collaborators who would have more direct and long-term capabilities of adding informative contributions to the Study than presently exist based on information provided. Will you be considering such collaborators at the state level?

Denny Lundberg, Corps of Engineers: Yes. There are state representatives here.

Question: Will those include state agencies of agriculture, transportation, natural resources conservation, and also additional special interest groups that would represent agriculture and others?

Denny Lundberg, Corps of Engineers: From the states the Corps of Engineers has been working with DOT's and DNR's, and on the federal side the Corps of Engineers has been working with the DOT, the Maritime Administration, the Department of Agriculture, the EPA and the F&WS. On the non-governmental organization side, the Corps of Engineers has been working with the National Corn Growers Association, Marc 2000, the Isaac Walton League, the Mississippi River Basin Alliance, the Audubon Society, and American Rivers just to name a few.

Question: How will you avoid the gridlock that has plagued the Missouri River Master Manual Revision?

Denny Lundberg, Corps of Engineers: There is a good opportunity to find common ground with the rivers stakeholders. A powerful way to avoid gridlock is for the stakeholders to walk up to Congress together with a balanced approach.

Question: If the locks work and the shipping companies want to use larger barges, why can't the barge companies pay all the construction cost or is the pork for shippers? Please reply.

Denny Lundberg, Corps of Engineers: The cost sharing for new construction is 50% out of Congress and 50% out of the Inland Waterway Trust Fund. That has been dictated by Administration and Congress; the Corps of Engineers doesn't decide that.

Question: You began the initial studies in 1993. Why has this process taken over 10 years?

Denny Lundberg, Corps of Engineers: This is a complex study. There is a lot of infrastructure with 37 lock and dam sites. There are thousands of acres of natural resources and billions and billions of investments that this country has made in the system.

Question: What is the connection between mooring cells and lock expansion?

Denny Lundberg, Corps of Engineers: This would help those waiting at the site. Currently, barges have to wait far away from the lock (maybe 2 miles). With mooring cells, barges can wait closer to the lock. Mooring cells can work independently or with new locks and lock expansions.

Question: If there is a connection, would mooring cells be up river, downriver, or both. Location refers to area immediately upstream and downstream of the lock.

Denny Lundberg, Corps of Engineers: They could be upstream, downstream, or both depending on the site.

Question: Do you see an expanded role for the 'Corp' in other transit modes such as rail beds, engineering, etc for balance?

Denny Lundberg, Corps of Engineers: No. But the Corps of Engineers is working more across governmental lines such as with the NRCS but not with the railroad.

Question: Is the purpose of this restructured study a way to kill any river development by studying it to death?

Denny Lundberg, Corps of Engineers: No, the Corps of Engineers is committed to trying to finish the study as soon as possible.

Question: When will the Environmental Management Program be funded at \$25 million or at the authorized \$33 million?

Jerry Skalak, Corps of Engineers : The program is authorized at 33 million, and Congress ultimately determines how much is appropriated on an annual basis

Question: Referring to the Upper Mississippi River Floodplain Management Comprehensive Plan authorized in the Water Resources Development Act of 1999. How is this going to affect flooding?

Jerry Skalak, Corps of Engineers : That particular piece of work will look at flooding throughout the system, and it is intended to look at both structural and nonstructural approaches to reducing flood damages and addressing flood protection throughout the system.

Question: If the NRC recommended not forecasting 50 years into the future, why are you still doing it? The scenarios project to 2050.

Rich Manguno, Corps of Engineers: The scenarios do project to 2050 and the NRC did say that it is difficult to project that far into the future. The NRC objection was more to the point that the Corps of Engineers came up with a single forecast to base the formulation upon. There will now be multiple descriptions of future worlds based on the multiple scenarios even though each scenario does project for a 50 yr. period.

Question: Have there been any studies done to project the future effect of value added operations (i.e., bio diesel or ethanol) that could occur here in the Midwest to affect the traffic projections?

Could ethanol production / soy diesel usage change future demand for shipping/export markets?

