

Final MINUTES

34th Meeting of the NECC
January 23 and 24, 2002
Holiday Inn - Bettendorf, IA

CEMVR-PM-A

Navigation Environmental Coordination Committee (NECC)

January 23 & 24, 2002
Holiday Inn, Bettendorf, Iowa

1. WELCOME

The 34th meeting of the Upper Mississippi River-Illinois Waterway System Navigation Study Navigation Environmental Coordination Committee (NECC) was called to order by Ken Barr, Chairman. Barr provided an overview of the meeting, agenda, and a handout of Joint Meeting Minutes. Barr also requested the NECC to check back for November minutes, be sure they have received them, and check to see if they have any comments.

2. STUDY STATUS and SCENARIO DEVELOPMENT – Lundberg presentation

(Attachment 2). This presentation is a focal point for the meeting, with portions of this presentation given for the meetings duration. The presentation given by Lundberg includes open dialogue throughout its length. The first major topics of the presentation include scenario development and consideration for environmental scenarios.

Benjamin: So this approach gives you multiple futures without project? Who makes the decision as to which future will occur?

Lundberg: We don't make that decision. We provide this information to the decision makers for them to make the decision.

Moore: How do you get to the recommended plan?

Lundberg: At this point, I'm not really certain. However, we'll have to identify this in the next couple of months.

Barr: One likely way to identify a recommended plan is if there are things that occur under a variety of future scenarios, then these actions are more likely to be recommended.

Moore: So you will have to go from an infinite number of futures to a manageable range of futures.

Duyvejonck: Don't we have a "centralized scenario"?

Barr: No, we have moved away from using one centralized scenario. Thus, none of the 5 scenarios will be more probable than another, and they are all plausible.

Nelson: The flavor I got yesterday is that with the Adaptive Management Framework you don't want to go too far into the future? Is that correct?

Lundberg: Yes, I believe so. I doubt we'll look at one scenario and say that is the direction for the next 50 years. There will be feedback loops. The interim report will identify a list of scenarios, but the evaluation will be in the final report. We hope to have all the scenarios by a March time frame.

Fenedick: This is an identifying stage, with an array that hopefully covers most future conditions. The adaptive part includes review of data through time so that you can adjust our actions through time.

Wilcox: Mark Harwell is working with the scenario development team. He has written literature on ecosystem management for south Florida. What they did was a scenario consequence analysis, which is a tool that address a range of future conditions. We shouldn't get too hung up on scenario analysis.

Brummett: Are you thinking about getting any more information on existing conditions?

Barr: Probably no more field work before interim report. We recognize there is great uncertainty with certain environmental aspects, but we can characterize this.

Lubinski: I'm not sure what you gain with environmental scenarios. They use different assumptions, different units, and if you have nine economic futures, and 5 environmental futures, the complexity grows quickly.

Barr: We have environmental goals we want to achieve, and it may or may not help us to put this into a "scenario" format.

Duyvejonck: What about some of the economic values that depend on the environment, such as recreational boating? Is there anything that will point to these economic values?

Barr: The short answer to your question Jon is Yes. We will look to consider this. I'm not sure how, but we will certainly consider this.

Barr: FYI, The environmental scenario team consists of: Steve Bartell, Mark Harwell, Ken Lubinski, and John Barko.

Moore: How much information is available on what each of these different terms and variables mean? For example, how much is the consultant considering certain farm management policies, etc. within these different scenarios?

Barr: These are all issues upon which certain assumptions will have been made. For example, assumptions will be made on certain aspects of land-use. These assumptions would be documented.

Beorkrem: How do we have an open discussion on the assumptions that Sparks will make on all these complicated issues? We need to discuss some of these important issues.

Lundberg: We have discussed a lot of these issues. For example, we talked early on about national security, but quickly decided that this was not appropriate.

Moore: So the interim report will not address national security.

Lundberg: Correct.

Barr: The ultimate question is how do we get to total tonnage for these scenarios? The scenario must be plausible, and inter-consistent. In order to bracket these uncertainties, we would look at high demand/high production with Scenario 1, and low demand and low production with Scenario 5. Scenario 2, 3, and 4 would be a combination of the two.

Nelson: How important is it that we agree on what adaptive management is??

Barr: I think we have had enough dialog to recognize certain components, but not much further than that. This is something that we likely need to visit at some point. The interim report would cover the basic parts of how to implement these.

Wilcox: At some point, I would think you would need to include thresholds to identify when an adaptive management approach needs to be changed.

Fenedick: Again, we need to identify steps at which we look back to evaluate if our approach is achieving what we set out to accomplish.

Duyvejonck: Are alternatives and measures interchangeable?

Barr: Not necessarily. An alternative could be several measures grouped together.

Beorkrem: What is the difference between scenarios and alternatives?

Fenedick: A scenario is the culmination of identifying future conditions. The alternative portion is a combination of structural or non-structural measures to address what the future scenario would generate.

Barr: We are at a decision point of how we want to proceed. Do we address one future environmental condition for all scenarios, or do we have “ecological drivers” with various ecological future scenarios?

Beorkrem: One of the things that concerns me is that we are developing economic scenarios, and we should be trying to identify how to do this on the environmental side, and yet we don’t seem to be doing this. We don’t seem to be identifying how ecological sustainability is driving river management, not tow traffic.

Barr: Ultimately, what drives or determines the ecosystem sustainability goals? I think the best approach is to identify what these goals are and lock them in, and that’s what we want to target and go for that, with whatever future tow traffic is.

Wilcox: Will Sparks identify the amount of energy to drive these scenarios? We might want to know this.

Barr: I believe they are considering this within their scenario development.

Moore: I would like to see what considerations/assumptions Sparks is making on climate change and global warming.

Break

Duyvejonck: As we resume discussions from before break, I’d like to go back to what Ken said. I think we want to target one future condition and shoot for it.

Brummett: Lets talk about impacts. The ecosystem is impacted by navigation. So, how do we focus and address these issues?

Wilcox: We could pose a whole suite of future environmental scenarios, and then try to perform a complicated matrix. This would be complicated. We also could simplify this by laying out existing and future environmental conditions, and then pose what society would like the UMRS to look like. We would then identify what would be needed to bring this about desired future. We should begin to try to reach some consensus on goals for the ecosystem, and an adaptive approach to reach them.

Lubinski: The work by Sparks will be in export tons. What will they model?

Barr: Unconstrained tonnage.

Wilcox: We also will not get forecast for nutrient runoff, erosion, etc. Only a qualitative description. Also, the goals for the economics are relatively easy and straightforward. For our ecological side, we really have set up these kinds of goals.

Brummett: How well linked are floodplain measures to these other issues? They would seem to be quite linked?

Barr: I would think they would be highly linked. We want to consider the floodplain, not only looking between the banks.

Nelson: It would seem that floodplain issues have been set off to the side?

Lundberg: We are using the interim report to define this comprehensiveness.

Beorkrem: In all this, it still seems that ecology is a constraint. How do I develop goals and objectives, I'm not sure we have a mechanism in place to hold these discussions on an equal level.

Barr: I think we can pose this question for when Theiling is in tomorrow, because he has been summarizing a lot of this information.

