UMR-IWW System Navigation Study
ECC/NECC Meeting Minutes

Crowne Plaza – Riverfront Hotel, St. Paul, Minnesota (651-292-1900)
Nov 14, 2006; 8:00 AM to 3:00 PM

1. Attendees:

Ron Adams	WI DOT	Jon Duyvejonck	USFWS	Paul Rohde	MARC 2000
Richard Astrack	CEMVS-PM-F	Al Fenedick	USEPA, Reg 5	Tim Schlagenhaft	MN DNR
Butch Atwood	ILDNR	John Hey	IA DOT	Bernard Schonhoff	IA DNR
Ken Barr	CEMVR-PM-A	Harold Hommes	IA ALS	Heather Schoonover	IATP
Terry Becker	Riverway Co	Barry Johnson	USGS-UMESC	Terry Smith	CEMVD-PD-SP
Gretchen Benjamin	WI DNR	Jerry Knapper	Ingram Barge	Rebecca Soileau	CEMVP-EC-H
Mark Beorkrem	UMRBA	Ron Kroese	McKnight Fdn	Chuck Sptizack	CEMVR_PM
Terry Birkenstock	CEMVP	Dick Lambert	MN DOT	Max Starbuck	Nat Corn Grower
Kevin Bluhm	CEMVP-PM-E	Gary Loss	CEMVR-DP	Janet Sternburg	MODOC
Jack Carr	CEMVR-PM-A	Rich Manguno	CEMVN-PM-A	Holly Stoerker	UMRBA
Bob Clevenstine	USFWS	Dan McGuiness	Audubon	Wes Walker	CELRH-NC
Mark Cornish	CEMVR-PM-R	Nicole McVay	CEMVR-PM-A	Scott Whitney	CEMVR-PM-M
Jeffrey DeZellar	CEMVP-PM-A	Barb Naramore	UMRBA	Dan Wilcox	CEMVP-PM-E
Barry Drazkowski	SMU	Kathryn Nelson	CEMVR-PM-A	Richard Worthington	CECW-PD
				Scott Yess	USFWS

2. Calendar:

- Feb 20th – 22nd – ECC-NECC/UMRBA/EMPCC Meeting, St. Louis, MO
- May 22nd-24th – ECC-NECC/UMRBA/EMPCC Meeting, Quad Cities, IL/IA

3. Action Items:

- Send comments on UMSL Vessel Sequencing Report to Astrack and Carr by Dec. - ECC
- Corps will create summaries of NETS studies and share these with the ECC/NECC – Carr/Barr
- Send comments on the Interim Report Proposal to Rich Astrack – NECC/ECC
- Send comments/needs regarding upcoming ECC presentations to Carr - ECC.
- Send thought/edits/comments on Project Reports to Whitney by Dec 1, 2006 – NECC/ECC.
- Distribute NECC/ECC minutes and handouts ASAP - McVay
- Provide comments on Draft Submersed Aquatic Vegetation 2nd Year Sampling Report to Cornish ASAP - NECC

4. Notes:

ECC 8:00 – 10:30

- **ECC Introductions and Opening Remarks (Ken Barr/Jack Carr)**

No changes to minutes or agenda. **Barr** reviewed the action items from the last minutes.

- **Peer Review Panel and Peer Review Process (Rebecca Soileau) – Attachment 1 Presentation**

Soileau reviewed slides 1-3 and then introduced Wes Walker. **Walker** described the Planning Center for Expertise for Inland Navigation (PCXIN). Stated it was established by Corps to improve process. We are predominantly responsible for the Peer Review. There are two levels of Peer Review – External Peer Review, and Independent Technical Review. PCXIN is also responsible for certifying the economic models. PCXIN is currently looking at the Survey Model and will begin certification process soon. They are aware of the other models that need certification. **Beorkrem** asked if the ITR for study products will be conducted by people from the Corps or someone outside the Corps. **Walker** said that requirement for the ITR is the reviewer be independent of the study, be they Corps, Industry, or Academia. **Soileau** continued with her presentation. She described the qualifications of each member of the Expert Peer Review Panel (Slides 9-11). Next, she talked about the products that the Peer Review Panel will be reviewing (see Slides 12-13). Then, she reviewed the Estimated Schedule (Slide 14). Their first meeting was Nov 12-13. Finally she described the review process (Slide 15).

Questions/Comments:

Beorkrem asked: Is the model certification process on the same schedule as this peer review process? **Walker** replied that is on the same time schedule, but will be completed with different individuals. **Barr** said that we proposed to have the Grain Forecasting Model workshop with the Peer Review and the ECC in the near future. Will discuss more later. **Beorkrem** asked: would there be other ECC workshops scheduled? **Barr** said they will be handled at regular ECC meetings. **Spitzack** said that there may be some small meetings for specific products.

- **Update on Lock Design** (**Jeff Stamper**) **–** Not Present. If you have any questions talk to Rich Astrack. Hoping to have some construction if we get an authorization in FY08.
- **Update on Economic Analysis** (**Rich Manguno/Rich Astrack/Jack Carr) – Attachment 2 Presentation**

Carr gave the first slide presentations.

- Slide 3 – Demand Curves (NETS). Wes Wilson will speak at future meeting. Field work delayed due to slow response rate.
- Slide 4 – Traffic Forecast (NETS) – Grain – This is the topic of the workshop we plan to have in Jan. The study team plans to send the Grain Report out to the ECC 30 days before the workshop. The ECC and the Peer Review Panel will be there as well as Bill Wilson, the Principal Investigator (PI) for the NETS Grain Model. Bill Wilson will be prepared to respond to comments.
- Slide 5 – Traffic Forecast Non-Grain – contract awarded to Louis Berger Group, Inc. PI is Anatoly Hochstein.
- Slide 6 – Transportation Rates – Phone interviews almost complete. TVA continues to process data and survey responses.

- Slide 7 – UMSL (University of Missouri at St. Louis) Vessel Sequencing Report – UMSL researchers concluded that scheduling would be useful at high traffic levels and possibly during lock construction. The draft report was sent to the ECC. Comments due to **Astrack** within 30 Days. Send comments to Astrack and Carr by Dec. 15, 2006. **Carr** gave a brief summary of this study. The first USML scheduling report looked at appointment scheduling under current traffic levels and concluded that implementing a vessel sequencing plan (as described in their report) wasn't feasible. We then asked UMSL to look at higher traffic levels, those that may occur in the future or under lock construction. **Worthington** asked what rules they looked at**. Hey** said that they suggested locking slowest tows last (ex: recreation vessels first, double tows last). This didn't make much sense to him. **Barr** said that these are the types of comments that need to be discussed. He then asked about the other strategies used in the report. **Astrack** said that there were 4-5 strategies considered. They recommended that at higher traffic levels re-sequencing and appointment scheduling may help the system work more efficiently. **Naramore** added that the practicality of implementation – on paper vs. in practice was acknowledged, but only fleetingly. **Knapper** expressed concern about how the report mentioned winners and losers…Who will be the losers? **Rhode** said that Marc2000 will be sending written comments. He can provide a 30 second comment now, but will provide written comments to Carr and Astrack. **Barr** said that he appreciated Mr. Knapper's attendance at this ECC meeting and we want to discuss these items. **Rhode** added that the proposals don't address the issues of locking time and the processing issues of locking a 1200' tow. **Worthington** asked: your comment is that it doesn't address the primary constraint to efficiency? **Rhode** said this is correct. **Astract** reminded everyone that this was only a sample test of the lower five locks. Also, this is only one of the schemes, and this is not something that will be implemented right now. The largest benefit found was during construction. **Worthington** asked Paul Rhode and Jerry Knapper if they were challenging the premise that some kind of sequencing could potentially reduce queue length and make the system more efficient. Does that seem counterintuitive? **Knapper** said that this isn't counterintuitive. Restated that in the report it is absent who loses and what conditions cause winners and losers. He also asked what kind of price difference users pay at the lock. **Hey** said that part of the efficiency of 1200' locks is the economy of moving more barges in a single tow. The purpose for expanding these locks is the more efficient tow times, but now UMSL is recommending setting aside these double tows and putting the recreation vessels first. He realizes that this is a study and is not set in stone, but this report gets a lot of people thinking. The purpose of the locks and dams is for navigation and secondarily for recreation. We need to keep this in mind and not give recreation vessels first priority. **Astrack** explained the different strategies in the report. They first looked at first come/first served. Then they looked at fastest first. Then they looked at some combinations. They also looked at the direction of the lock, to reduce turnaround (fastest up bound followed by fastest down bound). **Knapper** asked if NED benefits justified this. He asked what price we pay to gain this efficiency? **Manguno** said that originally the study showed that the benefits of the scheduling were so modest that the disruptions weren't worth it. The benefits were not sufficiently large to justify costs (additional wait time to some losers). Those considerations that Knapper has mentioned haven't gone unnoticed. **Naramore** said that the report talks about self-regulating vs. appointment scheduling; however, it doesn't seem to compare the two or look at self-regulating behavior under each

scheme. She asked is there any sense of how divergent, with self-regulating behavior, some of the schemes recommended in the report are? How different are these schemes from what is currently happening? This is a big issue as to acceptability. **Carr** said we turned to industry for comments on this. **Rhode** said that his group would provide these comments to the report writers. **Hey** mentioned that he was surprised to see Sweeney's name on this. He knows that Sweeney is very aware of how the industry works together to increase efficiency. Curiously this doesn't seem to be in the report. It needs to recognize the work that the industry does i.e. self-help, allow recreation boaters to lock through first in the evenings. There are a lot of unwritten procedures being followed on the river that aren't being recognized in this report. He thinks we are putting a lot on the lock masters to make decisions as to which appointment scheduling system to use. There could be a lot of wrath if they guess wrong. Finally, he said that the Corps has gone through a lot of effort to try to minimize lock delays during potential construction. He is wondering if the study authors are aware of this work. **Worthington** said that the Corps is working on measures to reduce delays during construction, but hasn't decided how to do this. That is one of the points of the study…how do we reduce delays during construction. **Hey** said that it is nice that the Corps recognized those obstructions ahead and tried to find ways to reduce delays. However, he doesn't think that changing the whole queue is a solution. **Barr** said that this was one of the comments from the National Research Council (NRC) – even after we described in detail industry self-help they still wanted more research on appointment scheduling. **Carr** stated it's good that we have reaction to the study. Please send comments and authors of the study will respond. **Barr** said that in the future the Corps will do a better job of summarizing these reports at ECC Meetings.

- Slide 2 - **Manguno** discussed the economic modeling flow chart. The purpose is to elaborate on how the pieces fit together. Equilibrium Traffic & Benefits is derived from the survey model. The Survey model is a single model to generate system benefits that replaces the Essence and Tow Cost models. There are a variety of inputs: Waterborne Commerce Statistics Center data, Lock Performance, Monitoring Data (LPMS) and Origin/Destination commodity flows. Using same transportation rate data as in past. The traffic and rates are combined and become individual movements in Survey model. New: shipper response studies which are one of NETS products to have empirical basis for demand curves. This work replaces upper and lower bound elasticity. This will allow us to shape the demand curves for both Grain and non-Grain. The Shipper Response Study is done by Ken Train and Wes Wilson. Tonnage, rates, and shipper responses create movements in survey model. Future traffic forecasts. The Grain Forecasting model, a NETS product, is replacing the Sparks work on Scenarios from the Feasibility Study. The Non-Grain forecasts will not be done as an explicit model. Lewis Berger and Associates has a contract to develop non-grain forecasts. We can combine the Grain and non-Grain to come up with total forecasts of future unconstrained traffic. The Waterway Analysis model is not being updated. This model studies relationship between traffic volume and expected delay. The study team will use the transit curves that were developed in the Feasibility Study. **Beorkrem** asked: With 2 different contractors doing models/forecasts of Grain and Non-grain: their methodologies may be different- what do you do? **Manguno** said that there are extra levels of coordination that will need to be made…which we are aware of. In the Grain model there are assumptions about ethanol…which means crop production…which means changes in fertilizer use. We

are sharing pieces from the grain model with the non-grain researcher to minimize problems of non-communication. **Worthington** said that we are in a less than ideal point of having a model for grain and only having a forecast for non-grain. What are the differences? **Manguno** reminded people of the Sparks Scenarios. Once you had the scenarios you couldn't go back and change one influence and see what effect it would have. With a model you have these relationships explicitly defined and can tweak these assumptions and see how that changes the output. We will only be able to do this for grain with the model. For non-grain we are using more of a traditional approach. We would like to get a model for each commodity but we aren't there yet. **Barr** asked in terms of scenarios and uncertainty bands where can we manipulate to represent the scenarios? **Manguno** said that things haven't really changed. **Barr** asked about the timeframe and the process that we are going to use. **Manguno** said that we need to get this final version of the Grain Model out for everyone to comment on. We've scheduled and moved the Grain Model Workshop several times. The workshop will be a beginning point for comments and to engage in conversations about other scenarios. We will find out if there are other considerations that we need to be investigating. There should be interesting range of different kind of things in these scenarios. Ethanol is certainly one of the key components of this. **Spitzack** said that the process is to begin to expand the scenarios at the workshop, but that it can't all be done then…there will be more work done in the following 6 weeks. **Manguno** - said that time is getting tight, and we still don't have a final product. However, we have already distributed an earlier draft report on the Grain Model. He cautioned the ECC not to pay attention to the bottom line results, as we are modifying some inputs. However, the basic structure and inputs and values being used for key inputs don't change. In terms of giving you more time to work through your comments and recommendations you certainly could use that earlier draft to begin that thought process. We can't say with certainty when we will have the final report. **Spitzack** said that our pivotal date is the end of Feb, as that is when the economists will need the scenarios in order to finish their work. We need to have the workshop no later than the middle of Jan. The results of which would be released in mid-June with public meetings later in the summer.

- **Reevaluation Report Scope (Chuck Spitzack/Rich Astrack) – Attachment 3 and 4 Handouts**

Spitzack described the handouts. He then described the Federal Principal's Group Meeting in July. It called for a broader approach to this evaluation by putting it in context to the National Transportation System. Next, Spitzack discussed the Interim Report, which will in 4 parts: Background, Forecasting and Evaluation Using Updated Data and Models; Recommended Plan as a Component of DOT/MARAD Strategy; and Conclusion/ Recommendations. detail on each section. Send comments on the Interim Report Proposal to Rich Astrack.