Rich Manguno, Corps of Engineers: The answer is yes to both of these. There have been studies to investigate the potential for these kinds of uses. The amount of use in these areas very much has the ability to affect the export demand. In the scenario approach to doing traffic

forecasts, the alternative use of ethanol or bio-diesel is one of the specific parameters. There will be different assumptions as to how much ethanol might occur in the future, and this value will have some effect on the demand for exports.

Question: At Lock 14--how much will traffic increase?

Rich Manguno, Corps of Engineers: The Corps of Engineers does not yet know the answer to that because we are not that far into the study yet. There won't be a single answer. How much traffic changes at a particular location will depend primarily on two things: the particular scenario and the state of the transportation system, i.e. existing network or some altered state such as capacity enhancements.

Question: What percent of the trust fund has been contributed by the Upper Mississippi Waterway? What percent of the trust fund has been utilized by the Upper Mississippi Waterway?

Rich Manguno, Corps of Engineers: The Corps of Engineers has this information but not at this meeting.

Question: Does the "Corps" include increased truck traffic or barge traffic and how emissions would be impacted and also road & bridge needs.

Rich Manguno, Corps of Engineers: The study by Dr. Denver Tolliver in addition to looking at fuel consumption and emissions also looked at accident rates and fatalities by various modes. The feasibility report will include this information based on Dr. Tolliver's work.

Question: How is the impact of 9 ft channel going to affect agricultural land on the floodplain?

Ken Barr, Corps of Engineers: The ongoing operation and maintenance of the 9 ft. channel project has limited effects on the floodplain. One direct effect is the placement of dredged material behind levees. Jerry Skalak is the project manager of a comprehensive study to look at opportunities for floodplain protection and restoration which will address more direct effects on agricultural land in the floodplain.

Question: We need larger locks to speed up shipping or other countries will take over our markets and not running studies for 10 years.

Ken Barr, Corps of Engineers: The Corps of Engineers shares the same frustration and hopes that the new cooperative spirit and adaptive framework developing in the region will help bring things to an end. Realizing that we don't have to know everything there is to know before we start to do things out there will help speed up the process.

Question: Are there any known negative effects of 1200' locks?

Ken Barr, Corps of Engineers: At certain locations, forests would need to be removed if landside locks are to be placed next to an existing lock. The Corps of Engineers also looked at what might happen if a 1200 foot lock is put in. Certainly there could be effects to important tail water fisheries. More importantly, the increase in traffic could cause effects. Of the 55 backwater complexes on the Upper Mississippi River, the Corps of Engineers thinks that about 12 or 15 of those have the sailing line very close the inlet. In these complexes, sediment that is re-suspended from the main channel and border areas finds its way back into the side channels and backwater. In those cases, we feel that the existing and increased traffic are contributing to the degradation of that backwater and side channel. The increased traffic will cause a certain loss of larval fish, and ecological models have been used to project how that would affect future fish populations. Increased traffic will also cause sediment to be resuspended which prevents submerged aquatic vegetation from growing.

Question: Wouldn't less barge congestion at locks be a benefit to the river ecosystem?

Ken Barr, Corps of Engineers: When the barges are waiting at the locks and when they are waiting to do a split, they have to put their noses into the river and they are close to shallow areas and turning up sediment. This is a negative effect. Not having the barges stacked up quite as deep, or churning for so long, or waiting for that split will have a localized beneficial effect. The feasibility report will address these issues; in addition, the Corps of Engineers is working with the stakeholders and the natural resources industry to look at building mooring cells away from the mussel beds and plant beds in an area that would be better suited for barges to wait.

Public: It is my understanding that 1,200 ft locks in both directions have and are being constructed on the Ohio River. Have any negative impacts been documented?