Fenedick: What Denny and Ken have been talking about is that these goals and objectives are environmental. What hasn't been discussed is if these are independent of navigation. We talk about economic issues, but this may not mean the same from an ecological standpoint. The next step is to develop an overarching statement above a series of goals and objectives. This would allow for identification of goals, and then objectives. This leads to the next phase, which is what is the incorporation of these objectives, next to the economic objectives. Do you change these environmental goals if economic goals or alternatives change? The key is the equal project objectives with environmental and economics. The problem is we don't know what these desired future conditions are.

Barr: The big question for us is do we use a series of environmental scenarios, or do you select one and discuss the variability around it. Do we pose a set of scenarios, or identify one scenario with goals and objectives for the future condition. The real question in river management is what is it that we want to have, how much is enough, how long will it take to achieve this, and how much will it cost?

Lubinski: I think this is where we differ. For this group to put goals in the interim report and call them collaboratively agreed upon would be pre-mature.

Barr: I think this approach would build upon what we have already produced.

Lundberg: Would the pool plans come into play when we begin to operationalize and build this?

Barr: For the interim report, we may not get real specific on what our future condition would be, but can point to pool plans as one way to perform this.

Millar: How do we address the cost issue, and that it may not be possible to build this desired condition?

Wilcox: We would need to perform a cost analysis to identify what we can build for how much, what the benefits are, and how long it will take.

3. Discussion of Issues Papers – (cont. of Lundberg Presentation at Attachment 2).

Barr: Lets move the discussion to the Issue Papers. There has been a strong desire to discuss how the issue papers will be addressed, so we want to try to discuss this. We met with Rick Nelson and Jon Duyvejonck to discuss where we are. We developed a summary of this meeting, and Jon and Rick prepared their version of a summary of this meeting.

Nelson: We asked for the scope of the study to be expanded, which is what these issues papers largely get to. The general thought is that the Corps seems to be making an attempt to get to these issues. The implementation is a key concern at this point. There are some overriding implementation issues that we probably won't solve at this level.

Benjamin: Would any mitigation have cost shared considerations.

Nelson: Sure. If this was mitigation, it would be 100% federal. However, if it is like an everglades project, then it would be 35% non-federal cost share.

Barr: Some of this may be mitigation, others portions of this environmental effort may fall under some form of cost sharing issues. HQ has directed us to focus on what we need from an environmental standpoint, and not to worry about the authority issues just yet.

Nelson: We have been making progress on addressing the 9-foot project, but the issue on cost sharing is important, and it's something that will have to get sorted out at some level.

Moore: Its o.k. for Corps Headquarters to tell you this, but it leaves us unsatisfied, because these issues will need to be resolved. And continually putting them off is problematic. There is a certain trust barrier that must be overcome. People in my organization feel that we have been screwed by the Corps for promises that weren't kept. We're not going to be willing to keep putting these off.

Beorkrem: These were originally drafted for the principles level.

Barr: We drafted these with the thought they may move up through the chain.

Nelson: At some point, we'll need to make a call if we are going to address these. As an agency, you seem to be saying this is interim, and that the final report will discuss these environmental issues. But this interim report may end up on the hill, and we need to be sure to include this so the environment gets some consideration.

Beorkrem: The Ohio River Management Plan is a failure because none of the states are willing to cost share. We rushed through authorization without commitment for cost sharing. So we have a non-functioning plan, even though

2 locks have been built. So we should not leave this implementation discussion out. No doubt it needs to involve HQ, the states, etc. But we need to do this for the interim report. It should be realized if the states or other entities are expected to supply a portion of this cost-share money.

Worthington: I think with these policy issues that the “how” question has to move on a parallel track to the “why.” We need to put something in front of the decision makers. I think we would be missing an opportunity not putting these issues into the interim report. But what I think Headquarters and MVD is saying is don’t let the implementation sidetrack the important discussion of what needs to be done.

Barr: I don’t think it’s a bad intent. It’s just that we shouldn’t let authorities limit our thinking for what the environment needs.

Nelson: Our paper states that we are working on these issues, and that these issues are for mitigation and wouldn’t include cost sharing.

Schlagenhaft: If I can discuss Pool Plans for a second, as we are dealing some of these issues. Pool plans include different components: including construction of backwater areas, channel and side channel management, floodplain connectivity, and water level management. Some of these have existing authorizations, but others do not. For example, we can’t use EMP to purchase lands, but maybe we can develop new policy to have this option. We also can’t do drawdowns under existing policy. We would need to have discussions to include these options.

Wilcox: How do we set targets for delivery of sediments, management for water quality, management for target population levels for animals; we can identify who can do this with traditional authorities. This is an opportunity to perform more integrated river management. There is concern about certainty of funding. Well, lets be creative. We’ve been given a lot of leeway.

Barr: As for specifics on the Issue Papers: Theme 1A – we are working that this could be done at full federal cost. We hope that in the interim report, we could put out a plan.

Beorkrem: What process is being put in place to address these issues in the interim report?

Barr: What we have from previous meetings and literature are being pulled together to be a part of this interim report.

Lundberg: We had talked about an oval group. Does this group want to see everything, or do you want to get this through the oval group? [General agreement from the group is “YES” we want to get some of this information directly].

Duyvejonck: I guess we want to focus on the “what” questions. Maybe we should focus on what looks likely to be implemented. It may not be great planning, but if we spend 3 years of planning and find that all alternatives are unacceptable, then we should have focused on other areas that may have been implementable. My perception is that these issues are going to be hanging around.

Beorkrem: Maybe another process needs to be set up to accomplish implementation parallel to our identification of goals and objectives, methods to accomplish these objectives.

Worthington: I don’t think it is unreasonable to talk about the “how” for implementation. It would seem we need to get consensus on what it is environmentally that we want, and then what is the cost and cost-share of each. I would think we need to get farther with the “what” and how much that will cost before we can make it much further with cost sharing.

Duyvejonck: Is there another way of remedying these adverse affects without the COE performing a supplemental EIS. We may agree at the field and division level, but may not fly at the HQ level.

Beorkrem: Under 1B for Kens draft from the Corps, sub-issue C, how would you envision proceeding when you wouldn’t assess all affects?

Barr: we would evaluate the affects that most challenge our goals. For example, we would be more focused on water level control than we would on limiting or reducing cottage leases.

Brummett: Would you go back to your authority issue, can you categorize funding categories of which methods might fit under which authority.

Barr: I think that because the question isn’t only what do you want, but how do you get there. I think we shouldn’t worry so much about the “how” that it limits the “what” that we are planning for. If we worry too much about the “how,” we may not get everything we can.

Brummett: There are categories of things that can be done, and that you may be making it more complicated than it needs to be.

Benjamin: We are talking about other things in addition to EMP. I consider a whole separate, much bigger program, for environmental O&M.

Barr: We clearly have two things to work on. Baskets of authorities, cross cut budgeting, etc. We are talking about this transition from a narrow study

Beorkrem: I suggest we recommend to General Arnold a parallel effort to figure out how we would implement these measures.

Schlagenhaft: Maybe the 3 districts should get together for more uniform pool planning efforts.

Barr: Lets adjourn. Let's be here at 7:45 to be sure to catch General Arnold.