- Part 1: Gives a sense of composition and state of the national transportation system. This needs to tie into the National Transportation System Goals which are accessibility, low cost, reliable transportation for all modes and freight. Discussion of goals, objectives, and strategies.
- Part 2: This section includes traditional Corps economic analysis. It discusses the 4 Corps' accounts. This Interim Report is an assessment of the recommended plan with new information and new models; not a re-formulation. The Nation is

faced with critical transportation challenges with congestion and capacity constraints…but our models don't take that into account. We need to understand and describe this. RED – water compelled rates, and induced investments that might come with further investment in the waterway…therefore there may be some more work on the RED. Environmental Quality – The original mitigation plan was developed for the Feasibility Report. We will be doing a sensitivity analysis to determine if the new forecasts would change our predictions for mitigation, but at this point we don't anticipate significant changes to our mitigation plan. Other Social Effects (OSE) account will not be as rigorous as our other models.

- Part 3 – Recommended Plan: First we need to understand the DOT/MARAD strategy. To see/ensure that the waterway is a viable part of the DOT/MARAD strategy. **Beorkrem** Asked for more details on the strategy. **Spitzack** said that this is there National Action Plan of 2003. They want full utilization of all modes of transportation…they feel that roads and rails will reach capacity. **Ron Adams (IA DOT)** asked if US DOT and MARAD are part of the surface transportation strategy meetings? **Spitzack** said yes. He continued with a discussion of the ports. There is surface congestion on the roads and rails reaching the ports. He also mentioned that the Panama Canal was voted on by the citizens of Panama and is going forward. This discussion needs to be included in the report.
- Overall we have assigned PM's for each section. Executive Summary and Introduction – Whitney and Spitzack; Section 1 – Whitney; Section 2 – Astrack; Section 3 – DeZellar; Section 4 – Whitney and Spitzack.
- Part 4 - The outcome of this won't be as definitive as our normal evaluation, just get a sense of whether this will relieve congestion on the national transportation system. See the Conclusions in the Attachment 4. See Recommendation in the Attachment 4. Seven questions answered. **Questions/Comments:**

Beorkrem asked about meeting with the States to get their data. **Spitzack** said that we are initiating this right now. First step is to get with MARAD and then with the States. There are also other sources of data on inter-modal transportation and waterways and we are investigating that now. **Beorkrem** said that there are a lot of questions to answer in 4 months. **Spitzack** replied that we will do as much as possible. This will be a point-in-time report and will probably have recommendations on how to answer these questions.

12 Actions for Change discussion – Gary Loss (refer to Attachment 4, part 4 conclusion, #7). After the actions in New Orleans and Katrina the Corps did a self-analysis to determine how it will work in the future. This summer's Senior Leaders' Conference developed these 12 Actions for Change to ensure that the Corps is the agency that the public expects us to be. We need to ensure Upper Mississippi Navigation Study to fit in with these 12 actions and the new direction of the Corps. He discussed #9 – effectively communicate risk. **Stoerker** asked Loss how he would translate this to the NESP. **Loss** replied that if we delay construction of the ecosystem or navigation efficiency projects we need to convey what the risks and consequences of that action are. Those are the kinds of dialogue that we need to have to make sure everyone knows what they are buying. Also we need to convey maintenance needs to stakeholders better. **Spitzack** said that we tried to incorporate those 12 Actions and better communication in the original Feasibility Study by

having the 3 models and multiple scenarios instead of 1 Benefit/Cost ratio. **Stoerker** said that she is having trouble translating risk analysis from a flood protection project to this type of project. The types of risk are very different: health and safety risk vs. investment risk. Do we have to do more than we did in the Feasibility Study? **Worthington** said that we are trying to do this better. We are focusing on the risk of over or under-investment. **Hey** said that this makes sense to him. **Worthington** said that under the systems based approach…we should be evaluating these improvements in the context of the entire national transportation system. The way that this report will be structured tries to get to a more systematic approach to this study. **Stoerker** commented that Corps' studies always include input from DOT and try to incorporate national transportation scheme, but decision doesn't always incorporate that. We don't have a decision process that allows us to make decisions in a national transportation policy scheme. She's interested in integrating national information into the decision process. Is there a way to integrate that information into our decision process? Is that what is compelling the Administration to have this reevaluation? **Worthington** answered that he doesn't think this is the main compelling factor on the reevaluation. The primary focus is having a better understanding of the Benefit/Cost ratio. The fact that our decision making process doesn't mesh well with the National Transportation Plan isn't a large factor on Capitol Hill. We are trying to get at some of these broad principles which should be part of our decision making process…but how that will play out remains to be seen. **Stoerker** said that right now this seems like a new idea and is not sure if this is speaking directly to the concerns that people have on making an investment on the Upper Miss, we should focus our efforts on increasing confidence rather than on other questions. **Worthington** said that this effort is not precluding us from our other modeling and analysis work. **Spitzack** said that we are hoping to put our new model results in terms of the National Transportation Strategy. The project in the next 20 years we will really be feeling the congestions. We need to get a sense of time…where will we be when we start to see benefits of these projects. Comments on this outline need to be sent to Jack Carr. **Carr** said that any comments/needs on presentations by the authors… should be sent to Jack as well. **Hey** said having the authors of contracted studies at a meeting might be helpful.

- **Partner/Stakeholder Comments:**
  - **Beorkrem** said that it will be very important to get these handouts and other information ASAP. We have to consult with lots of other people. It puts a lot of pressure on us. Quick communication is important so we can be looking at this at the same time that you are looking at it.

Combined NECC/ECC

- **Introduction (Next Meetings)(Ken Barr/Jack Carr)**

  Feb 20-22. UMRBA 1st, NECC/ECC 2nd, and EMPCC 3rd. **Schonhoff** asked if there was some discussion about separating the meetings. **Barr** said that yes we have discussed this, but are trying to model the River Management Council. However there has been some discussion that these are still very technical meetings. Barr would recommend that we give WRDA the opportunity to be authorized and for now try and maintain the good synergies between UMRBA/EMPCC/and NECC-ECC. The

NECC/ECC would meet Feb 21st in St. Louis. After lunch agenda item: different scales of planning and system level objective setting – the EMPCC group may want to participate with this. There is a possibility of having the floodplain workshop as a separate meeting in Moline. **Beorkrem** said that he is concerned that there won't be enough time to cover all of the economics at that meeting. **Barr** said that we will design the agenda as needed keeping in mind we are heading hard and fast toward econ re-evaluation. We may have the Pool Planning Workshop separate from the quarterly meetings? March? UMRCC? **Rhode** asked Worthington…at the last ECC meeting if the Peer Review Provision in the Senate version of WRDA would apply to the Upper Miss Study. What is the status of this? **Worthington:** The fact that we have a Peer Review Process underway for the Interim Report doesn't conform to the Senate provisions, but we would continue with the Peer Review Process that we have started. If the Interim Report would lead to a broader re-evaluation then the Senate Peer Review process may reply. **Loss** said that if WRDA passes and if the Senate Peer Review Process is in the he agrees with Rich that it would apply to any reevaluation study.

- **NESP Program Status** (**Chuck Spitzack/Rich Worthington) –**

  Worthington said that in terms of WRDA the House and Senate passed their versions of the Bill. Conferees have been named and there has been very active work in that Conference Committee. There has been substantial work done at the staff level and they have completed all the work that they can do without the members. Now that the Members are back it is possible for them to complete the work and pass the bill. However, with a new Congress he is not sure if or when they will pass the WRDA. As for Appropriations – it is even more uncertain. There are very huge policy differences between House and Senate. The lame duck Congress could pass an appropriations bill, or they could pass an Omnibus appropriation bill; or they could wait for the new Congress to pass the appropriations bill after January. **Rhode** said that Rich's assessment is good. Some people may have varying opinions as to the level of completion of the staff members' work. He has heard varying reports as to how much the staff has been able to accomplish to get the two versions to look like each other. The Corps' independent review process is one of the big issues. Also, some members of the House are trying to add more projects. Bottom line: no conferees meeting yet. MARC2000 has been running full-page ads in RoleCall calling to get them to meet. MARC2000 is also working to have phone calls into the conferees office to pass WRDA. **Loss** added that Senator Frist spoke 3 weeks ago. Frist thought that the Conference Bill could be reported out today or tomorrow and that could be acted on this week. There was a rumor that Overstar was also pushing for it. **Rhode** said that the change in leadership has really flummoxed everyone as to what they will do and how long they will stay in session.

  Spitzack Study Status – our focus is still on the reevaluation and getting some ecosystem and navigation projects ready for construction in FY08. FY07 goals – 1 shape a planning framework (planning on different scales) for individual planning process – for assistance to project reviewers. On the Navigation side we will have a framework for implementation – Nav team will refine that this summer. The result will be a revised 15-year plan and funding stream. **Beorkrem** asked if the teams are far enough along on the pre-engineering to determine if we are holding to the cost estimates. **Spitzack** said that the costs are holding pretty firm – there are some increases in materials costs, but quantities and approach remain constant.

Whitney – FY06 Summary (Attachments 5a, 5b, and 5c) – We are very pleased with the progress that the teams are making under the restricted budget. They are scheduling activities by keeping in mind that we want to get to construction in FY08. What we have attempted to do is to package our project report in similar formats. We recognize that you won't want to look at every project, but there may be some projects that you wanted specific information, so we sent you the entire package. He asked the group for their thoughts on information contained in the Project Reports. We would like to publish these on the web, but would fist like your comments on them. **Beorkrem** said that it was good to get all that detail. We don't all need that information, and he's not sure that the public is ready for this. He appreciated that ability to comment on what the report contains. **Whitney** asked for any thought/edits/comments to us by Dec 1, so we can make the changes and get them on the web. **Beorkrem** wanted the Corps to recognize that we only have 2 people from each state review these documents. **Schonhoff** said that there are individual PDT members from each state who are reviewing these report. **Whitney** said that this is something that does need to be reviewed by the State to make sure that each project PDT list has the correct State contact on it. **Beorkrem** – said that there is some concern about the level of cost sharing both for the projects cost-sharing and the project support from the States.

FY07 Work Plan (Attachment 6) – The study teams have worked and discussed the FY07 projects with keeping an FY08 construction in mind. We are assuming a $10mill appropriation for FY07. We have $12.3 mill of additional capability. $2 mill is going directly toward the economic re-evaluation study. **Rhode** asked about the effects of the re-evaluation work? **Whitney** said that right now the re-evaluation is supposed to be finalized in Sept of 2007, so the $2 mil will get us to that completion. However, if there is a further re-evaluation that may impact 2008 and beyond. **Beorkrem** asked about the Corps' appropriation process. What was the Corp's Division request for the FY08 budget and how much will you get? **Loss** We won't know until Feb. and the President's budget.

11:45 Lunch

- **NESP Public Involvement (Kevin Bluhm) – Attachment 7 PowerPoint, Attachment 8 – Handout**

Bluhm showed his slide presentation. Next Kevin talked about where does the Public Involvement team go from- scale plan for the website in the future. He will be asking people this week to see who would be able to help us on this. It is obvious that not everyone has the same opinion as to what the website should be. He also mentioned that the cost for the web user survey was less than $5k. **Schonhoff** recommended that the website be able to have people ask questions and have them answered. **Bluhm** agreed that this would be good. The sites that have done this successfully are ones that have someone assigned to monitor and respond on a daily basis. **Benjamin** asked if the Corps would develop several alternatives (Yugo to Cadillac type of plans). **Bluhm** said that he tried to just develop a plan, but maybe a modular plan is the most practical. The challenge is to make sure everyone is on board as to what is the overall goal. **Benjamin** said that the systemic PI plan is $75k, which is pretty small. Is this the only aspect of this, what should be done this year to keep the public involved? **Bluhm** said that this is only one part of this years' plan. On top of the website we are developing a Fast Plan for if WRDA is authorized. We will need to have a roll-out plan if/when that

happens. We have $500k of additional capabilities. **Spitzack** said that there will be public involvement with the reevaluation effort. We will be reaching out to the public as well. **Barr** added that Kevin's team supports the NEPA public meetings for individual projects as well. **Naramore** said that UMRBA tries to help people with questions on finding NESP information. She said that the meeting minutes are very difficult to find because they are in the old study minutes (on the Nav Study Website). **Bluhm** said that we have had some changes to the website. We used to publish all meeting announcements, but now we are only showing the Corps sponsored meetings. **Schonhoff** asked if it would be easy to put a link on the page to the current minutes. **Bluhm** said that now we have a "What's New" area are putting those links to there. So current minutes, reports, etc. are put there. **Sternburg** mentioned the problems on accessing the site – it takes too long to load on her computer. She is concerned about the public getting to the website. **Bluhm** said the he is aware of this, the Rock Island IM guys are working on this. **Beorkrem** asked when the Public Meetings for the Interim Report will be held. **Astrack** said that it should be August. **Bluhm** said that he will be around for a few days, please contact him with any comments.