Ken Barr, Corps of Engineers: We looked at the physical effects of barge traffic and how it might displace fish, change the substrate, and affect fish habitat. On the Ohio River, they certainly have done these same types of studies. Localized effects also occur when a 1200 foot chamber is put in. During construction in a particular instance there was a very special mussel bed downstream of the chamber, and extraordinary measures were taken to keep the sediment turbidity levels from harming the mussels downstream. Certainly there are effects on the Ohio River as well, but the Ohio River system is much different than the Upper Mississippi River system.

Question: If new locks would be built, will the present locks be destroyed or could they be used for small pleasure crafts?

Denny Lundberg, Corps of Engineers: It is quite likely that the existing locks would stay in service for redundancy in case the new lock was to shut down, or to lock additional craft.

Question: Could the extra half of the locks that are undeveloped be finished so that smaller boats could lock through while barges lock through? That way we don't have to wait so long to lock through.

Denny Lundberg, Corps of Engineers: The Corps of Engineers has not looked at this from a system standpoint. If larger locks were built without extending the original lock, the additional lock could be used for recreational craft.

Question: Why was the island of dirt dredge fill made right in front of the lock at Guttenberg? (It makes it hard to maneuver barges)

Denny Lundberg, Corps of Engineers: This is in the St. Paul District and that questioner should talk to Kevin Bluhm.

Question: If the Corps is serious about a more balanced approach to river management, why is its budget still heavily weighted toward navigation improvements, navigation maintenance and flood control? (The Corps spends less than \$1 on environmental monitoring and restoration for every \$10 it spends on navigation.)

Denny Lundberg, Corps of Engineers: One of the things the Corps of Engineers is trying to do as part of the restructured effort is to find a balanced approach to sustainability, both on the economic side and the environmental side. If the Corn Growers Association and the Audubon Society can present a solution together to Congress, then the approach would be more powerful.

Question: Is there funding in place to complete the study on time?

Denny Lundberg, Corps of Engineers: Funding is available this year to complete the interim report and continue on with feasibility study activities. Funding for FY03 is still uncertain at this time.

Question: When locks have been expanded, what percentages of locks have mooring cells within a 1/2 mi from the lock, either up or down river?

Denny Lundberg, Corps of Engineers: Since the Corps of Engineers hasn't expanded any locks on this part of the river, we don't have any mooring cells of this type. I'm not sure about other river systems, but I know the plans that we looked at were to try and locate mooring cells as close to the locks as possible where it made sense.

Question: Since the study has incorporated a whole new environmental component, has the US Fish and Wildlife Service been approached or offered to share the additional costs of the new study?

Rick Nelson, U.S. Fish and Wildlife Service: No, we haven't been approached and we have not offered either because there is no statutory authority for the USF&WS to cost share. It would take an act of Congress to make that possible

Question: Will your global agriculture models consider the fact that agriculture has persistently been a positive trade balance for the US?

Rich Manguno, Corps of Engineers: The output of the scenario analysis is the forecast of waterway demand. The Corps of Engineers is assembling factors and making an estimate of what the traffic might be. The trade balance is not really the objective of the scenario analysis. The impact to trade balance as a result of the scenario is ultimately determined by the alternative evaluated within the context of each scenario. If there is a plan that accommodates some amount of that potential demand, it will result in some level of export traffic which then translates into some contribution to the balance of trade.

Question: Will you consider the negative impacts to U.S. agriculture as other big competitors increase their river transportation capabilities to transport agricultural goods and products?

Rich Manguno, Corps of Engineers: The process of building these scenarios is to look at different factors that would affect what the demand for waterway traffic might be. Competition from countries like South America will be one of the parameters that will be considered.

Question: Will that negative impact include subsidy payments to account for losses to American agriculture if faced with more costly transportation requirements?

Rich Manguno, Corps of Engineers: No, the scenario analysis does not do that. Subsidy payments won't be identified.

Question: Will you examine the effects of alternative transportation in greater depth than in the past? Examples include impacts of large increases of truck transportation if river navigation is not upgraded to meet future and current needs? Limited RR terminal access?