4. The meeting was adjourned for the day.

5. The 34 meeting of the NECC was reconvened on Thursday, Jan 24. The meeting was initiated with a teleconference call with MVD DE General Arnold.

General Arnold: I apologize for not being able to make it up for today's meeting. I'll make it up future meetings, if possible.

As a part of this revised Navigation Study, we should work to define a process to address both environmental and economic issues. We need to have a picture, an over-arching picture, which contains goals and objectives important for both environment and economic concerns. The next step is to identify what the system would look like in the future without any type of project, thus identifying a delta or change. Then you develop a program to address that delta. Then you get to the "how" question – who pays, how much, full federal, cost shared, etc. I think for the interim report we really need to identify the "what" question that being what we need to do, and then for the final report we'll identify "how" to do it. The "how" piece may become a basis for building these scenarios. For the final project, the environment may be fully funded at the federal level. Another option may be that we look at a scenario of using existing policy of cost sharing. It may be that O&M to maintain existing conditions may be fully funded, and improvements may be cost shared.

Beorkrem: Flowers asked the divisions to reexamine O&M needs. Has this continued?

General Arnold: Much of this changed on 9/11. A lot of our efforts have focused on structural and security issues. The short answer is no, it has not reached a state where we have much to share.

Beorkrem: Another question, we are learning how to collaborate, and it is taking longer than past processes. We have a date where much work would be accomplished in March. We have concern with reaching these dates.

General Arnold: We realize that the interim report may not result in anything concrete. We need to produce a status of where we are on this project for the Chief of Engineers in July 02. This is an update on project direction, where we have been and where we are. The rest of the study will move toward the final report. If the interim report is not perfect and does not contain all detailed analysis, in my opinion, this isn't a great problem. As we move toward the date for the interim report, we need to provide our best effort to show folks where we are going.

Beorkrem: We have two major processes, what to do and how to do it. We discussed yesterday the possibility of setting up a parallel track to identify the "how" process. Clearly, the national implications are significant with budget and policy considerations. I recommend we explore that possibility.

General Arnold: I have no problem with that. However, we can get into this discussion and get mired into the "how" questions, without answering the "what" questions. Lets get to the point where we can ask the "how" question. If you feel there is a capability to work simultaneously without detracting from answering the "what" question, then I would support that.

General Arnold: As far what is rehab and O&M costs, when the system was first put in place, a group was assembled to put definitional rules on what was maintenance and what was rehab. Our guidelines are pretty well established. The importance is that if we identifying something as maintenance, it's fully federal. If its major rehab, its cost shared 50/50. We may comprise a group in the future, with policy folks and state and federal folks, we may get to identify what parts of restoration is O&M type work, and what type is ecosystem enhancement or major rehab. This type of discussion may be very good.

Benjamin: Most of the folks would agree that the river is in a degraded state, and that we have a ways to go just to get back to a functional state, and that enhancement may be a ways out in the future. There are a number of people who have been working on pool plans that have gone a long ways in identifying the "what" question. The money associated with these plans is quite costly, and will likely approach O&M of the system. So what is your reaction to that?

General Arnold: If congress gives us the money, then we'll do it. We are not the ultimate decision makers. We provide the best technical analysis forward, and then congress will appropriate money. The \$140 million sounds like a substantial number, but I probably have a \$40 or \$50 million shortfall every year, and that's something we have to deal with. That number with an economy from 2 years ago may have been doable, but \$140 million in today's economy may be tougher. Available funds also need to be spread out across our various inland waterways.

Nelson: Can you address relationship between interim report and the report to Congress.

General Arnold: We have to provide an interim report to the Chief of Engineers, and after that, I don't know what becomes of it. In June, July and August timeframe they begin work on WRDA 02. If there are pieces of the interim report that appear to be no brainers, be it environmental or economic, they could be included. However, we are not pushing for this. Could someone extract a portion of this, it could be authorized within 02 WRDA, yes. But that is not our objective. It is only to inform the Chief of Engineers of where we are.

General Arnold signs off.

6. Discussion of Issues Papers – (cont. of Lundberg Presentation at Attachment 2).

Barr: Lets get back to the issue paper discussion from yesterday. Lets discuss where we are at with the Issue Papers, capturing some of the issues that remain, and indicate other issues that are resolved. Issue 1A discusses equal consideration of fish and wildlife resources with navigation resources. The August memo allows the Corps to plan for navigation and other purposes, including modifications for environmental sustainability. It is anticipated that this planning, through the feasibility phase, can be conducted at full federal investment. Issues of concern remaining include limitations of authority, policy, or funding. The study outcome will determine implementation cost responsibility for measures (full federal or cost shared).

Beorkrem: I'm not sure the environmental community would agree that 1A is resolved, and won't get resolved sitting at this table, but we need to move to implementation before its resolve.

Barr: For Issue 1B: Sub-issues a. (baseline traffic effects), b. (9' channel O&M effects) and d. (cause and effects cumulative effects analysis), the re-structured study will use whatever tools are available to address these effects. For sub-issue c. (comprehensive mitigation planning for all 9-foot channel project effects), the Corps will look at baseline effects, and look in light of sustainability for potential O&M modifications, but these are not mitigation. Avoid, minimize and mitigation measures will be fully considered for any recommended construction to relief lock congestion.

Duyvejonck: How do we implement these actions? Is it a supplemental EIS, or some other documentation? We have these issues that are implementation issues, but also process issues.

Beorkrem: One question, is it clear between FWS and COE definitions of O&M responsibilities? My interpretation, is that there is the O&M for the 9-foot channel project structures that causes impacts, and then there are separately COE or federal responsibilities for the resources that the 9-foot project is a part of. My concern is that the agencies have not reached an agreement on this. Clearly O&M needs to be a consideration, but also unmet responsibilities that should be addressed now at the District level, and should this O&M question be handled both inside and outside of the interim report.

Nelson: I think the issues of O&M concern operation of the project, but I don't think we have talked in general with the Corps on O&M with land management issues.

Beorkrem: We need a separate, current discussion about environmental O&M outside of the 9-foot project.

Wilcox: The sums of all our activities are creating this existing condition. We can predict a future condition if we maintain status quo. Now, we can also define what we want, thus a desired future condition. To get there will require changes in O&M, restoration efforts, etc.

General discussion held on difficulties with political uncertainty with who pays for what issues, what is O&M, what is major rehab, what is cost shared vs. fully funded. Basically, the "how" question. The general conclusion is that we should take this dilemma to the principles group.

Moore: We will be looking carefully of how this disagreement of funding is handled. The draft issue paper response has soft language on what the Corps will do, but firm language on what it will not do. You cannot exclude the possibility of an EIS, and you cannot exclude the possibility of mitigation.

Barr: That language was suggested by EPA.

Fenedick: EPA still holds that a 9-foot channel EIS should be performed. I wouldn't call this a baseline, but rather what the long-term impacts may be. We are after these long-term impacts.

Barr: What we have heard is that we shouldn't be so certain on what the Corps will and will not do.