- **Ecosystem Work Plan (Ken Barr) – Attachment 9 - PowerPoint**

  Barr displayed the FY07 Ecosystem Work Plan. He discussed current Corps planning efforts with those of NESP. For Water Level Management (WLM) the Districts used to do just an EA, but there was no separate planning document. Under NESP WLM will require a Project Implementation Report (PIR), so it will look different from what we traditionally did with O&M. However other projects had more detailed decision document…such as Schiniman Chute…the level of detail in the PIR will look very similar to the HREP Feasibility Report. The third project type he compared was Wing-Dam Dike Alteration, which is typically also a simple O&M document but may need to have a more detailed PIR. These are three examples of the level of planning that we have done in the past and what we may need to do in the future. These are some of the issues that our planners have been struggling with. Slide 3 –This has to do with different scales of planning – site, pool, geomorphic reach, and systemic planning. We hope to have the Draft Reach Planning Report (Pool 18, Harlow, and Pool 5) distributed in January. We hope to have a Workshop on Reach Planning in February. Slide 6– when planning moves from site specific to reach and systemic there will have to be less detail. When you get to the Pool Scale (slide 9) – this is again a different resolution from site planning. Geomorphic Reaches (slide 10) – we usually talk about 4 (Upstream of the Quad City Area (QCA) is impounded without levees; Downstream of the QCA is impounded with levees; the unimpounded reach of the Mississippi and the ILWW). These 4 reaches are what we have recently used. However, we are starting to consider the 12 geomorphic reaches from the Cumulative Effects Report. This more refined geomorphic reach process may be another planning scale. **Pierce County Example** (slides 11-16) – **Benjamin** said that WIDNR put this forward as a floodplain project. The State is fully aware that there is only a portion that WIDNR would be cost sharing. They hoped that this project would be considered as a whole, rather than splitting it up into several projects. Island Dredging, floodplain restoration, …what is the scale of the project – site, reach…Right now this has been a discussion between WIDNR and the Corps, but MNDNR will need to be involved. There are a lot of different planning concerns that came forward as we came to look at this project. Wisconsin has cost-sharing money now, but we don't know about the future. We'd like to see this move together in some sort of package, but not sure how this will go. As for

project types – one would be to reconstruct some water level management levels for waterfowl in a state-inviolate areas. The other management areas – island dissection issues, MN River is a big influence to this area has caused a loss of aquatic vegetation, particularly SAV. **DeZellar** said that as the PDT team leader they originally downsized the scope of the project. WIDNR then sent a letter that requested that the entire project area (900 acres) be considered…and that many planners in MVP see the validity of the WIDNR letter. **Benjamin** said that in the Feasibility Report we said we were going to do "x" number island and "x" number backwaters…but we don't do these individually out there, we combine them (sort of like you wouldn't build a lock without a dam). **Schlagenhaft** said that we have targeted goals for NESP. This project points out the need to integrate this work. We need to have a discussion as to how we need to do this. We haven't done this very well up to now. **Beorkrem** asked if this project would be part of the State's planning for its TMDL goals. **Benjamin** said that this could certainly apply. **Beorkrem** asked if Gretchen was involved in the TMDL goals? **Benjamin** said that there is a project manager on her team that is working on TMDL and that this project could be put in the models for TMDL. This is a Science Panel question that we hope they could answer for us…so we can see how we can put this into our TMDL. **Duyvejonck** asked us do we incorporate this into our Goals and Objectives? If we don't have a consensus on these how do we evaluate how well this project can meet this. **Barr** said that the Goal and Objectives and the Decisions Support System is a work in progress, but will apply to this. **DeZellar** said that this is certainly too small of a scale to be included as a reach plan. **Barr** said that we originally were looking for floodplain restoration projects that we could show the willing support for this part of program. **Benjamin** said that when she originally offered it WINDR wasn't sure if this should be floodplain or what. **Worthington** said that he didn't see any Corps issues…you can implement as a single project and then formulate costs on the individual components. He asked if the entire complex was under the $25mil limit. **Benjamin** said yes – it is about $15 million.

- **Fish Entrainment** (**Mark Cornish) – Attachment 10 - Handout**

  The American Beauty is a Class B Kort Nozzle vessel. Cornish thanked ARTCO and ADM for support this work. This summer was the worst case scenario with the low water conditions. The sampling took place in ½ hour to 1 hour cycles. Alton Pool, Marseilles Pool and the Middle Mississippi will be completed this fall. Figure 3 on the handout does not show all the fish species entrained, it only shows the fish species that were entrained and had damage done to them. Fish of interest – Blue gill (not expect to see them because they tend to be in backwaters) – this may be a function of the low water conditions. **Wilcox** asked if the numbers were for the entire 500 miles. **Cornish** said that the data says "as of Sept 2006" so he thinks that this is the entire 500 miles. **Wilcox** said that if this is the case then this is a remarkably small number of fish compared to power plants on the UMR.

  Cornish continued – he mentioned that Tow props are 6 inches thick – so are much more blunt than recreational boats. **Species of Interest** Paddle Fish –all the Paddle Fish were found in the lower Alton Pool by Grafton. **Catch Variability –** seems to be variability based on depth. We are learning a lot about main channel use of fish. **Sampling Issues** – The Middle Mississippi River is a very difficult area to sample - lots of large debris such as logs. Net damaged fish – heads get stuck in net and are ripped

off or seem to be getting some eye damage. **Barr** said that we are learning a lot. We determined that the big fish would move out of the way, and we are learning that this isn't always the case. However, since this is 500 miles of data, it does seem like most are getting out of the way. We are considering different extrapolation methods. We are also looking at a population model framework – age class structure. Hope to end this fieldwork in June/July 2007. **FY07 Work Plan** Night collection may help us to complete the study, but this is very dangerous work and we need to consider this. The Middle Mississippi River is still very difficult due to debris and the need to keep the boat moving at all times. Will also do some Net Effects Study – throw some fish into the net behind the tow and see if they pass through the net and what damage was done. **Schonhoff** asked if there were some fish that survived the entrainment. If so, could they be held and see if there is delayed mortality? How do we know what is done by the net and done by the prop? We also need to calibrate some of the efficiency of the net. Throw marked fish out in front of the net to see if we get them all. Also how many small fish are being chopped up and pushed through the net? **Cornish** said that all good science leads to more questions. This is really a landmark study. **Schonhoff** said that it was very worthwhile for him to have gone out on the boat. He could really see things, especially how much they pull on the bends. **Barr** wondered that with every half hour the barge is stopping and then powering back up – he was wondering if that powering up was swaying the results. **Schlagenhaft** asked about how we know what effect this has on the overall fish population in the river. **Cornish** agreed that this is an area we still need to study. **Johnson** asked what the final publication will be. How will that be reviewed? **Cornish** said this would be a publication like the Green Reports and will go through normal ITR, usually with contracted experts that are identified through the NECC. **Beorkrem** asked about publishing this in a peer reviewed publication. **Barr** said that Jack Kilgore will probably publish this. **Wilcox** said that there has been Section 316 A&B demonstration on receiving waters. We made good use of these studies on estimating fish eggs and larvae in the water. We made better estimates based on this information. We made use of many of the same types of models as well to determine production forgone. What has not been done is a cumulative effect study of fish losses from industrial uses (barge and power plants). There is supposed to be another 316 review by the EPA and States at power plants. **Johnson** said that they support the publication of this data as well.

Cornish had some Draft Submersed Aquatic Vegetation 2nd year sampling reports with him. The Draft was distributed to interested NECC members. He wants to get comments ASAP so it can be finalized before Christmas.

- **Environmental Components of Reevaluation Report (Ken Barr)**

  Barr said this will be looking at the single, recommended plan for Navigation Efficiency. It will not include a re-evaluation of the ecosystem restoration. The cost to avoid/minimize/or mitigates (AMM) these impacts are taken into account. We will be doing threshold evaluation to see if there will be any changes in our AMM estimates. We don't anticipate any changes from footprint effects. When we get the "With Project" and "Without Project" traffic projections in May then we will review system mitigation requirements. If we still think that we have a close approximation of

reasonable worst case we will coordinate with the NECC; otherwise we may have to start up our fish models again and meet with you regarding the results of these models.

- **Fish Passage (Mark Cornish) – Attachment 11 - PowerPoint**

  Schonhoff asked how the counts were established – are they an extrapolation or actual count? **Cornish** said that the 85,000 is an extrapolation from the survey. **Johnson** asked about the smaller fish – what size do you do fish estimates on? **Cornish** said that they could monitor down to about 5 inches. **Cornish** continued – **2006 Telemetry** – he said that the Skipjack Herring did not survive the tagging, so took those tags and put them on the other fish. We are working with other tagging efforts to share information. **Cornish** also talked about incorporating experimental design into these fish passage.

  Questions/Comments:

  Wilcox said that there are a few other studies that are being worked on: a hydroacoustic monitoring system – stationary hydroacoustic monitors that would count the number of fish that pass through the fish passage; location of fish in the tailwaters and the hydraulic conditions of the tailwaters.

  Beorkrem asked about some of the operation and maintenance concerns of fish passage? **Cornish** said that there may be a debris issue. There may be some maintenance issues. **Schonhoff** asked about putting a chevron in front of the passageway to keep the debris away from it. **Cornish** agreed that this could work. We will model this, but we have to have no impact to flood heights and need to make sure we protect the bridge from ice. **Yess** asked about overall life expectancy of the fish passage? **Cornish** said that they are designed for 50-year project life and 200-year flood heights. **Schonhoff** asked about how the fishway will be designed and what will pass through it. **Cornish** said that they are considering 38 species, but assume that more will be affected.

- **Partner/ Stakeholder Comments (Group)**
  - **Naramore –** UMRBA meeting will be talking about a proposal to look at Clean Water Act work (TMDL) and Ecosystem Restoration Work (NESP,EMP…). The draft proposal is in the UMRBA packet. The initial attempt is fairly modest to get people who are involved with this to meet and talk to about the intersections of the two programs.
  - **Loss –** said that he was happy to see everyone here.
  - **Soileau** – said that Rhode asked to have everyone limit email attachments to 2 per message and have a quick summary of the attachments in the message of the email to help Blackberry users. **Naramore** replied the some people don't want lots of emails.
  - **Starbuck –** 15x15x15 – 15 billion bushels corn, 15 billion gallons ethanol by 2015 Report. This will impact exports… we will release this soon. We asked for pricing on the effect of closing 1-2 locks if we had an extended closing of LaGrange and Lock 25. Deadline to respond is the 20th. This would be water compelled rate analysis. What effects would it have on corn and exports? What effect it would have on transportation on truck/rail/barge? We haven't picked who will be doing this work. **Worthington** asked about the current corn harvest – NCGA - this year it was 10.7

- **Benjamin –** Mentioned that due to the FY07 Economic Re-evaluation work Navigation Efficiency is once again receiving more funding than Ecosystem Restoration.
- **Smith –** This has been very informative and very impressive that you have such a diverse group and large area that has been able to show solidarity.
- **Sternburg –**enjoyed attending the Fish Passage Science Panel meeting to see how each is working and how they are working off of each other. This was very helpful.
- **Beorkrem –** MRBA as an organization will be closing down. The NGO community is very interested in the Water Quality and Clean Water Act issues and ecosystem issues.
- **Wilcox** said that this trends well with water transparency in Pool 3. This is the kind of connection between basin restoration and water quality.
- **McGuiness –** We are concerned about the equity of funding between Nav and Ecosystem.
- **Duyvejonck –** Sometime in Jan-March the Rock Island Field office will be moving to Moline.
- **Clevenstine –** Adaptive Management is an important component of the work plan. Encourage that all the partners put down on paper as to what an adaptive management plan is. Barr said that the May NECC/ECC cycle would be a good time to have an adaptive management workshop. Bernie reminded everyone that May is field season again.

- **Adjourn**

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External Peer Review Panel

NESP Navigation Economic Re-evaluation

Center for Expertise for Inland Navigation
Wesley Walker & Rebecca Soileau

Presented to:

Environmental Coordination Committee
St. Paul, Minnesota
14 November 2006

US Army Corps of Engineers

Objective & Background

Background– The Corps of Engineers study team is scheduled to produce an Interim Report by September 2007 which is focused on the re-analysis of the National Economic Development (NED) benefits of the recommended plan for navigation efficiency, but will also consider the other three accounts: Regional Economic Development (RED), Other Social Effects and Environmental quality.

Objective – To secure external technical expertise needed for the review and evaluation of the latest forecasting model inputs, outputs, and documentation relative to the UMR-IWW Inland Navigation System.

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PCXIN

- **Planning Center for Expertise for Inland Navigation….**
  With responsibility for establishing guidance and providing oversight of External Peer Review and Independent Technical Review

- **Wes Walker**
- **Rebecca Soileau**

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Reevaluation PDT

Members

Rich Worthington (HQ)	Vertical Team - HQ
Terry Smith (MVD)	Vertical Team - MVD
Chuck Spitzack (MVR)	Regional PM
Rich Astrack (MVS)	PDT Leader
Scott Whitney (MVR)	Project Manager
Jeff DeZellar (MVP)	Project Manager
Rich Manguno (MVN)	Economics TM
Ken Barr (MVR)	Environmental TM
Jeff Stamper (MVS)	Engineering TM
Jack Carr (MVR)	Economist
Dave Kelly (MVS)	Economist
Jeff McGrath (MVP)	Economist
Mary Hanson (MVR)	Writer - Editor

US Army Corps of Engineers

Panel Selection Process

- Developed Work Outline
- Request for nominations sent to State and Federal Partners
- Identified potential External Candidates from nominations
- Requested vitas and statement of interest
- Nomination list based on special expertise, level, and breadth of experience
- Selection approval by CPXIN

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External Peer Review Panel

- John Beghin
- Stephen Fuller
- Alexander Metcalf
- Darryl Ray
- Denver Tolliver

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Dr. John Beghin

- **Affiliation**
  - Professor of Economics and Marlin Cole Chair in international agricultural economics at Iowa State University
  - Co-director of the Food and Agricultural Policy Research Institute (FAPRI)
  - Head of the Trade and Agricultural Policy Division of the Center for Agricultural and Rural Development
- **Related Expertise**
  - Trade Policy Analysis
  - The interface between trade, the environment, and development
  - Extensive modeling experience in international trade related to agricultural markets and the environment

US Army Corps of Engineers®

Dr. Stephen Fuller

- **Affiliation**
  - Regents Professor in the Department of Agricultural Economics at Texas A&M University in College Station, Texas.
- **Related Expertise**
  - Agricultural transportation, marketing and international trade
  - Research on: Panama Canal, UMRS freight transportation demands, railroad pricing
  - Construction of spatial grain equilibrium models
  - Effects of lock congestion on grain barge rates

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Dr. Alexander Metcalf

- **Affiliation**
  - President of Transportation Economics & Management Systems, Inc. (TEMS)
  - PhD in Transportation Economics from the London University
- **Related Expertise**
  - Internationally recognized authority in inter-modal and high speed rail economics, business planning, demand forecasting
  - Economic and financial analysis and transportation models and systems.
  - Developed passenger demand forecasting models that use the latest stated preference and behavioral analysis for demand forecasting

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Dr. Darryl Ray

- **Affiliation**
  - Director of the Agricultural Policy Analysis Center, University of Tennessee
  - The Blasingame Chair of Excellence in Agricultural Policy, professor of agricultural economics
- **Related Expertise**
  - Developing computer models for the U.S. crop agricultural sector and the agricultural commodity policy simulation model used by the U.S. Department of Agriculture.