Rich Manguno, Corps of Engineers: The work of looking at relative accident rates by mode will be covered. That won't expand the scope of alternative transportation. The depth of that investigation will be the same in the re-focused study as it was in the original study.

Question: Will you consider the statistical data on accidents and increased costs to the public as deaths and injuries with increased road transportation especially considering that the current most hazardous occupation is now truck driving?

Rich Manguno, Corps of Engineers: The relative accident rates by mode will be part of evaluation in the final report.

Question: Will you consider the impacts of the local areas near highways where increased truck traffic loads increase demands on natural resource building materials including such things as trucks hauling those materials to be used in construction of highways?

Rich Manguno, Corps of Engineers: That is probably too focused and detailed an effect to be captured in the alternative mode investigation.

Question: Some people say the dams and locks are all bad--aren't there some good things that have happened to fishing, etc. because of the locks and dams?

Ken Barr, Corps of Engineers: Until the 50's there was a boom in waterfowl, bass fishery, and sunfish fishery. There was more diversity after the construction of the dams. But over time, after the 50's we are on a slope but the Corps of Engineers is not sure how steep the slope is. That is why there is a desire to have a sustainable ecosystem on the upper Mississippi River.

Question: Endangered species--aren't we lucky to not have dinosaurs around anymore?

Ken Barr, Corps of Engineers: The principle of sustainability says: pass onto future generations what you have been given. This kind of flies in the face of the principles of sustainability. We would like to try not to lose any species on the earth that now exist. The Endangered Species Act from Congress reinforces that notion.

Question: Based upon 1 day usage, how many more barges can go through a 1,200 foot lock compared to a 600 foot lock?

Rich Manguno, Corps of Engineers: For the 15 barge tow which requires two cuts to be processed, it takes about 90 minutes to complete that lockage currently with a 600 foot lock. With a 1200 foot lock, that time would roughly be cut in half to about 45 minutes.

Question: With modern technology and computer generated models, is there a chance this study can speed up?

Rich Manguno, Corps of Engineers: The Corps of Engineers is doing everything they know how to do to make this go as quickly as possible. We are doing our best.

Question: How is this justified on the Ohio and not on the Upper Miss?

Rich Manguno, Corps of Engineers: There are a lot of specifics that go into the economic analysis for a particular location, and we are not informed enough about all of the particulars to give a good answer.

Question: How long has the Inland Waterway Trust Fund been collecting the extra tax on barge fuel? Is the gasoline sold on the river taxed also? What has been done with the funds--have the Upper Miss received benefits? If so, what?

Rich Manguno, Corps of Engineers: The trust fund was enacted in the early 80's and a couple years passed before the first tax was collected, so the first tax was collected in the mid 80's. It is only the diesel that towboats use that pays the tax. Please contact the Corps of Engineers to obtain information on how those funds were distributed in certain areas. The major rehab program is also funded by the Trust Fund.

Question: Why are 1,200 ft locks o.k. for the Ohio River but the Mississippi must be studied and the need for 1,200 ft locks be questioned?

Denny Lundberg, Corps of Engineers: There are a lot of specific details on how the Ohio River is operated. The Corps of Engineers there have been studying that river on a site-specific basis for many years, and they got started well before the studies on the Mississippi. When the Mississippi study got started, the Corps of Engineers went at it from a systems standpoint which is a different and much more complex approach. The river is a different river and there are different commodities.

5. Statements

Dudley Hanson, Retired Corps of Engineers, Propeller Club of U.S. The Club applauds the Corps of Engineers on collaboration and the common sense approach to consideration of a wide range of scenarios. The Club agrees that an adaptive management approach is good, and urges the Corps of Engineers to proceed with the construction of locks. America's security will be hard to recover if it is lost.

Dennis Denton, Farmer, Illinois Corn Growers, Illinois Farm Bureau. This long study is wasteful; it is time to bring this study to a close and move ahead with needed improvements. He toured South America and saw new infrastructure that has been put in place. The U.S. lock system is overdue for modernization, and the current delays affect all farmers. River transportation saves taxpayers up to \$1.5 billion each year in transportation costs. The Corps of Engineers should build the 1,200 ft locks.