Duyvejonck: Cumulative means watershed affects, floodplain effects, here is the state of the river. It didn't separate O&M specific effects. We think for the purposes of accomplishing the guidance memo, we have to isolate what the O&M specific effects are. These should be mitigated for, but other effects like within the watershed, would probably be cost-shared projects. Ultimately, we are looking at ongoing and future effects. We look at those for the existing project. We are not asking for mitigation for past sins.

Wilcox: Then maybe we should focus on the delta between the projected future without condition, and baseline conditions.

Fenedick: We are looking at documentation that is 30 years old for the old EIS. So what triggers the need for re-evaluation? Their were no cumulative impacts, no mitigation, and the methods that the corps manages the river have been changed – yet we have no overall, comprehensive look at what is going on across the river. Looking at incremental impacts won't cut it.

Duyvejonck: Have we talked about this in the interim report, or will it get put off until the final report for the Nav Study?

Barr: As much as possible for the interim report, we will include this type of information.

Schlagenhaft: I think we have a pretty good idea of what we want. We should be looking at how we will be looking to implement.

Barr: Issue 2 deals with cause and effect cumulative effects analysis. As the comprehensive study will consider baseline effects, this will go far towards a cause and effects analysis. In order to consider more fully O&M effects, cause and effect analysis will be used; it is also important to use indicators and trends analysis. This will require a sustained commitment to data collection and analysis in support of an adaptive management framework

Barr: Issue 3 deals with expanding the traffic effects analysis to include quantification of the impacts of existing traffic (including second lock traffic) and traffic increases expected to occur without navigation expansion. The same state of the art models developed for the navigation effects study will be used to examine baseline traffic impacts; the models will, however, need some modification/refinement due to the set of assumptions that was originally used (assumptions may be different for this baseline traffic analysis). The issue is not mitigation, but providing comparison/context for any modifications that might be made on the system for a sustainable environment.

Barr: Issue 4 includes an assessment of ongoing project O&M impacts as an element of the system navigation study. The general plan will consider the effects of ongoing O&M; the focus will be on those O&M actions that challenge or complement the goals and objectives for a sustainable environment. This is not a re-write of the 9-foot channel EIS's. The analyses should be systematic/comprehensive, gathering as much information as possible to address any future questions or issues. Recreation will be included in this analysis.

Duyvejonck: We believe the EIS needs to be updated, unless you can provide a way of getting to the same endpoint.

Beorkrem: And what is the Corps position of this, other than you say that this is not a rewrite of the 9-foot channel EIS? Basically, none of the inland waterways has updated their EIS's.

Worthington: All of our effort will be discussed through supplemental documents, we would have GI funded as opposed to O&M funding, so what does and O&M EIS get you?

Beorkrem: This process is a multi-year planning effort. The end game is uncertain, but we have a certainty with responsibilities for O&M.

Worthington: I can assure you that this is a better tract to get what you want than going with an O&M EIS.

Moore: In another situation I might agree with you. But NEPA affords participants other avenues for conflict resolution that this may not.

Worthington: But this will have a parallel NEPA process.

Moore: The scope of this parallel process needs to be laid out.

Duyvejonck: A formal O&M EIS would better guarantee funding than some other NEPA effort. We need to have a linkage to O&M modifications. To us, this appears to be the tool to get to that linkage. We are still smarting from broken promises with the 2nd lock, so we are looking to decrease the wiggle room.

Worthington: Those are worthy goals, but I see these better accomplished here than with a separate O&M EIS.

Beorkrem: Sure, but we have baggage from the 2nd lock that you may not have experienced.

Nelson: So your argument is that an O&M EIS would force the funding for mitigation into O&M funding?

Worthington: A better funding mechanism is probably with the Comp study.

Beorkrem: But we are still looking for assessment of cumulative impacts, for example, wingdam and side channel destruction.

Fenedick: The EPA would still want to see the EIS updated, but we aren't real concerned with what vehicle this is accomplished with.

Barr: Issue 5 includes a comprehensive mitigation plan that addresses the total array of navigation effects as part of the navigation study. This issue is essentially addressed in the statement under Theme 1b. It is important to include the concepts of adaptive management and a sustained commitment of fiscal and human resources.

Barr: Issue 6 is the assessment of traffic effects due to the Second Lock, Melvin Price Lock and Dam. To date the 2nd Lock has functioned as a back up lock to assure the river is not shut down when the main lock is inoperable. Therefore, the traffic thru the 2nd lock to date does not indicate an increased amount of traffic thru the project. Projections will be developed for future use of the lock. Traffic projections for mitigation planning purposes will not be completed until the navigation study completes its modeling. The same traffic model will be used to determine the incremental increase due to the Mel Price 2nd Lock.

Barr: Issue 7 includes that cooperating Federal and state agencies should develop and implement a comprehensive ecosystem management plan for the Upper Mississippi river system. This issue gets at the concepts of crosscut budgeting, institutional arrangements, a potential commission, and the role of the Principals Task Force in future management decisions. Modification of the Navigation project would be one component of a broader Comprehensive plan.

Barr: The concept of institutional arrangements, this group has held good discussion and that these can go forward to talk about a larger commission, crosscut budgeting, etc.

Barr: Issue 8 includes how site-specific impacts will be addressed and incorporated into the overall environmental impact assessment. A tiered approach (i.e., site-specific impact analyses and documentation that would tier off of the systemic EIS) is appropriate for addressing site-specific impacts of any recommended measures. It will be

clearly stated what resources will be addressed and how the analyses would be conducted, in full coordination with other Federal and state agencies. It would also use the site-specific habitat assessments already completed in 1998. **Barr:** Issue 9 includes the inadequacy of incremental effects studies due to insufficient data. The Corps is conducting additional data collection and verification activities as part of the ongoing feasibility studies. More important is the concept of adaptive management, including the monitoring component. Any additional studies or monitoring should be done with an eye toward refining approaches, and continuing those things that work; the goal is to minimize the effects of uncertainty in the study results. The tools to do this should be available well into the future. Adaptive management and monitoring should be conducted cooperatively, and EMP LTRMP would be an ideal program to utilize provided adequate funding is available. Uncertainties in the direct effect of navigation traffic studies are of lesser concern if a sustained commitment is made to adaptively manage the system in light of cumulative effects and environmental sustainability.

7. ECONOMIC ISSUES – Lundberg presentation (Attachment 2)

Break

8. STUDY SCHEDULE – Lundberg presentation (Attachment 2)

A conference call sometime in February would be appropriate - afternoon of Friday, Feb 22. NECC meeting sometime around April 15 to 19. Next NECC mtg. Possibilities 15, 18 or 19th.

Nelson: Do you want a FWS CAR, and if so, when?

Barr: This is simply a status document. There wouldn't be a requirement there. We would state that we would get your input at several levels, but that we wouldn't need to get your input for a CAR.

8. UPDATE ON STATUS OF INTERIM REPORT - Theiling presentation (Attachment 3)

Lundberg: We were planning on sending out Chuck's work as it becomes available.

Barr: These works would be in the very draft stage, and you folks would provide comments back.

Christoff: We should go for geomorphic reach restoration because the pools are artificial.

Barr: Sure, and we have performed some of this in our previous work.