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Dr. Denver Tolliver

- **Affiliation**
  - Associate Director and Senior Research Fellow at the Upper Great Plains Transportation Institute of North Dakota State University
  - Director of PhD program in Transportation & Logistics
- **Related Expertise**
  - Rail planner for the North Dakota Department of Transportation
  - Highway and railroad planning and economic analysis
  - Benefit-cost analysis
  - Grain transportation
  - environmental and energy impact analysis

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Products for Review

- **Second CRA ----Through Jan 31**
  - **Long-Term Forecasting of Commodity Flows on the Mississippi River; Applications to Grains and World Trade**
  - **Concepts for nontraditional navigation benefits SOW**
  - **Survey Model**

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Products for Review

- **Jan 31 – Sept 07:**
  - Non-Grain Traffic Forecast
  - Development of Demand Curves for Grain and non-grain commodities
  - TVA Transportation Rate Study (limited)
  - Socio/Economics Economic Analysis model runs
  - Scenarios from PDT

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Estimated Schedule

- **First CRA – through Nov 17**
  - Introductory Meeting of EPR Panel — Nov 12-13
- **Second CRA -- through Jan 31**
  - Grain Forecasting Model
  - Concepts for Non-traditional benefits scoping
  - Survey Model
- **Possible Meetings**
  - NETS Grain Forecasting Model — Jan/Feb
  - Non-grain and Elasticity — April
  - Draft Interim Report — June

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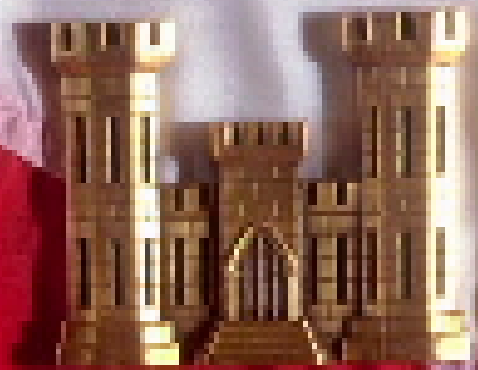
Review Process

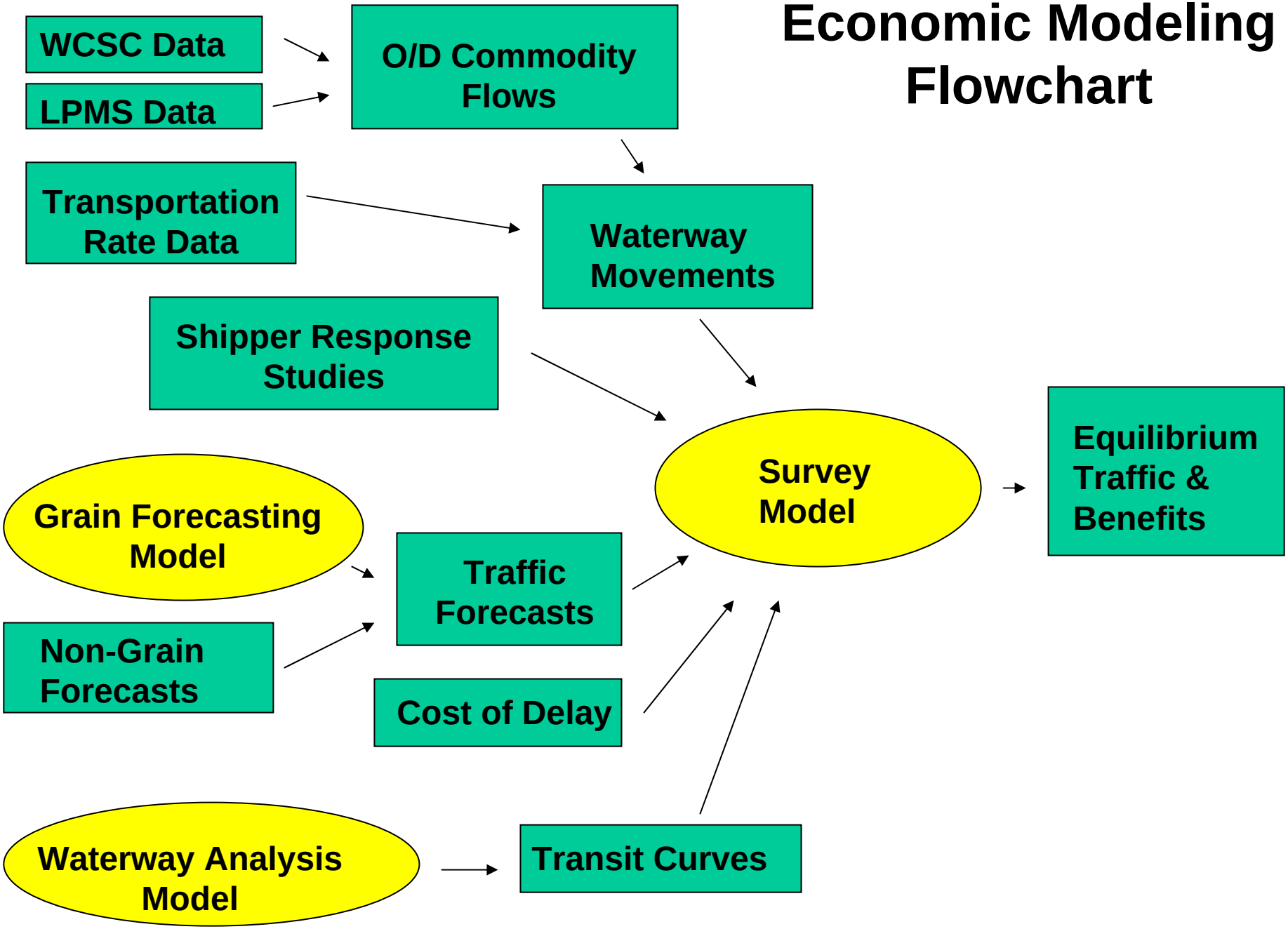
- EPR Panel conducts individual reviews of each document
- Comments are returned to the CPXIN for distribution to PDT for responses.
- Comments and responses are returned to the EPR Panel Members via the CPXIN
- EPR panel members attend workshops on key products with ECC and ITR members
- Each EPR Panel member submits a letter report following review of a preliminary draft of the Interim Report.

Presentation
to the
UMR-IWW System Navigation Study
NECC/ECC
St. Paul MN, November 14, 2006



by
Jack Carr
Economic and Environmental Analysis Branch
U.S. Army Engineer district, Rock Island District,
Rock Island, Illinois

Economic Modeling Flowchart



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NED Analysis

Demand Curves (NETS)

- **Principal Investigators –**
  Kenneth Train – University of California, Berkeley
  Wesley Wilson - University of Oregon.

- **Field Work (Surveys) for non-grain commodities to be completed in December 2006. This is a delay due to low response rate.**

- **Grain re-surveys completed; processing of data underway.**

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NED Analysis

Traffic Forecast – Grain (NETS)

- **Principal Investigator –**
  William Wilson - North Dakota State University.
- **Additional calibration identified - Model developers making model calibration changes responding to PDT comments.**

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NED Analysis

Traffic Forecast – Non-Grain (NESP)

- Contract awarded to Louis Berger Group, Inc.

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NED Analysis

Transportation Rates (NESP)

- Contract awarded to Tennessee Valley Authority (TVA).
- Field interviews with grain terminals and major non-grain terminals is complete.
- Telephone interviews are continuing.
- Processing of data is underway.

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NED Analysis

Demand Management (formerly Appointment Scheduling)

- Draft report complete
- Comment period underway

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NED Analysis

What's Next?

- Grain Model Workshop

(DRAFT) INTERIM REPORT
15 November 2006

EXECUTIVE SUMMARY

INTRODUCTION

PART 1 – BACKGROUND

- NATIONAL TRANSPORTATION SYSTEM
- INLAND NAVIGATION SYSTEM
- UPPER MISSISSIPPI RIVER SYSTEM
- RECOMMENDED PLAN

PART 2 – FORECASTING AND EVALUATION USING UPDATED DATA AND MODELS

- SYSTEM OF EVALUATION ACCOUNTS
- REASONABLY EXPECTED FUTURES
- NATIONAL ECONOMIC DEVELOPMENT (NED)
  - Commercial Navigation Benefits
  - Recreation Benefits
  - Evaluation Limitations and Uncertainties
  - Limited Quantification of Benefits Considering Capacity Constraints and Congestion in Alternative Modes
  - Summary of NED Findings
- REGIONAL ECONOMIC DEVELOPMENT (RED)
- ENVIRONMENTAL QUALITY EFFECTS (EQE)
- OTHER SOCIAL EFFECTS (OSE)

PART 3 – RECOMMENDED PLAN AS A COMPONENT OF DOT/MARAD STRATEGY TO REDUCE CONGESTION BY INCREASING UTILIZATION OF WATERWAYS

- DOT/MARAD STRATEGY
- RECOMMENDED PLAN AS A COMPONENT OF THE STRATEGY
  - Overcoming barriers and facilitating increased utilization of the UMRS.
  - Potential impact on demand for commercial navigation, if barriers are overcome.
  - Direct and indirect benefits associated with increased utilization.

PART 4 – CONCLUSIONS AND RECOMMENDATIONS

Attach

11/12/06

INTERIM REPORT
DRAFT OUTLINE

A. EXECUTIVE SUMMARY

B. INTRODUCTION

1. Purpose.

The purpose of the Interim Report is to present findings on reevaluation of the Recommended Plan as put forth in the Chief's Report (December 2004) for the UMR-IWW System Navigation Feasibility Study.

2. Why a reevaluation.

Reevaluation is included as a provision of the Recommended Plan as a means to manage risk associated with an uncertain future. Project delivery for the first increment of improvements, including seven 1200-ft locks, is a lengthy process and allows for reevaluation as new data and tools come available. It was expected that reevaluation would be done 5-7 years after completion of the feasibility study, but is being done now at the request of the Assistant Secretary of Army for Civil Works.

3. Economic analysis.

Economic analysis for the reevaluation includes two complementary and additive pieces done to different degrees of rigor and sophistication. The first updates the analysis and evaluation accomplished as part of the feasibility study using updated data and forecasting tools. This first piece meets criteria established in Corps guidance for economic evaluation of proposed navigation projects. *However, the tools and methodologies used in this evaluation do not address projections of increasing capacity constraints and congestion affecting other freight transportation modes and do not address impacts of system reliability on willingness to use or invest.* The other piece of the reevaluation attempts to address these issues. Lacking adequate data and tools, the latter piece consists of narratives and gross assessments based on anecdotal data and limited analysis. Considering that the period of analysis will not start for about 15 years from now and extend from there into the future, uncertainty will remain significant no matter the degree of sophistication used as a basis for the forecasts. The downside risk associated with not moving forward in the face of uncertainty remains.

NOTE: *We need to be careful to be clear about the level of detail and quality of analysis that can be accomplished. We don't want to leave the impression that the models don't meet the basic requirements of reanalysis. We should state that the with respect to alternative mode capacity, the new benefit model follows the directive of Principles & Guidelines. Part of the "other piece" work is to try to document the specific evidence of alternative mode limitations required by P&G.*

4. Format and content of the Interim Report.

The Interim Report is presented in four parts. Part 1 starts broadly with the nature of the national freight transportation system, including importance, national transportation goal, characteristics, current state of acceptability, and national strategic objectives, drawing heavily on information provided through the Department of Transportation. This is followed by more detailed looks at the Inland Navigation System and Upper Mississippi River System (UMRS) as a subset of it. The first part concludes with a description of the Recommended Plan. Part 2 presents the reevaluation consistent with what was done during the feasibility study, using updated economic data and models, revised scenarios, and other refinements. The presentation is consistent with the four evaluation accounts of national economic development, regional economic development, environmental quality, and other social effects. The second part concludes with an assessment of model limitations and uncertainty, including the limitations associated with not considering increasing capacity constraints and congestion across the nation's freight transportation network, which affects demand forecasts and benefits. Part 3 presents the Recommended Plan as a component in the Department of Transportation strategy for reducing congestion by increasing utilization of the Inland Navigation System. Part 4 summarizes findings and results and brings the reevaluation to conclusion with an updated recommendation.

PART 1 - BACKGROUND

C. NATIONAL TRANSPORTATION SYSTEM

1. Transportation affects our standard of living and quality of life.
   - National production/productivity
   - International competitiveness/role of transportation in National agricultural policy
   - Regional development
   - Mobility

2. Transportation goal.
   - Accessible, low cost, reliable, fast, and safe

3. Transportation characteristics
   - Multimodal – water, rail, road, air, pipeline
   - Mix commuter and freight
   - Public – private
   - Private decision/investment – maximize profits/return on investment
   - Public decisions/investment – maximize national/regional economic development through public policy (planning, regulation, incentives, and direct investment) that serve to guide private investment in the best interest of the public. Direct federal investment is generally road and water infrastructure.

4. Current gross assessment of the national freight transportation system.
   - Current state of freight transportation – rail, road, water.
   - Expected growth in freight movement.
   - Challenges … investments in transportation infrastructure are not meeting needs.

5. International transportation network.
   - Panama Canal.

6. National transportation objectives and strategies.
   - Department of Transportation
   - Maritime Administration

D. INLAND NAVIGATION SYSTEM

1. System characteristics.
   - Features.
   - Past and current use of the system.

2. Public investment – operation, maintenance, rehabilitation, and enhancement.
   - Annual expenditure by category.

3. Investment priorities.
   - System assessments.
   - Inland Waterways Users Board (IWUB) – recommend priorities for investment that will be partially funded by the Inland Waterways Trust Fund.
   - Recommended Plan aligns with priorities of the IWUB.