Debbie Neustadt. Her grandparents were farmers and riverboat operators. She is glad that scheduling is being considered. She is also glad that more than just incremental increases in barge traffic are being considered as having effects on the ecology of the river. There is a channel in place for barges to go around the Chain of Rocks at St. Louis, and it looks like a drainage ditch. This should not happen to the Mississippi River.

Jim Owens, Prairie Premium Agriculture Coalition. Due to increases in cost, farms will be lost if improvements to the waterway system are not made. Affordable food contributes to our high standard of living, and we support the resumption of the study. It should be brought to a close, and the improvements should be made.

Cary Jenks, LaFarge North America. Lafarge transports many materials on the river. River transportation is more efficient and environmentally sound than any other mode of transportation. Fuel goes much farther in moving commodities by water than by any other mode of transportation. Lafarge supports upgrading the locks.

Ed Vandermuellen, LaFarge North America. Agrees with Mr. Jenks regarding the efficiency of waterway transportation. LaFarge transports more by rail than by barge. There is a trickle down effect that contributes to the economy. For transporting a ton of cement from Davenport up to the Twin Cities, rail transport is four times as expensive as water transport, and truck transport is eight times as expensive as water transport. Lafarge and its employees support upgrades to the locks and dams, so that Lafarge can continue to keep transportation costs down.

Carl Sparenberg, IL Soybean Association. The extension of the locks would help soybean farmers dramatically. The Corps of Engineers has received more grief than they should. The biggest roadblocks will be a lack of knowledge and politics. We should all work together, and it will take time and money.

Roy Washburn, Tri City Buildings Trade Council. The locks and dams are critical to the economy of the area. The Council supports improvements to the locks and dams, and the jobs that it will provide. This is the most effective way to transport goods.

Steve Pigg, Illinois Corn Growers Association. Agriculture is the top industry of Illinois and one of the top industries in the U.S. Thirty percent of U.S. production is exported. Agriculture is twice as dependent on trade as any other industry. The lock system should be expanded or its ability to compete will be lost. The Evans Study re-iterates that losing our ability to compete will

cost American producers billions of dollars over the next 20 years. We need to act now to build and expand locks.

Tom Mueller, Illinois Farm Bureau and Rock Island Farm Bureau. The River system supports thousands of jobs. The building of 1,200 foot locks would contribute 3,000 to 5,000 construction jobs over a 10 to 15 year period. This would decrease the cost of production and increase exports. The increasing world population will cause an increase in demand. We must act now. There would be less maintenance problems with an upgraded lock and dam system, and efficiency would be increased.

Tim Murphy, Quad Cities Audubon Society. We now ship 60 percent of our grain down the system and it seems to work relatively well. The Audubon Society does not want to see the river further degraded.

Bruce Carey, Alder Barge Line . Both industry and environmental groups realize that both have something at stake. Both groups love the river. Scheduling will be very difficult because of all the complex factors that need to be considered such as weather and barge servicing. The study should be sped up. The 1,200 ft locks are safer and faster.

Al Shafebo, Farmer in Benton County, Iowa. The largest demand for corn is on the west coast, and it is necessary to barge it there. We need to update our old dams to be competitive in the global market. Lock delays cost \$364 million in depressed value each year. The U.S. needs to maintain a strong economy in order to maintain its quality of life.

Harlen Meyer, Farmer, Environmentalist, and Member of the Isaac Walton League . Before the dams went in, the River was had a putrid smell. When the dams went in 70 years ago, no one was concerned about the ecology. The \$57 million that has already been spent would have gone a long way toward the dams. Because of reduced barge congestion, there will be less fish and wildlife that are disturbed, and there will be less re-suspended sediment. The locks need to be extended.

Francis Owens, Iowa Corn Growers Association, Green Merchandising International Trade and Transportation Committee. It is more efficient and safer to upgrade the locks than to depend on other modes of transportation. Supports upgrading the river.