Worthigton: At some point, we need to get back to Denny's diagram where we overlap back into floodplain issues. I think that this is a restructured Nav Study with 2 objectives, but its not going to be the effort that will deal with every issue for a Comprehensive Management Plan for the UMRS. I'm suggesting the vehicle for completing a Comprehensive Management Plan for the UMRS isn't completely wrapped up in the restructured nav study.

Lundberg: What we are doing in the interim report is laying out the need for this CMP.

Duyvejonck: When defining a sustainable ecosystem, you need to get back to floodplain issues. We need to get beyond just navigation if we are really going to be discussing ecological sustainability.

Barr: Are you comfortable with the information we have provided you, and do you want to get the future documents for comments and review? Also, a more focused pool-planning workshop might be a good idea.

Duyvejonck: If you want to have collaboration, we should sit down and discuss this, not just review and send back comments to Chuck.

Nelson: What exactly are we going to be seeing from Chuck?

Theiling: I think we can get through Level 2, broad goals.

Barr: What we need is a pathway to Level 3 in the interim report.

Theiling: The HNA and working river document are probably the two most important reference points to work from.

Nelson: I'm still having a hard time with the road map of where you are going. I think these discussions are good, but we need to have more of them to get to where we need to go.

Barr: It sounds like we may need to have a NECC workshop in lieu of a conference call.

Beorkrem: I think you need to have the FWIC and RRCT to work together for consistency, and then you need the States to commit the manpower to develop these pool plans.

Barr: I would request FWIC, FWVG and RRCT put together a workshop for pool planning, not just for Nav Study but also for several other programs. This will help to identify the pathway for the interim report.

Wilcox: I think we put this in the interim, then when we get the green light, we go forward with this pool planning process.

Nelson: I think we could at least get the groups together and start the dialogue.

Brummett: We have been hit by this with everything. These are the same people doing everything. I don't have the time to take on this additional task.

Barr: I think the FWIC, FWWG and RRAT chair people would lead any future meetings. We'll decide later if we want to pursue this.

Barr: With that, lets look to wrap things up. Are there any final comments from either the States or Feds?

Barr: No further comments? Then lets adjourn.

Attachment 1

ATTENDANCE LIST

31st Meeting of the NECC
November 28 and 29, 2000

Attendance ListNovember 28 & 29, 2000 -- Holiday Inn, Bettendorf, Iowa

Name	Affiliation	Address	Phone	E-mail
Ken Barr	CEMVR-PM-R	P.O. Box 2004, Clock Tower Bldg. Rock Island, IL 61204-2004	(309) 794-5349	Kenneth.A.Barr@usace.army.mil
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Elliott Stefanik	CEMVR-PM-AR	P.O. Box 2004, Clock Tower Bldg. Rock Island, IL 61204-2004	(309) 794-5285	Elliott.L.Stefanik@usace.army.mil
Denny Lundberg	CEMVR-PM	P.O. Box 2004, Clock Tower Bldg. Rock Island, IL 61204-2004	(309) 794-5632	Denny.A.Lundberg@usace.army.mil
Rich Worthington		441 G Street NW Washington, D.C. 20314	202-761-4523	Richard.T.Worthington@HQ02.usace.army.mil
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Bernard Schonoff	IA DNR	3390 Hwy. 22 Muscatine, IA 52761	(319) 263-5062	fishiowa@muscanet.com
Tim Schlagenhaft	MN DNR	2300 Silver Creek Road Rochester, MN 55906	(507) 280-5058	tim.schlagenhaft@dnr.state.mn.us
Mark Beorkrem	Sierra Club	P.O. Box 370, 204 Wyandotte Morrisonville, IL 62546	(217) 526-4480	Mbeorkrem@hotmail.com
Rick Moore	Isaac Walton League	1619 Dayton Ave. Suite 202 St. Paul, MN 55104--6206	(651) 649-1446	rxmoore@iwla.org

Attachment 2

Upper Mississippi River - Illinois Waterway Restructured Navigation Study

Presented by

Denny Lundberg

US Army Corps of Engineers – Rock Island District

34th Meeting of the NECC
January 23 and 24, 2002



Upper Mississippi River - Illinois Waterway Restructured Navigation Study

NECC Meeting
23 Jan, 2002



AGENDA



- **Corps Planning Process**
- **Scenario Development**
- **Alternative Development**
- **Issue Papers**
- **Schedule**

Corps Planning Process?



Identify Problems and Opportunities

Inventory and Forecast Resource Conditions



Formulate Alternative Plans

Evaluate Alternative Plans

Compare Alternative Plans

Select Recommended Plan

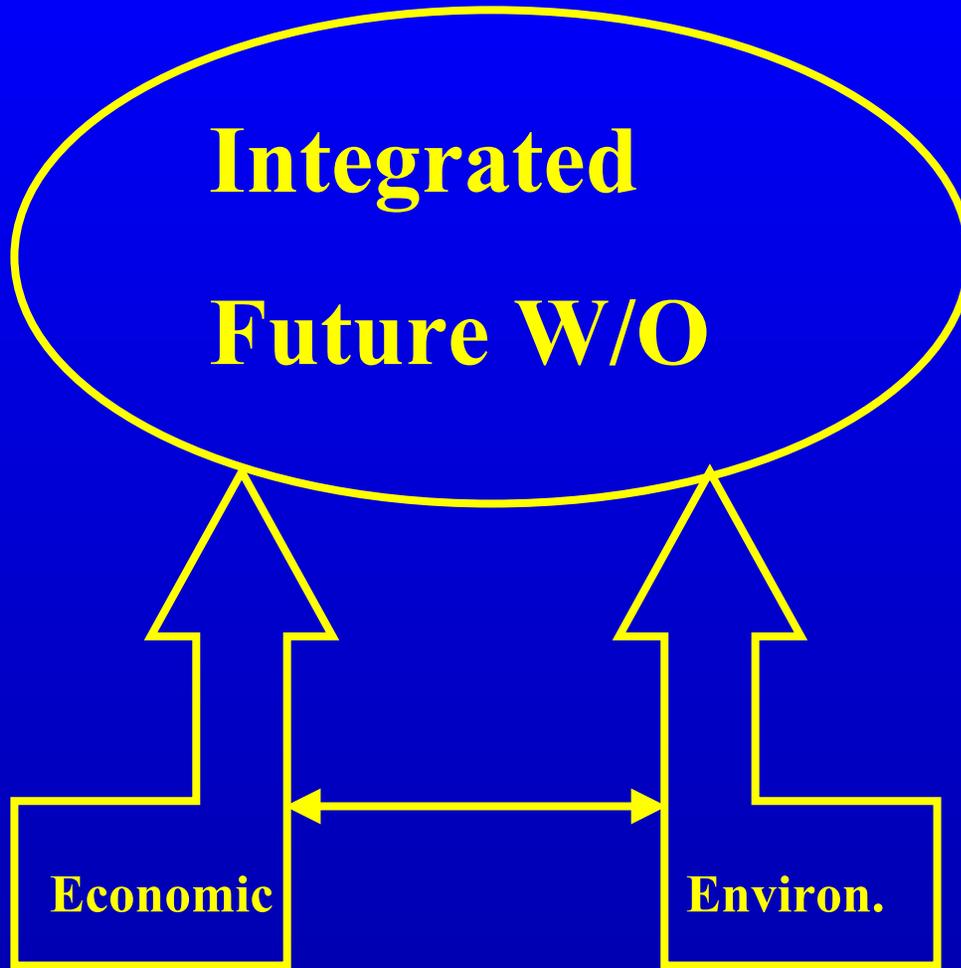
Inventory & Forecast



1. Existing conditions

2. Future Without Project

- **Conditions expected during period of analysis**
- **Provides the basis from which alternatives plans are formulated and impacts assessed.**
- **Scenarios used to help define uncertainty**