E. UPPER MISSISSIPPI RIVER SYSTEM (UMRS)

1. System characteristics.
   - Features.
   - Use of the system.
   - Managing for navigation in a multipurpose environment

2. Public investment – operation, maintenance, rehabilitation, and enhancement.
   - Annual expenditure in each category
   - Replacement cost of system

3. System problems leading to feasibility study.
   - Capacity
   - Reliability.

F. UMRS – RECOMMENDED PLAN FOR NAVIGATION

1. Planning objectives.
   - Couch planning objectives in P&G – "Efficiency, Effectiveness, Completeness, and Acceptability"
   - Provide safe, reliable, efficient, and sustainable navigation.
   - Address cumulative impacts on the UMRS including ongoing effects of operation and maintenance.
   - Assure that any recommended measures are consistent with protecting the Nation's environment: avoiding, minimizing, or mitigating significant environmental, cultural, or social impacts.

2. Features for framework and first increment.
   - 1200-ft locks.
   - Small scale – switchboats and moorings.
   - Appointment scheduling.
   - Impact on operation, maintenance, and rehabilitation.
   - Impact on ecosystem (system and site specific) and expectations from integrated management for navigation and ecosystem.

3. Efficiency Improvement
   - Transit time.
   - Reliability.
   - System capacity.

PART 2 – FORECAST AND EVALUATION

G. FORECASTING AND EVALUATION USING UPDATED DATA AND MODELS

1. System of evaluation accounts.

2. Reasonably expected futures – is the outcome of an orderly presentation of the factors that affect both the traditional and non-traditional components of analysis for a range of reasonably expected futures.

3. National Economic Development (NED)
   - Forecasting and evaluation data, tools, methods, and procedures.
   - Evaluation assumptions – with and without project
   - Commercial navigation benefits – results of analyses using updated models and data across a range of reasonably expected futures.
   - Recreation benefits - from greater recreation use of the river system … directly because of quicker and more efficient passage through locks … and through synergy with ecosystem restoration and integrated management offset by negative impacts due to higher commercial traffic volumes.

- Evaluation limitations and uncertainties – capacity constraints and congestion in the transportation system, reliability impact on willingness to use and invest, etc.
- Results of limited quantification of benefits considering impacts of capacity constraints and congestion resulting from increasing rail rates in grain model and any alternative traffic forecasts for non-grain (containers for example) based on assuming increasing congestion in alternative modes.
- Summary of NED findings – traditional and non-traditional.

4. Regional Economic Development (RED)
   - Income and employment benefits from direct construction expenditures of the navigation improvements and from transportation efficiencies generated by the alternative.
   - Benefits from water compelled rates.
   - Benefits from induced development.

5. Environmental Quality Effects (EQE)
   - Measures to avoid, minimize, and mitigate
   - Integrated management … healthy and sustainable ecosystem

6. Other Social Effects (OSE).
   - Emissions, accidents, noise, and other impacts
   - Community ties to the river
   - Recreation opportunities – more access to river, more recreation opportunities from integrated management and a healthier ecosystem.
   - Lower cost of goods and less congestion across the region
   - Other pluses and minuses

PART 3 – RECOMMENDED PLAN AS A COMPONENT OF DOT/MARAD STRATEGY TO REDUCE CONGESTION BY INCREASING UTILIZATION OF WATERWAYS

H. DOT/MARAD STRATEGY TO REDUCE TRANSPORTATION CONGESTION BY INCREASING UTILIZATION OF WATERWAYS.

1. Strategy statement.

2. Strategy components.

I. RECOMMENDED PLAN AS A COMPONENT OF THE DOT/MARAD STRATEGY

1. Overcoming barriers and facilitating increased utilization of the UMRS for commercial navigation.

2. Potential impact on demand for marine transportation in the UMR-IWW System.
   - If barriers can be overcome, traffic demand and associated benefits will rise substantially.

3. Direct and indirect benefits associated with increased utilization.
   - NED – increase in freight movement in and out of the UMRS.
   - NED – decrease congestion at west coast ports and in their landside vicinities.
   - NED – decrease congestion at bottlenecks throughout the system.
   - RED – increase
   - EQE – improve … but not necessarily in study area.
   - OSE – improve

PART 4 – CONCLUSIONS AND RECOMMENDATIONS … *NOTE: conclusions and recommendations will be adjusted after results from ongoing investigations and analyses are complete.*

J. CONCLUSIONS

1. Does the Recommended Plan align with expectations of DOT and IWUB?
   - Aligns with DOT and MARAD goals and strategic objectives
   - Aligns with priorities established by the IWUB
   - Aligns with DOT/MARAD strategy to address capacity constraints and congestion

   NOTE: *Considerations of the larger national transportation system used to support the recommended plan are not consistent with current practice, i.e. don't formulate a waterway project to address landside issues.*

2. Is the Recommended Plan reasonably scaled?.
   - Aligns with most heavily used segment of the UMRS
   - Proposed new locks on the UMR fit within the existing footprint of the existing locks and dams to the extent possible. As a result, the cost per lock and environmental impacts are substantially less than those associated with completely new lock and dam complexes that have been built in other locations on the Inland Navigation System.
   - Investment in navigation efficiency constitutes just 2% of the systems replacement value.

3. Do results of traditional economic analyses over a range of reasonably expected futures establish a lower bound on expectations?
   - Economic analysis using updated data and models have addressed some of the criticism of data and models used in the original formulation and evaluation.
   - Limitations in the economic tools, methods, and procedures that do not account for existing and anticipated constraints in other freight transportation modes will most likely under estimate utilization of marine transportation and reduction in congestion on other modes of transportation.

- Economic tools, methods, and procedures do not consider the impacts of system reliability on willingness to use or invest.

4. Does RED, EQE, and OSE analyses support implementation of the Recommended Plan?.
   - Implementation of the Recommended Plan, which includes integrated management of the UMRS, increases appreciation by the public for this national asset and will leverage use of and care for the system far beyond the direct investment.
   - Regional Economic Development will be substantial and sustained.

5. Is the DOT/MARAD strategy applicable and reasonable to the UMRS and, if successfully implemented, will it result in greater utilization of the UMRS? The Recommended Plan becomes a component of the DOT strategy upon implementation.
   - The DOT/MARAD strategy recognizes the need for federal leadership and facilitation in overcoming barriers to greater use of waterways.
   - Implementation of the Recommended Plan, along with other actions in the greater waterway transportation system, will serve as catalysts for intermodal development on the Inland Navigation System, including the UMRS.
   - Successful implementation of the DOT/MARAD strategy will provide an alternative and complement to other intermodal transportation arrangements to increase flexibility and robustness of the national transportation system, one more resilient to system shocks.
   - The DOT/MARAD strategy will increase international competitiveness.

6. Can an ecologically healthy UMRS be achieved and sustained through implementation of the dual purpose Recommended Plan?.

7. Does the Recommended Plan align with the Corps' Civil Works Strategic Plan, Environmental Operating Principles, and 12 Actions for Change? The 12 Actions for Change are –

   - Employ integrated, comprehensive and system-based approach.
   - Employ risk-based concepts in planning, design, construction, operations and maintenance
   - Continuously reassess and update policy for program development, planning guidance, design and construction standards
   - Employ dynamic independent review
   - Employ adaptive planning and engineering systems
   - Focus on sustainability
   - Review and inspect completed works
   - Assess and modify organizational behavior

   - Effectively communicate risk
   - Establish public involvement risk reduction strategies

- Manage and enhance technical expertise and professionalism
- Invest in research

K. RECOMMENDATIONS.

1. ***Recommendation to implement, not implement, or to continue reevaluation will be determined after analysis and other investigations are further along.***
   - As stated in the conclusions, the economic reanalysis most likely encompasses the extent of the downside risk related to implementing the Recommended Plan. On the other hand, the upper bound of benefits most likely exceeds the envelope established by the economic analysis, because of simplifying assumptions related to capacity constraints and congestion in the greater transportation network and disregarding how system unreliability affects willingness to use and invest.
   - Upside potential as part of a successful implementation of the DOT strategy for increasing utilization of waterways for freight is not quantified with any degree of rigor, but suggests it may be significant.

2. ***Need a recommendation(s) regarding traffic management, especially in view of findings that some of this may be effective at increased traffic levels. Also, need to consider some of these measures in managing traffic during construction. Mr. Woodley will want to see some discussion of GPS/"smartlock" kind of technology. Also, need to consider scope, cost, etc. of delivery chain management study and whether such a recommendation is appropriate.***

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM (NESP)

FY06 YEAR-END PROJECT REPORTS

PROGRAMMATIC PROJECTS

Projects Activities	Lead District	Team Leader	District Project Manager
PROGRAMMATIC PROJECTS			
A. Program Management	MVR	Whitney, Scott	Whitney, Scott
B. Institutional Arrangements (PED)	MVP	Soileau, Rebecca	DeZellar, Jeff
C. Systemic Public Involvement	MVP	Bluhm, Kevin	DeZellar, Jeff

3 November 2006

U.S. Army
Corps of Engineers

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
A. Program Management
Team Leader: Scott Whitney

PURPOSE: The purpose of NESP Program Management is to provide necessary oversight, leadership and guidance for all program/project activities to ensure the most efficient, timely and cost effective manner towards the systematic attainment of the programs goals and objectives.

LOCATION: Regional NESP program management is assigned to Rock Island District, however implementation of this important regional program is closely coordinated with Sr. Management, Program Managers and Resource Providers in Rock Island, St. Louis, and St. Paul Corps Districts. Mississippi Valley Division and Corps Headquarter staffs also play an important role in program management decisions, out-year budgets and implementation guidance.

DESCRIPTION: The NESP Program Management Team (PMT) is a well-defined standing team that will stay in place throughout program implementation. Membership consists of the regional project manager, assistant regional project manager, three district project managers, nine technical managers, value engineering and quality manager, MVD District Support Team (DST) program manager, and HQ Regional Integration Team (RIT) program manager. The Program Management Team, in collaboration with stakeholders, drives program execution through adaptive, integrated management. Both project managers and technical managers are instrumental in developing and managing a multi-year program and in developing strategies for specific initiatives, creating project delivery teams, conducting acquisition planning, procuring resource commitments, and facilitating organizational learning. The PMT meets regularly to discuss and seek resolution of program and project issues or challenges.

SUMMARY OF FY06 ACTIVITIES: Fiscal Year 2006 marked year two of NESP's implementation of Pre-construction, Engineering and Design (PED) activities on 34 projects. There were four major considerations that directly influenced the FY06 NESP activities:

(1) Like year one, FY06 started off under a Continuing Resolution Act (CRA), uncertain budget and pending WRDA authorization. The CRA and budget uncertainty forced a very conservative implementation for the first four months. Anticipated funding of $12M did not materialize and the PMT had to make some hard decisions to pare the projects back to fit within the congressionally approved $10.0M FY06 NESP budget. A 1% recission was also assessed on all Corps GI projects to provide additional funds for hurricane relief activities. Thus, total FY06 NESP budget was $9.9M.

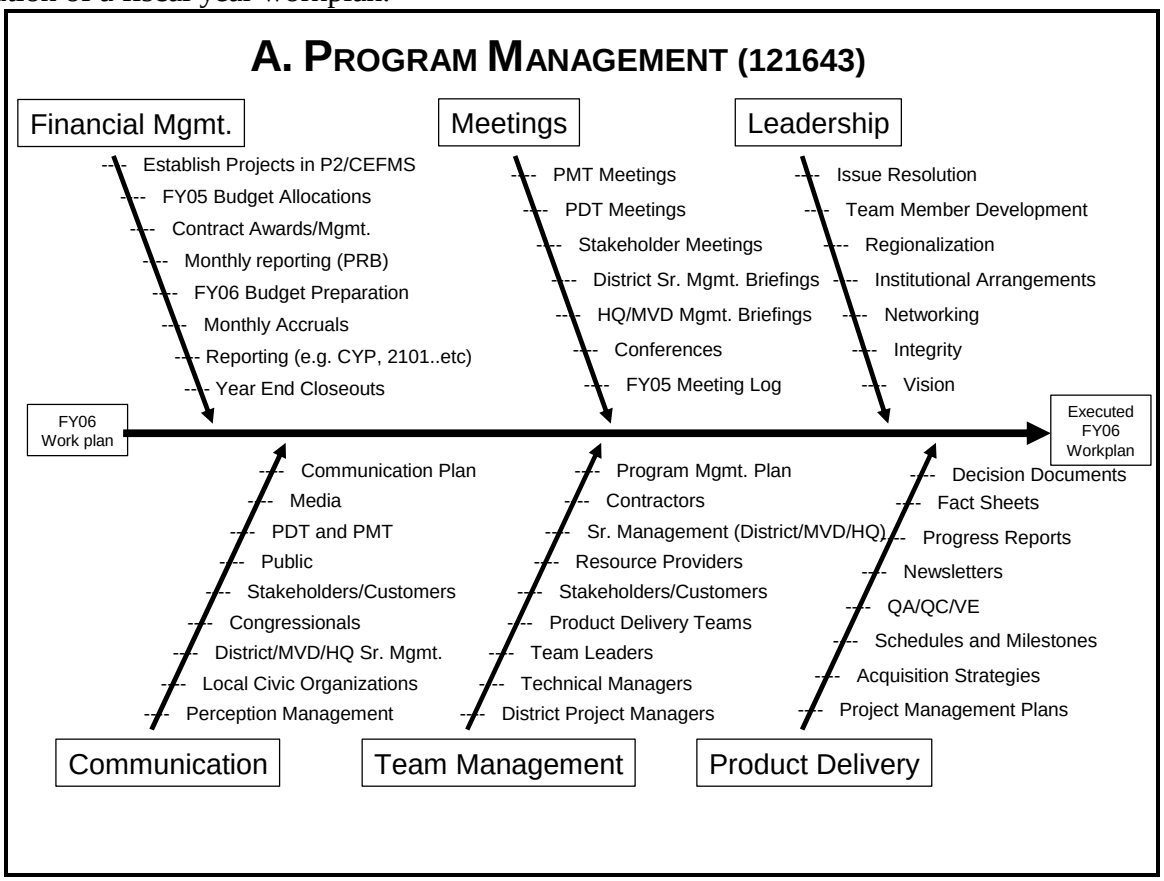
(2) Hurricane Katrina/Rita support activities along the Gulf coast also required 1-4 month deployments of a significant number of NESP PDT members. In many cases these deployments delayed the NESP work that these individuals were assigned.