Dan McGuinness, Audubon Society. There are 143,000 jobs dependent on tourism and hunting and fishing; this is a \$ 6.6 billion business each year. River restoration will occur with or without lock extension. The greater concern is what farmers will do if they can't cover their costs even with the improvements. Audubon has a vision statement where people prosper and birds, fish, and wildlife thrive in a healthy environment.

Milford Shilby, Retired Farmer, Benton County, Iowa. The lock and dam system is important to farmers and the economics of Iowa. Lock delays cost about \$364 million dollars in depressed crop values each year. No other transportation sector relies on infrastructure built in the 1930's. New and improved locks will benefit farmers and the economy of the state of Iowa, and will improve boating on the river, and with planning and landscaping it will enhance the environment. This is a win-win situation.

Jud Hulting, Illinois Soybean Association. He is a farmer and produced soybeans. The navigation study should be completed and the improvements made. The Corps of Engineers can build the locks and also enhance the environment. By 2030, the population will reach 9 billion

with over 800 million people malnourished, so the demand for food will increase. Bio-diesel and ethanol production will increase in the future. The ecosystem must be improved while the new locks are being built. The lock improvements should be included in WRDA of 2002.

Mark Lower. He supports the new locks on the Mississippi and Illinois Rivers.

Dave Jordening, Farmer. Supports locks for farm products and other commodity transportation. Regarding tradable permits, scheduling would be hard to do. He is a pleasure boater, and it is frustrating to wait for a barge to go through; it can take almost two hours. The pleasure boats need lock improvements, too. The barges don't cause the bank erosion; it is the cruisers that cause the high wakes. However, if the barges need to meet a schedule, then they will increase their speed on the river to meet the schedule and cause large wakes as a result. Currently barges are safe and slow; let's keep it that way.

John Strothers . It is important for all of us come together. Both economics and environment are important. There are ways that both sides can come together. *A River that Works & a Working River* gives some great ideas. Can we produce organic produce that would be locally consumed, since some countries are opposed to genetically modified grains. Brazil might produce cheaper grain than we do because they have cheaper land prices, and it's not genetically modified. They could ship their grain up here because it is cheaper. Siltation is one of the biggest problems on the river.

John Abbot, farmer. There is some misconception about genetically modified organisms. At one time (60 years ago) a 600 ft lock was adequate. There has been a gradual progression and upgrading in transport system over time. Now a bigger lock (1,200 ft) is needed. He supports two new locks on the Illinois. Non-farmers benefit substantially from the benefits that farmers receive.

Glenn Miller, Past President of Iowa Corn Growers Association. He has been to many conferences and has seen all the angles of the issue. The Corps needs to go ahead with the extension of the locks and keep in mind the environmental issues. There is an equilibrium.

Paul Rohde , MARC 2000. All of their members are environmentalists. MARC 2000 welcomes this discussion. Only the wealthiest nations can afford to discuss environmental issues. The locks are deteriorating. The Corps of Engineers is performing admirably and deserves the Golden Duct Tape Award. We don't wait for our highways to reach 100% capacity before we add another lane, so it is time to start moving forward.

Eric Johnson Applauds the Corps of Engineers for their foresight in the earlier plan. It is time to move ahead. Siltation occurred before the locks and dams were in place. We don't need to keep rehashing old things.

Paul Bertels, National Corn Growers , Corn Growers Association. He is very biased in favor of trade, biotechnology, production of agriculture, and the environment. Lock extensions alone will not save farming. People should support livestock production. The environmental community should say what they want and go hand in hand with farmers to Washington.

Desiree Sorenson Groves, National Audubon Society. She saw hundreds of dead fish when she was young, and it affected her. If the fish aren't healthy, then the birds that feed on them won't be healthy either. She now worries about the health of the river. The River is an important

migratory flyway for 326 bird species. We need places like the Mississippi River to heal ourselves. The environment should be considered in the study.