Economic Uncertainty

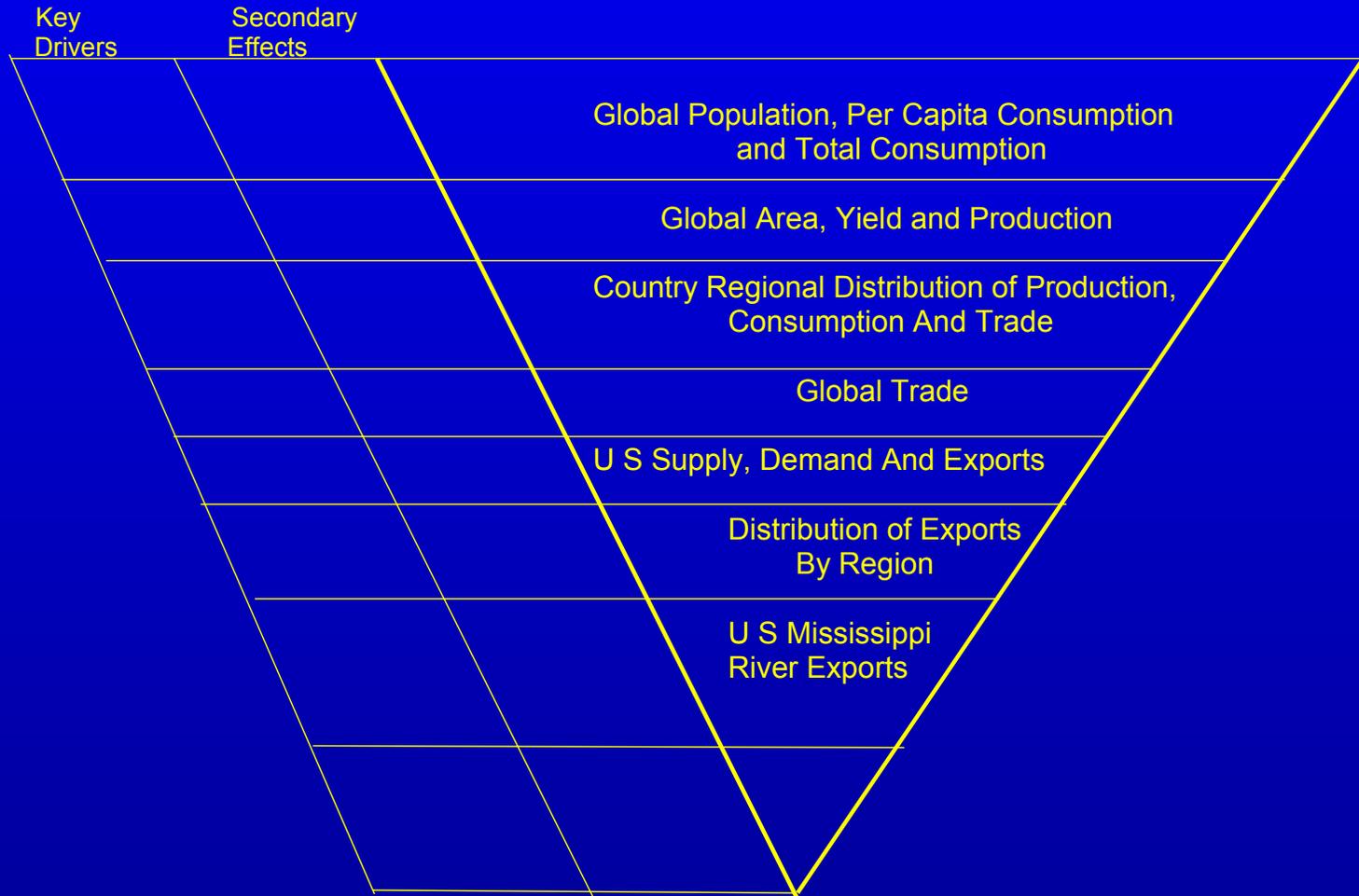
- Scenario's

Environmental Uncertainty

- Goals and Objectives
- Scenario's



Scenario Analytic Framework



Scenario Integration Matrix



Scenarios	Economic Scenario A	Economic Scenario B	Economic Scenario C
Environ Scenario D			
Environ Scenario E			
Environ Scenario F			

Scenario Development



1. No top down scenarios will be developed.

- **Macro level scenarios will be hard to translate to UMR**
- **Research will be documented and included in Interim Report**

2. All scenarios will be developed using bottom-up approach.

Scenario Development



3. Realistic Considerations

World Trade

- GMO developments and acceptance
- China's and India's willingness or unwillingness to become trade dependent
- Reversal of WTO process
- Competition issues

Scenario Development



3. Realistic Considerations(cont'd)

Land Utilization

- Farm/Commodity policy(set-a-side)
- Conservation Issues
- Rural/Urban Issues
- Hypoxia

Scenario Development



3. Realistic Considerations(cont'd)

Consumption Developments

- Cereal to meat evolution, the shifting or changing pace
- Ethanol/Bio-diesel
- Population
- Per capita consumption
- Livestock production locations

Scenario Development



3. Realistic Considerations(cont'd)

Yield Developments

- Rate and uniformity of increase
- Variation
- Irrigation/Water availability
- Climate variability

Scenario Development



4. Regional Distribution

- USA
- Canada
- Mexico
- Brazil
- Argentina
- Other Latin American countries
- Australia
- South Africa
- North Africa and Middle East
- Other Africa
- Japan
- Taiwan
- South Korea
- China
- India
- Indonesia
- Malaysia
- Other Asia
- West Europe
- Central Europe

Scenario Development



Scenario Development Matrix

Scenarios	World Trade	Land Use	Consumption Developments	Yield Developments
1	+	+	+	+
2				
3				
4				
5	-	-	-	-

Alternatives Assessment Matrix



Alternatives	Future W/O 1	Future W/O 2	Future W/O 3
Navigation Measures			
Environ. Projects			
Floodplain Measures			

***Alternatives will be formulated under the principals of adaptive management.**

Navigation Improvement Alternatives



Small Scale Measures

- Traffic Management
- Mooring Cells
- Guidewall Extensions

Large Scale Measures

- Lock Extensions
- New Locks

Ecosystem Improvement Alternatives



9' Channel O&M

- Fish Passage
- Water Level Management
- Structural Modifications(chavons, wing dams, revetments, etc.)
- Sediment Management(dredging, placement, control, etc.)