(3) ASA(CW) directed restructuring to accelerate the development, testing, ITR and application of the economic forecasting tools to prepare a *Interim Economic Re-evaluation Report* NLT 30 Sept 07. The PMT was directed to re-align NESP projects to allow for sufficient financial buffer of FY06 funding to ensure that these efforts can continue uninterrupted through 1st quarter FY07 (Priority 1). A second regional managment directive (Priority 2), was that more focus and resources should be assigned to those NESP ecosystem and navigation efficiency projects that could achieve construction contract awards by 2007-08. All activities not directly contributing to either of these priorities were to be immediately scaled back to ensure accomplishment of Priority 1 then Priority 2 tasks.

(4) Overprogramming actions of roughly $1.0M were needed in the May-June timeframe to ensure the program would successfully execute its $9.9M budget. Overprogramming is a management tool that allows projects to proceed with tasks or contracts identified on their additional capability lists. Financial coverage for these actions comes from other NESP projects that were unable to fully utilize their FY06 budgets. Two of the most common factors contributing to projects being unable to fully utilize their funds were deployments of key team members and 20% reduction in district labor regional rates through most of FY06. The latter freed up more than half the amount needed to cover overprogramming actions.

Despite these rather significant FY06 challenges, the NESP program pulled off a successful and productive year. Financially, the program achieved a 99.5% obligation and 94.4% expenditure on the $9.9 million FY06 budget. The majority of the obligated/unexpended funds were tied to economic re-evaluation contracts that were awarded late in the FY and intentionally awarded with funding sufficient to carry execution at least through the first quarter of FY07. The year-end NESP project reports provide a detailed listing of the full range products and successes achieved in FY06. From a collaboration and stakeholder/public involvement perspective, there were numerous opportunities for interaction and involvement at the working and administrative levels of this program. Stakeholders and public are vital members of our NESP product delivery teams. The PMT continues to strive for an open and transparent program management structure and processes, such that team members and stakeholders understand the logic or rationale for management decisions or actions allowing for informed discussions and questions.

The following graphic illustrates the broad array of tasks, responsibilities and activities that the Program Management Team members assume while administering the program through the development and execution of a fiscal year workplan.



SUMMARIZED FINANCIAL DATA:	PED (GI)	CONST. (CG)
Estimated Federal Cost	$1,767,795	$44,844,205[a]
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$1,767,795	$44,844,205[a]
Allocation through FY 2005	$625,958	$0
Allocation for FY 2006	$496,837	$0
Budget Request for FY 2007	$500,000	$0
Balance to Complete after FY 2007	$145,000	$44,844,205[a]
Amount that could be used in FY 2007	**$645,000**	**$0**

[a] – Funding estimate for Program Mgmt for full implementation of recommended plan first increment (approx. 15 years).

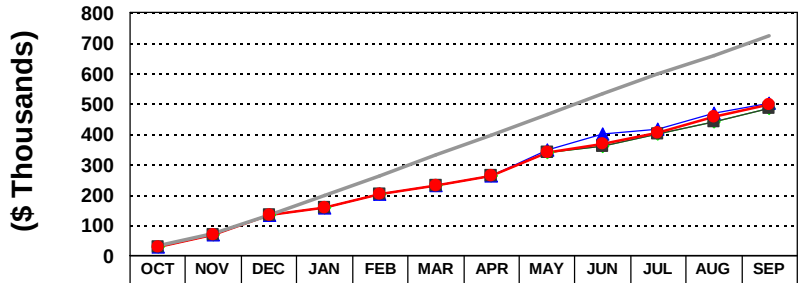
A. PROGRAM MANAGEMENT (121643)

Scott Whitney, CEMVR

FY06 Project Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)

%Dev = Actual/Sched	
Obligations	2.9%
Expenditures	2.2%



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	30.3	67.5	132.1	159.3	200.2	230.6	261.6	340.8	360.0	398.0	439.0	486.2
Actual Obligations	30.3	67.5	132.1	159.3	200.2	230.6	261.6	348.4	398.7	416.7	469.6	500.5
Sched. Expenditures	30.3	67.5	132.1	159.3	200.2	230.6	261.6	340.8	360.0	398.0	439.0	486.2
Actual Expenditures	30.3	67.5	132.1	159.3	200.2	230.6	261.6	338.3	369.6	405.6	456.4	496.8
BASELINE	32.0	71.4	131.7	196.8	264.4	332.1	397.5	464.4	532.5	596.2	659.2	725.0

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM

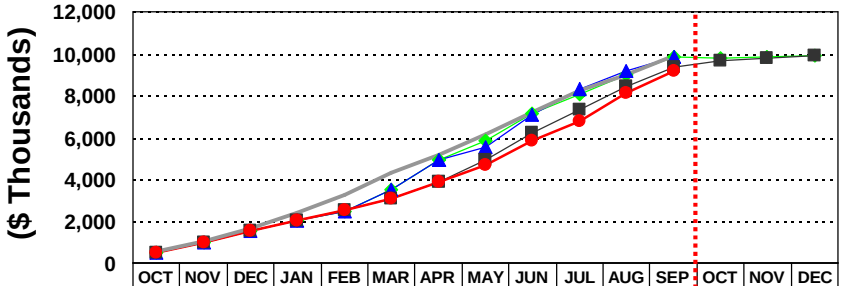
Revised Schedule

Scott Whitney, CEMVR

FY06 Program Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)

%Dev = Actual/Sched	
Obligations	-0.2%
Expenditures	-2.2%



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Sched. Obligations	522	974	1548	2037	2489	3517	4915	5865	7169	8092	8994	9872	9810	9876	9904
Actual Obligations	522	974	1548	2037	2489	3517	4915	5535	7087	8332	9155	9856			
Sched. Expenditures	522	977	1561	2040	2504	3066	3894	4943	6239	7312	8437	9384	9632	9781	9904
Actual Expenditures	522	977	1561	2040	2504	3066	3894	4694	5822	6798	8109	9181			
BASELINE	528	1035	1635	2413	3286	4288	5172	6181	7194	8264	8997	9904			

SCHEDULE AND MILESTONES:

Task	SCHEDULED Start Date	ACTUAL Start Date	SCHEDULED Finish Date	ACTUAL FINISH Date	Comments
Program Financial Management	**1-Oct-05**	**1-Oct-05**	**30-Sep-06**	**30-Sep-06**	
Product - Final 2101s	**15-Nov-05**	**15-Nov-05**	**6-Jan-06**	**13-Jan-06**	
Product - Updated Program Management Plan (PgMP)	**11-Jan-06**	**11-Jan-06**	**24-Mar-06**	**24-Mar-06**	
Product - Project Information Papers	**8-Jan-06**	**8-Jan-06**	**30-Jan-06**	**10-Feb-06**	
Product - FY06 Workplan	**1-Oct-05**	**1-Oct-05**	**30-Jan-06**	**10-Feb-06**	
Regional Stakeholder Meetings (Quarterly)	**15-Nov-05**	**15-Nov-05**	**17-Aug-06**	**17-Aug-06**	
Product - Congressional Fact Sheets and Talking points	**23-Jan-06**	**23-Jan-06**	**15-Sep-06**	**15-Sep-06**	
FY07 NESP Capability Submittals	**15-Mar-06**	**15-Mar-06**	**7-Apr-06**	**6-Apr-06**	
Product - Schedule + Cost Estimate for 1st Increment	**2-Mar-06**	**2-Mar-06**	**7-Apr-06**	**4-Apr-06**	
FY06 Midyear Program Review / Adjustment	**4-Apr-06**	**2-Apr-06**	**9-Jun-06**	**9-Jun-06**	
Product - FY07 CEMRS Database Update	**12-Apr-06**	**12-Apr-06**	**19-Apr-06**	**19-Apr-06**	
Product-FY08 Budget Request and Ranking Factors	**1-Jun-06**	**5-Jun-06**	**7-Jun-06**	**7-Jun-06**	
Product-3rd quarter Financial Report	**5-Jul-06**	**5-Jul-06**	**11-Jul-06**	**11-Jul-06**	
Overprogramming and Reconciliation Recommendations/Actions	**22-May-06**	**22-May-06**	**1-Sep-06**	**1-Sep-06**	
Product - DRAFT FY07 Workplan	**12-Apr-06**	**12-Apr-06**	**30-Sep-06**	**30-Sep-06**	
Product-Year-End Program Financial Summary Report	**2-Oct-06**	**2-Oct-06**	**11-Oct-06**	**11-Oct-06**	

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
1-6-06	FY06 Final Project 2101s	Financial project resourcing schedules	
3-24-06	Updated Program Management Plan (PgMP)	Mgmt. structure and strategy for NESP	
2-10-06	Project Information Papers	Summary of NESP projects	X
2-10-06	FY06 NESP Workplan	Resourcing and implementation strategy, quarterly milestones, additional capabilities.	
Multiple	Congressional Fact Sheets and Talking points	Provide program highlights and issues for congressional visits (spring/fall) and inquiries.	
4-4-06	Schedule + Cost Estimate for 1st Increment	Baseline schedule and cost estimate for implementation of recommended plan	
4-19-06	FY07 CEMRS Database Update	Anticipated resourcing based on assumption of $10M FY07 program	
6-8-06	FY08 Budget Request and Ranking Factors	FY08 Program Capability and description of projects.	
Multiple	Quarterly Program Financial Execution Report	Project Financial Resourcing and Execution for each NESP project.	
9-3-06	FY07 DRAFT Workplan	Initial resourcing and task descriptions for an	

		assumed $10M FY07 program	
Multiple	Program Presentations	Over three dozen program presentations at conferences and local civic organizations.	
Multiple	Respond to Program Inquiries	Requests for information and data from Sr. Mgmt, Congressional, Stakeholders, and Public	

CONSTRUCTION START: Not Applicable

NON-CORPS STAKEHOLDER INVOLVEMENT:

Groups or Committees	AGENCY/ ORGANIZATION	INVOLVEMENT
NECC	Fed, State, & NGO	Ecosystem Restoration Implementation strategies and Activities
ECC	Fed, State, & NGO	Economic/Navigation implementation strategies and activities
UMRBA	Fed & State	Interagency coordination and communication, Programmatic authorization and implementation
Science Panel	Fed, State, University	Ecosystem restoration Adaptive Mgmt.
Federal Principals Group	USFWS, USEPA, USDA, USDOT	Sr. Washington level Federal Agency Representatives
RRCT, RRAT, RRF	State & Fed	District coordination on project planning and implementation, relationship to projects being conducted under various Corps Authorities
District and Regional Project Review Boards	Corps	Implementation Administration and Guidance, Financial Tracking and Performance, Issue resolution, Resourcing challenges, Schedules

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
FY06	Study Website	Meeting dates and locations, study status, project information, contacts
Sept 06	Newsletter	15K distribution, Project Status, Key issues, Public Awareness, Comments
FY06	Quarterly Stakeholder Meetings	Project Status, Q&As, concerns/issues
FY06	Media Interviews	Radio, TV, and Newspaper interviews
FY06	Civic Group Presentations	Study Status and Q&As
FY06	E-mail and Phone	Q&As concerning study status or specific project schedules or features, concerns/issues
FY06	School/University Presentations	Project Status, Q&As, concerns/issues

FY07 IMPLEMENTATION STRATEGY:

The NESP Program Management Team in combination with the Program Management Plan (PgMP) provides comprehensive understanding across all aspects of the program implementation and communicates critical information to all interested parties on how the program is managed. Key emphasis for both are on high-level scheduling and resource planning suitable for multi-year program development

and management and on organizational arrangements and management processes that address teamwork, communication, and quality. They embrace a strategy for adaptive, integrated program and project management.

Key implementation objectives for FY07 include:

(1) Actively manage NESP in accordance with our Program Management Plan and the Project Management Business Process

(2) Contribute to the further development, refinement and documentation of our Program Management processes that allow for the steadily improvement of our individual and collective program/project productivity, effectiveness and efficiency.

(3) Work closely with District Branch Chiefs and Team Leaders to ensure our labor and contracting resource needs are clearly understood and aligned to ensure efficient and effective project execution.

(4) Maintain monthly project performance tables, graphs and checklists that allowed for the evaluation and compare/contrast of NESP Project financial obligation/expenditures, milestone/product attainment, and responsiveness to programmatic taskers.

(5) Continue to increase team utilization of the new Projectwise document management system.

(6) Economic Re-evaluation Interim Report – Delivered to ASA(CW) by 30 Sept 06

(7) Readiness for FY08 construction on variety of Navigation Efficiency and Ecosystem Restoration projects. Current Capability estimate = $16.2 million in construction by FY2008.

(8) Develop a clear strategic implementation plan for NESP that is flexible to accommodate variable levels of funding and assists in prioritizing projects and activities that will proceed under possible funding scenarios.

(9) Refine and increase level of detail on program schedule and outyear resourcing need/capability for the full first increment (recommended and hopefully soon to-be-authorized plan)

(10) Strengthen and broaden coalition of program supporters through continued regular communication and collaboration.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
B. Institutional Arrangements
Team Leader: Rebecca Soileau

PURPOSE: The purpose of modifying institutional arrangements is to provide a means for government agencies and private stakeholders to more effectively work together toward integrated, adaptive management of the UMRS for multiple purposes through multiple programs.

The Upper Mississippi River System Navigation Feasibility Report calls for integration of Federal river management activities to achieve a sustainable system. In addition to the dual purpose authority recommended in the feasibility report, the Federal activities suggested that coordination under the sustainability umbrella include operation and maintenance of the 9-foot navigation channel project, the Environmental Management Program (EMP), environmental Continuing Authorities Programs, the Upper Mississippi River Comprehensive Plan (pursuant to Section 459 of the Water Resources Development Act (WRDA of 1999), the FWS Refuge Management, Illinois River basin restoration initiatives (Section 519 of WRDA 2000), U.S. Department of Agriculture programs and other activities.

The existing framework of institutional arrangements needs some modification to enable more integrated, science-driven, inclusive, efficient, and cost-effective management of the UMRS. At the system-wide scale, the present EMPCC attends to the UMRS EMP but not to other aspects of river management. Similarly, the Governors Liaison Committee (GLC) and NECC/ECC were chartered exclusively for the UMR-IWW System Navigation Study.

LOCATION: The program area comprises the Upper Mississippi River System, as defined by Congress in the Water Resources Development Act of 1986 (WRDA 1986), which includes the Upper Mississippi River from Minneapolis, Minnesota, to Cairo, Illinois; the Illinois Waterway from Chicago to Grafton, Illinois; and navigable portions of the Minnesota, St. Croix, Black and Kaskaskia Rivers.

DESCRIPTION: This multi-use resource supports an extensive navigation system (made up of 1200 miles of 9 foot channel and 37 lock and dam sites), a diverse ecosystem (2.7 million acres of habitat supporting hundreds of fish and wildlife species), floodplain agriculture, recreation and tourism. Based on the recommendation of the recently completed UMR-IWW System Navigation Feasibility Study that examined system needs over the next 50 years, the Navigation and Ecosystem Sustainability Program (NESP) was implemented to achieve the dual purposes of UMRS ecosystem restoration and navigation improvements. The Institutional Arrangements project addresses the needs for organizational collaboration and coordination on the UMRS to support integrated management of this and other UMRS programs.

Components of institutional arrangements will operate at different levels and scales facilitating integrated, adaptive management and will include the following:

- River teams
- River Council
- Science Panel (*established through contracts with the Corps*)
- Work Groups (*at reach and system levels*)
- Interaction through project delivery teams (*stakeholders, partners, and the public*)

Components of institutional arrangements for connection to high level decision-makers and broader basin management include the following:

- UMRBA (*existing interstate organization*)
- Mississippi River Commission (MRC)
- Federal Principles Group
- Advisory Panel potentially mandated by Congress (*depending on authorizing language*)

SUMMARY OF FY06 ACTIVITIES: In FY 2006, the funding for this project was diverted to the economic restudy in March, terminating all activity. The following activities were accomplished prior to cessation:

1. A stakeholder meeting was held on October 20-21 in St. Louis Missouri to confirm the comfort level with the overall configuration and description of the institutional arrangements and refine the Operational Model for the River Council. Approximately 40 people attended from federal, state, and NGO organizations.
2. Work from the October stakeholder meeting was incorporated and a River Council Draft Operational Model was presented for discussion and comment at the November 15-17 UMRBA, EMPCC, NECC-ECC meetings in St. Paul Minnesota.
3. The Fish and Wildlife Service and USACE began discussions on a strategy for implementing institutional arrangements including how they would co-chair a River Council.
4. A communications network meeting was held in La Crosse WI to provide coordinated input to a documentary being developed for the Mississippi River from the headwaters to the Gulf in conjunction with the One River Mississippi project.
5. A document outlining the principal objectives of the Institutional Arrangements and River Council was presented to the senior leaders of each of the UMRS districts for sign off in March. This Commanders Agreement was signed off in June.

SUMMARIZED FINANCIAL DATA:	**PED**	**CONST.**
Estimated Federal Cost	$324,202.20	$759,797.80[a]
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$324,202.20	$759,797.80[a]
Allocation through FY 2005	$238,221.18	$0
Allocation for FY 2006	$60,981.02	$0
Budget Request for FY 2007	$25,000	$0
Balance to Complete after FY 2007	$0	$759,797.80[a]
Amount that could be used in FY 2007	**$150,000**	**$0**

[a] – Funding estimate for Institutional Arrangemnets for full implementation of recommended plan first increment (approx. 15 years).

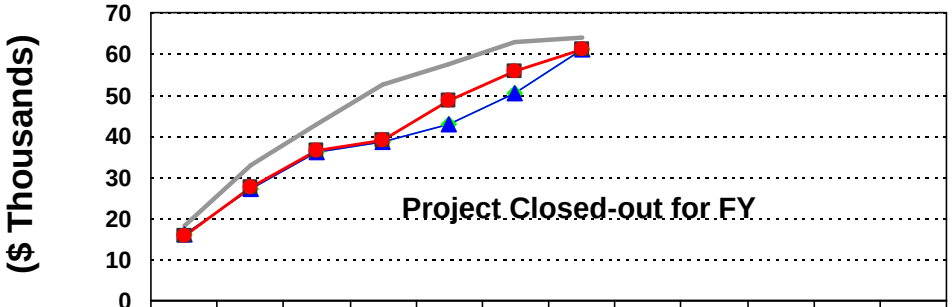
B. INSTITUTIONAL ARRANGEMENTS (121825)

Rebecca Soileau, CEMVP

FY06 Project Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)

%Dev = Actual/Sched	
Obligations	0%
Expenditures	0%



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	16.1	27.2	36.1	38.6	42.9	50.2	61.0					
Actual Obligations	16.1	27.2	36.1	38.6	42.9	50.2	61.0					
Sched. Expenditures	15.7	27.6	36.5	39.0	48.5	55.9	61.0					
Actual Expenditures	15.7	27.6	36.5	39.0	48.5	55.9	61.0					
BASELINE	18.4	32.9	43.0	52.7	57.5	63.0	64.1					

SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Revise PMP	1-Oct-05	3-Jan-06	30-Jan-06	30-Jan-06	
Produce Workshop Handbook	1-Oct-05	1-Oct-05	18-Oct-05	18-Oct-05	The unbound handbook was distributed to attendees before the workshop via email as briefing materials
Stakeholder Meeting	20-21 Oct - 05	20 Oct 05	21 Oct 05	21 Oct 05	The meeting was attended by about 40 stakeholders
Revise Draft Operational Model for River Council for presentation and Review at UMRBA etc. meetings.	22 Oct 05	22 Oct 05	15 Nov 05	15 Nov 05	Bound copies were distributed at the meeting and stakeholders asked for comments.
Internal Coordination USACE – Commanders Agreement	28-Mar-06	28-Mar-06	30-Apr-06	30- June-06	This is a first step for internal coordination within the Corps on the concepts. Additional coordination is required on the full details of implementation.
Internal Coordination USFWS	15-Nov 05	15-Nov 05	30- July-06	Post-poned for future funding/ authorization	There was a meeting in Rock Island and several phone conferences to begin this process. It will be completed as funding/ authorization permits.

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Oct 05	Upper Mississippi Institutional Arrangements October 20-21, 2005 St. Louis Missouri Workshop Handbook	A new revision of work generated by the Corps, FWS and broader stakeholder community over the previous year. This document was refined by the stakeholders in preparation for creating documents upon which MOU's would be drafted formalizing collaboration on the UMRS.	
Nov 05	Upper Mississippi River – Illinois Waterway System River Council Draft Operational Model	This document focused on the River Council component of a broader institutional arrangements network being discussed by the systems stakeholders. Based on the work of the previous meeting, to be used by the USACE and USFW for reaching an implementation agreement internally.	
Jun 06	Commanders Agreement	A concept document for the commanders from all three districts to verify a common understanding and agreement on the principles to be incorporated into the future institutional arrangements and planning for the UMRS.	

CONSTRUCTION START: Not Applicable

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
McGuiness, Dan	Audubon	Resource expert
Atwood, Butch	ILDNR	Illinois Resource expert
Mick, Jim	ILDNR	Illinois Resource expert
Rhode, Paul	MARC2000	Industry contact coordinator
Carr, Mark	MEMCO	Navigation stakeholder
Schlagenhaft, Tim	MNDNR	Minnesota Resource expert
Sternburg, Janet	MODOC	Missouri Resource expert
Beorkrem, Mark	MRBA	Stakeholder Representative
Grawe, Robin	MRCC	Public Stakeholders Representative
Howe, Bill	MRCC	Public Stakeholders Representative
McCalvin, Catherine	TNC	Conservation stakeholder, partner
Lubinski, Ken	TNC	Resource expert
Stoerker, Holly	UMRBA	State stakeholder representative
Fenedick, Al	USEPA	Environmental Protection, NEPA
Yager, Tim	USFWS	Refuge Manager
Duyvejonck, Jon	USFWS	FWS resource expert

Nelson, Rick	USFWS	FWS management representative
Clevenstine, Bob	USFWS	FWS resource expert
Hultman, Don	USFWS	Refuges
Johnson, Barry L.	USGS	Science Panel Co-Chair
Benjamin, Gretchen	WIDNR	Wisconsin Resource expert

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
	Information in Corps web-links	

FY07 IMPLEMENTATION STRATEGY:

If NESP is funded at the $10M level in 2007, the River Council portion of the Institutional arrangements could be ready to go to out from the FWS and Corps to other partnering agencies for establishing MOU's as early as the winter of 2008. The tasks listed below must be accomplished if an implementation start in 2008 is to be achieved.

1. FWS and Corps approved Operational Model for River Council – Apr 07
2. FWS and Corps Working Agreement for River council Administration ready to sign – July 07

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
C. Systemic Public Involvement
Team Leader: Kevin Bluhm

PURPOSE: Public involvement is an important component of any study, project, or program. The Corps of Engineers has the responsibility to involve and coordinate with the public in order to open and maintain channels of communication and give full consideration to public views and information throughout a decision-making process.

LOCATION: The program area comprises the Upper Mississippi River System, as defined by Congress in the Water Resources Development Act of 1986 (WRDA 1986), which includes the Upper Mississippi River from Minneapolis, Minnesota, to Cairo, Illinois; the Illinois Waterway from Chicago to Grafton, Illinois; and navigable portions of the Minnesota, St. Croix, Black, and Kaskaskia Rivers. This multi-use resource supports an extensive navigation system (made up of 1,200 miles of 9-foot channel and 37 lock and dam sites), a diverse ecosystem (2.7 million acres of habitat supporting hundreds of fish and wildlife species), floodplain, agriculture, recreation, and tourism.

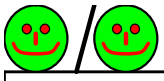
DESCRIPTION: Systemic public involvement is very different from typical projects, as it reaches over all of the individual projects within the NESP program. All aspects of public education, public awareness, public affairs, and public involvement will be contained in this project. This involves maintaining a database of interested persons to notify of general actions and specific items, mailing and emailing public notices, producing program newsletters and data sheets, building an interactive web site that is all inclusive for all Corps and other related actions within the project area, and assisting all individual projects within the NESP scope to ensure that public involvement objectives are utilized in all phases of work. The systemic public involvement plan is the tool that will help pull together all the individual components of the NESP and help build support and allow for the publics and stakeholders to have a better understanding of the proposed measures.

SUMMARY OF FY06 ACTIVITIES: In FY 2006, the following major activities were accomplished:

1. The Everglades trip summary presentation was built and presented to the NESP PMT and NECC meeting in November.
2. The Nav. Study web site was revised in a short-term "patch" to fit the needs of the new program (NESP) and to provide more data to users.
3. A Fast Start plan was built and revised to look for enhanced communication and outreach opportunities. The Fast Start plan specifically identifies activities to be performed with WRDA authorization and also identifies a direct roll-out of tasks that would be most beneficial to the program when NESP is authorized.
4. A contractor was hired to interview key NESP members for their thoughts on web site uses and needs. This survey was designed to provide responses that would be used as a starting point for the direction of any next generation web site development.
5. A contractor was utilized to write and distribute a program newsletter in September. The newsletter focused on accomplishments for the FY and provided updates to the public about the authorization status and reevaluation report progress. The newsletter was mailed to nearly 11,300 addresses.

SUMMARIZED FINANCIAL DATA:	PED (GI)	CONST. (CG)
Estimated Federal Cost	$944,675	$5,559,325[a]
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$944,675	$5,559,325[a]
Allocation through FY 2005	$256,464	$0
Allocation for FY 2006	$106,211	$0
Budget Request for FY 2007	$75,000	$0
Balance to Complete after FY 2007	$507,000	$5,559,325[a]
Amount that could be used in FY 2007	**$582,000**	**$0**

[a] – Funding estimate for Sys. Public Involvmeent for full implementation of recommended plan first increment (approx. 15 years).



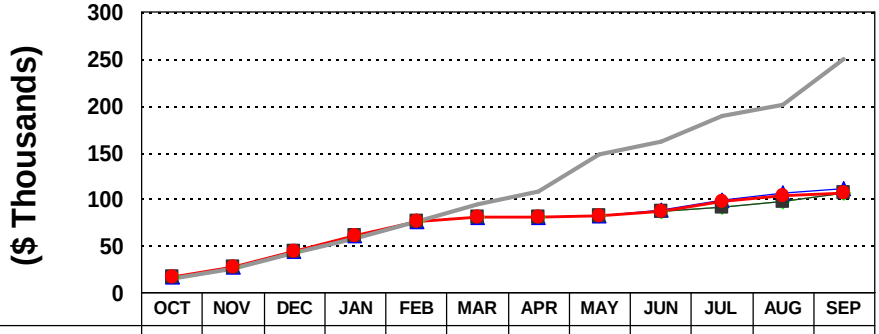
C. PUBLIC INVOLVEMENT (121823)

Kevin Bluhm, CEMVP

FY06 Project Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)

%Dev = Actual/Sched	
Obligations	4.2%
Expenditures	-0.56%



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	16.8	27.4	44.7	60.9	75.6	80.1	81.0	82.6	86.8	90.9	97.3	106.8
Actual Obligations	16.8	27.4	44.7	60.9	75.6	80.1	81.0	81.7	88.9	98.8	106.2	111.3
Sched. Expenditures	16.8	27.4	44.7	60.9	75.6	80.1	81.0	82.6	86.8	90.9	97.3	106.8
Actual Expenditures	16.8	27.4	44.7	60.9	75.6	80.1	81.0	81.7	86.9	96.9	104.0	106.2
BASELINE	15.0	25.6	42.1	57.9	76.6	94.0	107.5	148.2	161.2	188.1	200.6	250.0

SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Draft PMP	03 Jan 06	03 Jan 06	11 Jan 06	11 Jan 06	
Final PMP	11 Jan 06	11 Jan 06	14 Aug 06		No funds- Postponed
Web Site Patch	12 Dec 05	12 Dec 05	28 Feb 06	17 Feb 06	
Newsletter Contract	07 Jul 06	07 Jul 06	30 Sep 06	28 Sep 06	
Web site Analysis Contract	07 Jul 06	07 Jul 06	25 Sep 06	25 Sep 06	
Web site support/maintenance	03 Jan 06	03 Jan 06	30 Sep 06	30 Sep 06	On going task
Fast Start Plan	03 Jan 06	03 Jan 06	30 Sep 06	30 Sep 06	On going til WRDA signed
NESP PDT PI/Comm. Support	01 Oct 05	01 Oct 05	30 Sep 06	30 Sep 06	On going task

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Nov 05	Everglades presentation	Summary of Everglades Comm/web	
May 06	LD 22 AAR Public Meeting	Lock Exp & Fish Passage	
Aug 06	Mel Price AAR Public Mtg	Fish Passage	
Sep 06	Newsletter	12 pg. program newsletter	Yes

CONSTRUCTION START: Not Applicable

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Gretchen Benjamin	WI DNR	Communications Network
Catherine McCalvin	TNC	Communications Network
Dan McGuiness	Audubon	Communications Network
Paul Rohde	MARC 2000	Communications Network

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
FY06	Meeting announcement mailings	Specific mailings to interested publics
FY06	Web site updates	Posting of data on web site as needed
28 Sep	Program newsletter mailed	12 pg. Program newsletter mailed to over 11,000 persons in mailing list

FY07 IMPLEMENTATION STRATEGY:

If NESP is authorized and funded in 2007, the communications and systemic public involvement project could be ramped up to a very ambitious plan, encompassing many key communications activities. Over $500K in additional capability has been identified for this reason. Tasks would include large scale public meetings, additional programmatic communications, and public involvement activities to increase the publics' awareness of the value of NESP; e.g., a revised, next generation interactive web site; information kiosks; image/name recognition initiatives; and additional program newsletters and mailings.