Ecosystem Management

- Habitat Modifications (backwaters, islands, side-channels,etc.)
- Longitudinal Connectivity (migratory blocks, “stepping stones”,etc)
- Naturalized Hydrologic Cycles
- Enhanced Diversity (plant & animal species, habitat, bath.,etc)

Floodplain Management

- Sediment Management (dredging, traps, upland...etc)
- Lateral Connectivity (spillways, control structures, levee mod.)
- Enhancement of Isolated Aquatic Habitats
- “Greenways” in Developed Areas



SUSTAINABILITY

NAVIGATION

ECOSYSTEM

FLOOD PLAIN
MANAGEMENT

FUTURE
CONGESTION

O & M
CONSIDERATIONS

DIVERSITY

CONNECTIVITY

STANDARIZED
FLOOD CONTROL

FUTURE W/O
(SCENARIO'S)

FUTURE W/O

FUTURE W/O

FUTURE W/O

FUTURE W/O

NAVIGATION
IMPROVEMENTS

MOD. TO O & M
FOR ENV.

ECOSYSTEM
MANAGEMENT

FLOODPLAIN
MANAGEMENT

**Problem &
Opportunities**

**Inventory &
Forecast**

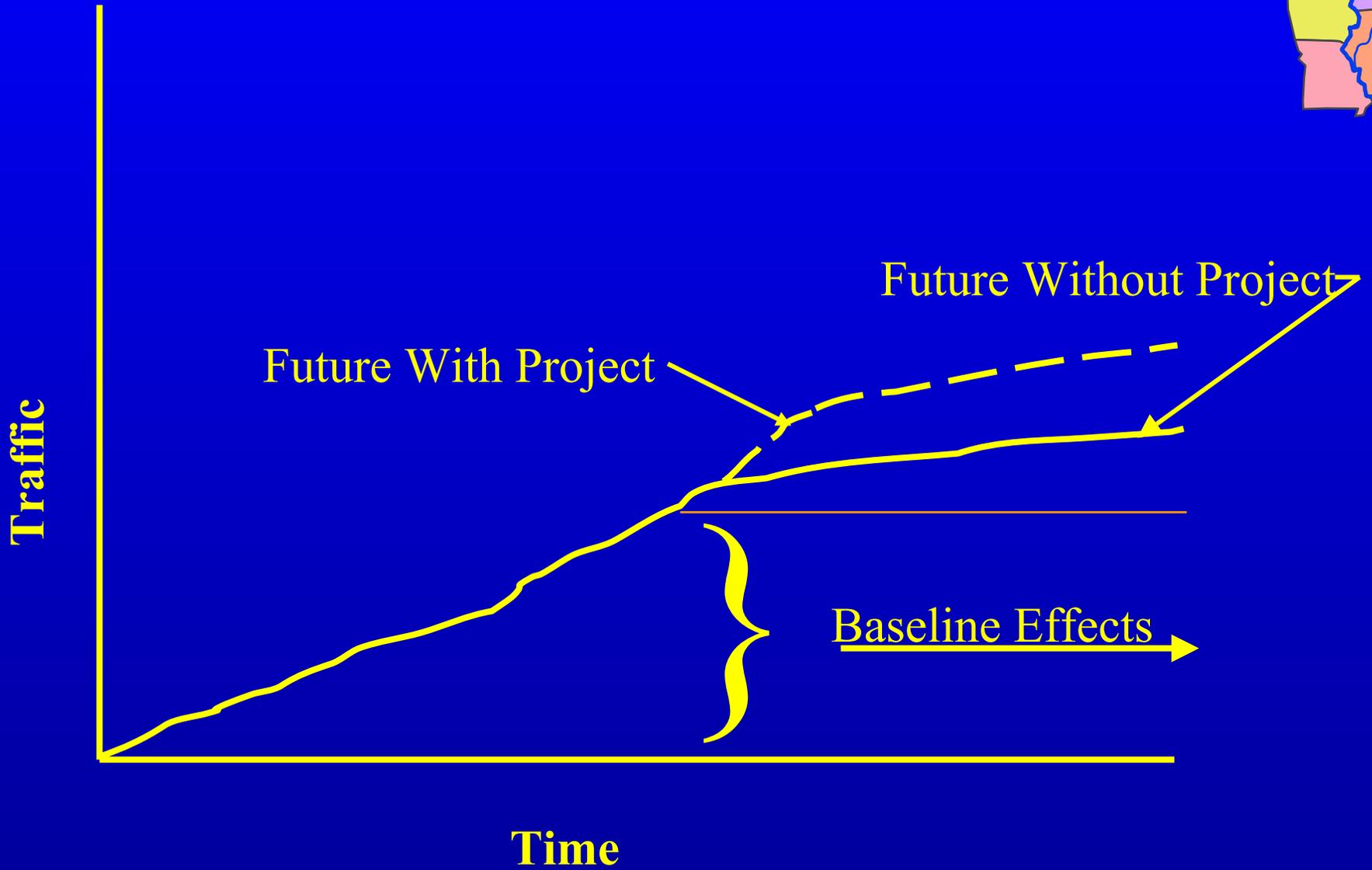
**Formulation of
Alternatives**

**Evaluation of
Alternatives**

**Comparison of
Alternatives**

Select a Plan

{ **Alternatives Assessment Matrix** }



Issue Papers

Environmental Themes and Issues



- **Theme 1a:** Equal consideration for fish and wildlife resources.
- **Theme 1b:** Environmental effects of the existing Nine-Foot Channel Project.
- **Issue 2:** Incorporate a cause and effects cumulative effects analysis in the System Study.
- **Issue 3:** Should the scope of the tow traffic effects analysis be expanded to include quantification of the impacts of existing traffic (including Second Lock traffic) and traffic increases expected to occur without navigation expansion, or should existing traffic impacts remain identified as the baseline condition.

Issue Papers

Environmental Themes and Issues



- **Issue 4:** Include an assessment of ongoing project operation and maintenance (O&M) impacts as an element of the System Navigation Study.
- **Issue 5:** Include a comprehensive mitigation plan that addresses the total array of navigation effects (O&M impacts, baseline traffic, Second Lock traffic, avoid and minimize, and incremental traffic) as part of the Navigation Study.
- **Issue 6:** Assessment of traffic effects due to the Second Lock, Melvin Price Lock and Dam.
- **Issue 7:** Upper Mississippi River cooperating federal and state agencies should develop and implement a comprehensive ecosystem management plan for the Upper Mississippi River system.

Issue Papers

Environmental Themes and Issues



- **Issue 8:** How will site-specific impacts be addressed and incorporated into the overall environmental impact assessment?
- **Issue 9:** Inadequacy of incremental effects studies due to insufficient data.

Issue Papers

Economic Issues



- **Issue 1a: Calculation of Traffic Forecast:** Relates to Issue 1, “Spatial Equilibrium Model and Data” of the National Research Council (NRC) review report.
- **Issue 1b: Demand Elasticities.** Relates to Issue 1, “Spatial Equilibrium Model and Data” of the National Research Council (NRC) review report.
- **Issue 1c: Use of ESSENCE Model (Benefit Model).** Relates to Issue 1, “Spatial Equilibrium Model and Data” of the National Research Council (NRC) review report.
- **Issue 2: Consider nonstructural options for improving traffic management as a baseline condition for the study.** This relates to issue 2 of the National Academy of Sciences Review Report.

Schedule



- **Complete initial scenarios** 15 Jan
- **Review with Regional Group** 22 Jan
- **Review with Federal Task Force** 29 Jan
- **Review with stakeholders** 30 Jan-6 Feb
- **Complete final scenarios w/conseq.** 8 Mar
- **Review with Regional Group** 13 Mar
- **Review with Federal Task Force** 14 Mar
- Public Meetings** 19-28 Mar
- **Environmental Advisory Board** 11-12 April

Schedule



- **Complete scenario assessment matrix** 12 April
- **Review with stakeholders** 15-19 April
- **Review with Regional Group** 22-26 April
- **Review with Federal Task Force** 22-26 April
- **Complete Draft Interim Report** 10 May
- **ITR** 13-17 May
- **Submit Interim Report** 1 July

Upper Mississippi River - Illinois Waterway Restructured Navigation Study NECC Jan 23, 2002



Mississippi
Valley Division



Questions?

Attachment 3

Status of Interim Report

Presented by

Charles Theiling

US Army Corps of Engineers – Rock Island District

34th Meeting of the NECC
January 23 and 24, 2002

Refocused UMR-IWW Navigation Study

Interim Report

Goals and Objectives

- 1. Compile and Review prior studies**
- 2. Identify Purpose Statements**
- 3. Prepare a matrix of goals**
- 4. Refine redundancies**
- 5. Categorize types of goals**

Upper Mississippi River Planning Documents

- **Upper Mississippi River Main Stem Level B Study – 1980**
- **Comprehensive Master Plan for the Management of the**
 - **Upper Mississippi River system - 1982**
- **Facing the Threat: An Ecosystem Management Strategy**
 - **for the Upper Mississippi River – 1993**
- **Restoring the Big River – 1994**
- **Sharing the Challenge: Floodplain Management into the**
 - **21st Century (Galloway Report) – 1994**
- **McKnight Report – 1994(?)**
- **Fish and Wildlife Interagency Committee**
- **UMR Summit – 1996(?)**
- **LTRMP Status and Trends - 1998**
- **Habitat Needs Assessment - 2000**
- **A River That Works and a Working River - 2000**

Time

Study/Report	Recreation	Dredging Issues	Bank Stabilization (veg., rip-rap, channelization)	Sedimentation	Water Quality	Monitoring & Study	Institutional Coordination	Habitat Restoration	Acquire Floodplain Lands	Environmental Integrity (EI)	Provide Life Requisites for Waterfowl and Mig. Birds	Provide Life Requisite for Fish, Aquatic Plants, and other Aq. Resources	Provide Life Requisites for Wildlife	Conserve, Restore, and Enhance T&E Species	Water Level Mnaagement	Environmentally Sympathetic Training Structures	Maintain or enhance viable native populations and habitats	Maintain or enhance ability to recover from disturbances	Maintain or enhance ecosystem sustainability	Maintain or enhance capacity to function as part of a healthy basin	Maintain or enhance annual floodplain connectivity	Maintain or enhance ecological value of natural disturbances	Improve Habitat Quality	Improve Habitat Diversity	Sever Pathways for Exotic Species	Provide Fish Passage at Dams	Represent native ecosystem types	Maintain viable populations of native species	Maintain ecological and evolutionary processes	Maintain evolutionary potential of biota	
Basin Commission Level B Study Phase II 1977 (dredging, sedimentation, water quality)	X	X	X	X	X																										
GREAT I																															
GREAT II (WQ, Sediment, F&W) 1980	X		X	X	X	X	X	X																							
Basin Commission Master Plan 1982	X	X				X																									
UMRCC Facing the Threat 1993							X																								
Restoring the Big River 1994					X	X		X																							
Galloway Report 1994								X																							
McKnight Report 1995	X					X	X																								
FWIC 1996										X	X	X	X	X																	
UMR Summit 1997-99		X			X				X						X	X															
UMRS Status and Trends Report 1998																	X	X	X	X	X	X									
Habitat Needs Assessment 2000				X				X							X								X	X							
Working River 2000		X	X	X	X			X							X							X				X	X				
Conservation Biology																											X	X	X	X	

Specific → General

UMRCC Ecosystem Management Planning Goals - 1994

- Maintain viable populations of native species in situ.
- Represent all native ecosystem types across their natural range of variation.
- Restore and maintain evolutionary and ecological processes (i. e. disturbance regimes, hydrological processes, nutrient cycles, etc.)
- Integrate human use and occupancy within these constraints.

Grumbine, R.E. 1994. What is ecosystem management? *Conservation Biology* 8:27-38.

These goals are similar to the ones adapted from Noss, R.F. and A.Y. Cooperrider. 1994. *Saving Nature's Legacy: Protecting and Restoring Biodiversity*

A Nested Hierarchy of Ecosystem Goals and Objectives

(prepared by Dan Wilcox)

Level 1 - Overall goal: A Sustaining, Whole, and Beautiful River Ecosystem

First Principles for River Management:

1. Maintain the natural beauty of the river
2. Avoid and minimize adverse effects of human activities on the river ecosystem
3. Allow the navigation system and the river ecosystem to be as self-maintaining as possible

Level 2 - Goals for the UMRS Ecosystem

(Noss and Cooperrider 1994)

1. Maintain all native ecosystem types and seral stages across their natural range of variation.
2. Maintain viable populations of all native species in natural patterns of abundance and distribution.
3. Maintain ecological and evolutionary processes, such as disturbance regimes, hydrologic processes, nutrient cycles, and biotic interactions.
4. Manage the riverscape and communities to be responsive to short-term and long-term environmental change, maintain the evolutionary potential of the biota.

Level 3 - Measureable Objectives for Condition of The River Ecosystem

(These need to be set collaboratively for each geomorphic reach of the UMRS (Pool Plans), some examples below)

In UMRS Geomorphic Reach X:

Pattern of habitats (develop target habitat distribution maps and reports)

- 40,000 acres of floodplain habitat hydrologically connected to the main channel by year 2020
- Opportunity for fish passage for all migratory species past each navigation dam by year 2030
- 20,000 acres of vegetated shallow aquatic habitat by year 2020
- 5,000 acres of floodplain forest with mast-producing trees by year 2030

Refocused UMR-IWW Navigation Study

Environmental Planning Component

TASK 1: Establishing a Collaborative Management Framework for UMRS

TASK 2: Goals and Objectives for a Sustainable UMRS Ecosystem

TASK 2B: Critical Appraisal of River Management Plans

TASK 3: Application of Conceptual and Predictive Models in Developing a Comprehensive Management Plan

TASK 4: Alternatives for Achieving Environmental Sustainability

TASK 5: Evaluation Procedures for Comparison and Measurement

TASK 6: Authorities for River Management

Refocused UMR-IWW Navigation Study O&M Component

1. Channel Maintenance

Channel Maintenance

Channel Design (Dike Revetment)

2. Recreational Resource Management

3. Navigation

4. Regulatory

5. Water Level Management

Refocused UMR-IWW Navigation Study Floodplain Component

This Component needs further scoping and will be highly dependent on results from the WRDA '99 Comp. Study. Should include details on:

**levee protection – acres, miles, freq.
of overtopping**

crop value

land/property value

loss foregone

etc.....