If NESP is not authorized and funded, then the implementation strategy for systemic public involvement would be to maintain communications within the PI Team and to attempt to produce one program newsletter to inform the publics of the status of the program and what the future of the program would look like (at the end of the FY looking into FY08). If provided funding by the specific projects, the PI Team would be available to assist all of the individual program elements with any communications or outreach needs. Those tasks include, but are not limited to, assisting with and participating in public meetings, organizing mailings, and/or preparing a content analysis of comments received at public meetings.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM (NESP)

FY06 YEAR-END PROJECT REPORTS

NAVIGATION EFFICIENCY PROJECTS

Projects Activities	Lead District	Team Leader	District Project Manager
ECONOMIC RE-EVALUATION PROJECT			
D. Navigation Adaptive Management	MVS	Astrack, Rich	Astrack, Rich
NAVIGATION EFFICIENCY PROJECTS			
E. Systemic Env. Mitigation	MVR	Cornish, Mark	Whitney, Scott
F. Navigation Appointment Scheduling	MVS	Manguno, Rich	Astrack, Rich
G. Mooring Cells and Buoys	MVP	Grundhoffer, Tim	DeZellar, Jeff
H. Switchboat	MVS	Gordon, David	Astrack, Rich
I1. Lock 22	MVR	Tarpey, Mike	Whitney, Scott
I2. Lock 25	MVS	Hobbs, Steve	Astrack, Rich
I3. Lock La Grange	MVR	Hunemuller, Toby	Whitney, Scott

3 November 2006

U.S. Army
Corps of Engineers

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
D. Navigation Adaptive Management
Team Leader: Rich Astrack

PURPOSE: NESP Project D. Navigation Adaptive Management provides a mechanism to analyze and confirm/modify as warranted, proposed navigation efficiency features to best suit the needs of the Upper Mississippi River System and the Nation. Major work components include the following areas:

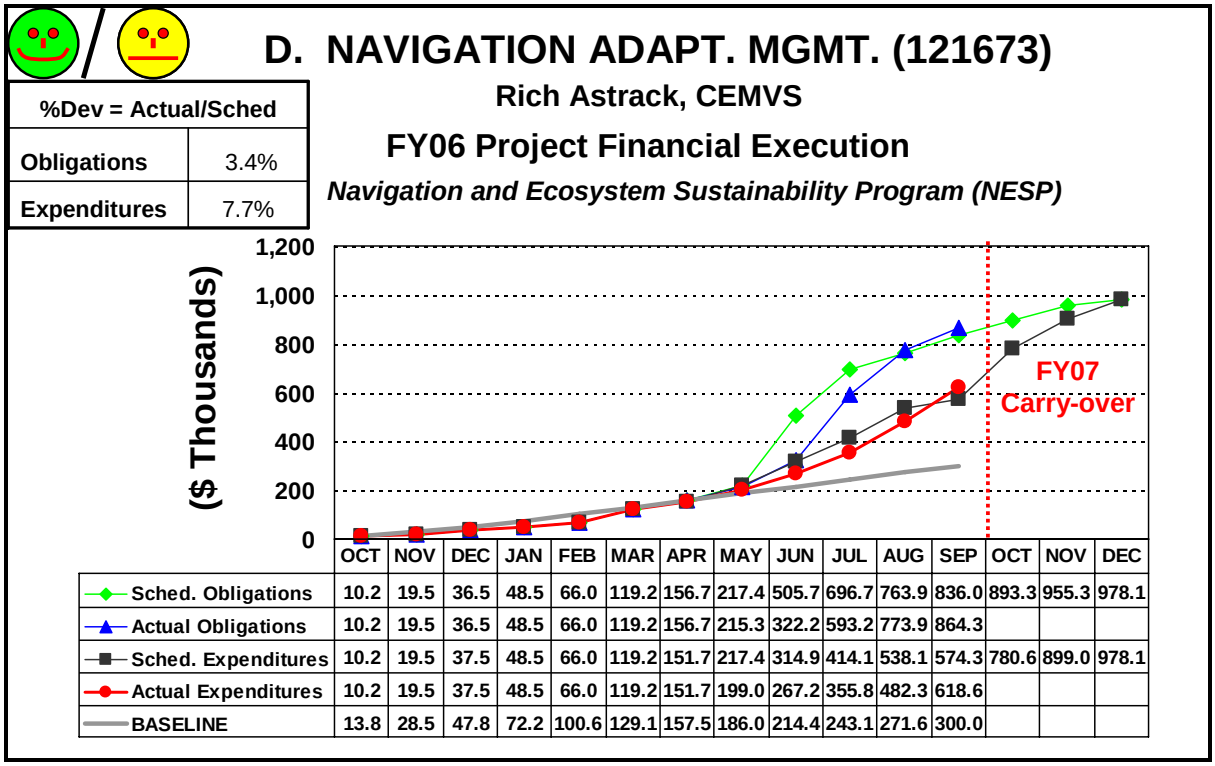
- Navigation Efficiency Administration.
- Review and Coordination including External Peer Review, Independent Technical Review (ITR), and Economic Coordinating Committee (ECC)/Stakeholder coordination.
- Economic Data Collection and Monitoring.
- Navigation Economics Technologies (NETS) Program.
- Interim Report.
- Reevaluation Report.
- Updated Feasibility Report.

LOCATION AND DESCRIPTION: Project D. Navigation Adaptive Management is applicable on all aspects of the planning, design, evaluation and construction of Navigation Efficiency improvements for the entire Upper Mississippi River 9-foot Navigation System.

SUMMARY OF FY06 ACTIVITIES: Until Mar 06, most FY 06 activities involved overall coordination of navigation efficiency projects and monitoring the NETS Program.

In early Mar 06 a meeting was held with ASA(CW). The result was that Project D. was reoriented to produce the Interim Report, an economic analysis of the recommended plan presented in the Feasibility Report using available updated data, analysis and models by the end of FY 07. This resulted in a major shift forward of planned work and resulting funding increase for Project D. through completion of the Interim Report. The Interim Report is a decision point to determine if a Reevaluation Report, which is a reformulation of navigation efficiency plans, is required.

SUMMARIZED FINANCIAL DATA:	PED (GI)	CONST. (CG)
Estimated Federal Cost	$2,934,506	$16,565,494[a]
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$2,934,506	$16,565,494[a]
Allocation through FY 2005	$415,946	$0
Allocation for FY 2006	$618,560	$0
Budget Request for FY 2007	$2,000,000	$0
Balance to Complete after FY 2007	$300,000	$16,565,494[a]
Amount that could be used in FY 2007	**$2,300,000**	**$0**



SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
RATE ANALYSIS SOW	APR-06	APR-06	JUN-06	MAY-06	
RATE ANALYSIS (TVA)	MAY-06	MAY-06	APR-07		Progress on track to complete on time.
DEVELOP SOW NON-GRAIN	MAY-06	MAY-06	JUN-06	JUN-06	
AWARD AE NON-GRAIN	JUN-06	JUN-06	JUL-06	SEP-06	
AE CONTRACT FOR NON-GRAIN	JUL-06	SEP-06	APR-07		Progress on track to complete on time.
PEER REVIEW / ITR TO PCX	JUL-06		AUG-06	SEP-06	External Peer Review panel identified Sep 06.
PEER REVIEW / ITR ESTABLISH	AUG-06	AUG-06	SEP-07		Initial meeting 12-13 Nov at St. Paul for External Peer Review panel.
ECC WORKSHOP (GRAIN)	JUL-06		JUL-06		Waiting on final Grain Model Report to have workshop.
INTERIM REPORT TO ASA	**MAR-06**	**MAR-06**	**SEP-07**		

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Apr 06	PMP updated per ASA(CW)		
Apr 06	RATE ANALYSIS SOW		
Jun 06	SOW for non-grain commodities	Forecasts of non-grain commodities to be developed by L. Berger	
Sep 06	External Peer Review (EPR) panel	Established EPR members with input from stakeholders	

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Economic Coordinating Committee	Federal, state and NGO organizations	Quarterly meetings

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
Sept 06	Newsletter	15K distribution, Description of Re-evalaution Effort and key milestones.
Aug 06	Quarterly Stakeholder Meetings	Project Status, Q&As, concerns/issues

FY07 IMPLEMENTATION STRATEGY: Complete and submit the Interim Report which will reevaluate the navigation efficiency recommended plan presented in the Final Integrated Feasibility Report and Programmatic Environmental Impact Statement for the UMR-IWW System Navigation Feasibility Study.

Major tasks in FY 07 include the following.
NETS Program–Grain Forecast Model, demand curves from surveys, Survey Model certified.
NESP-Transportation rates developed by TVA , non-grain commodity forecasts by Louis Berger (AE), non-traditional NED benefits.
NETS Program–demand curves & grain forecasts input in Survey Model.
NESP-Transportation rates & non-grain commodity forecasts in economic model.
Recommended plan project cost updated.
NED economic model runs using new data and model of the recommended plan.
Draft report for public review.
Public meetings.
Interim Report submitted.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
E. Systemic Environmental Mitigation
Team Leader: Mark Cornish

PURPOSE: The purpose of this project is to mitigate for the expected effects from the increase in navigation as a result of the navigation efficiency NESP projects. The goal of systemic mitigation was to use a science-based approach to ensure all significant adverse effects would be mitigated to levels of insignificance. The net effect from both increased traffic and site-specific impacts would be no loss to fisheries, submersed aquatic plants, backwaters, secondary channels, and historic properties.

LOCATION AND DESCRIPTION:

FY06 Fisheries Component activities:

UMR – Middle Mississippi, Pools 26, 25, 24, 22, 21, 20, 19, 18, 17, 16, and 14
IWW – Alton Reach, Peoria, LaGrange, and Marseilles

FY06 Submersed Aquatic Vegetation Component activities:

UMR - Pools 5, 9, 11, 13, and 19

The first two years of program activity have been focused on 1) building a management structure for a mitigation program and 2) refining the mitigation estimates provided in the Final Feasibility Report, Appendix ENV-A. This information will be used to recalculate mitigation costs in the NESP economic re-evaluation which will be completed in September 2007. Later stages of the program, after authorization, would involve the construction of mitigation measures to offset both site specific and systemic impacts of the NESP.

SUMMARY OF FY06 ACTIVITIES:

General

- The PDT developed a workplan; information papers (Fact Sheets); PDT stakeholder list; Project Management Plan; schedule and milestones, and product list and updated the financial plan for FY07.
- The PDT utilized the appropriate ProjectWise directory for posting reports and sharing information.
- The Team Leader promptly coordinated team activities with senior NESP managers through eleven monthly progress reports.
- Mark Cornish presented a briefing on systemic mitigation to 46 biologists and resource managers at the February NECC meeting.

Fisheries Component – Jack Killgore, Mark Cornish, Tom Keevin

- The number and species of fish potentially entrained through an operating towboat propeller are being evaluated as part of the Upper Mississippi - Illinois River Navigation Improvement study. These data will be used to estimate seasonal, propeller-induced mortality rates of juvenile and adult fish under different navigation traffic scenarios. In cooperation with the American River Transportation Company, a subsidiary of Archer-Daniels-Midland Corp., the current study is being conducted with a 5,400 HP towboat (MV *American Beauty*) with Kort nozzles pushing 15 loaded barges upstream. A similar study using only 3 unloaded barges was conducted in 2002-2003 using a 3,000 HP towboat (MV *Cooperative Venture*) with open wheels. Entrained fish are being collected with a specially designed net deployed from the stern of the vessel that filters the propeller wash while withstanding turbulent forces (Figure 1).

Figure 1. The main channel trawl deployed behind the MV *Mississippi*.

- During 2006, spring and summer sampling has been completed in the Upper Mississippi River between Lock and Dams 26 to 14 and the Illinois River between Alton and Marseilles Pools. A total of 215 river miles were sampled during this time period. Gizzard shad and freshwater drum are the dominant species being entrained by towboat propellers. Higher propeller mortality is evident with the Kort nozzle compared to open wheels. Mortality for these two species directly attributed to the propeller is less than 2%, but up to 23% have exhibited some type of net-related damage (e.g., heads stuck in webbing, eye damage, frayed fins). The majority of shad and drum entrained through propellers are not being killed or injured, at least in terms of instantaneous mortality.
- Other species struck by the propeller have also been captured including buffalo, paddlefish, shovelnose sturgeon, and bighead carp (Figure 2). These species are rarely encountered, but when they are, multiple individuals are usually collected in a single trawl sample. Their size makes them particularly vulnerable to propeller strikes.
- Sampling will continue for autumn and winter seasons, and will be expanded into the Middle Mississippi River. Population models will be developed for susceptible species to evaluate the magnitude of propeller-related mortality on recruitment and abundance.

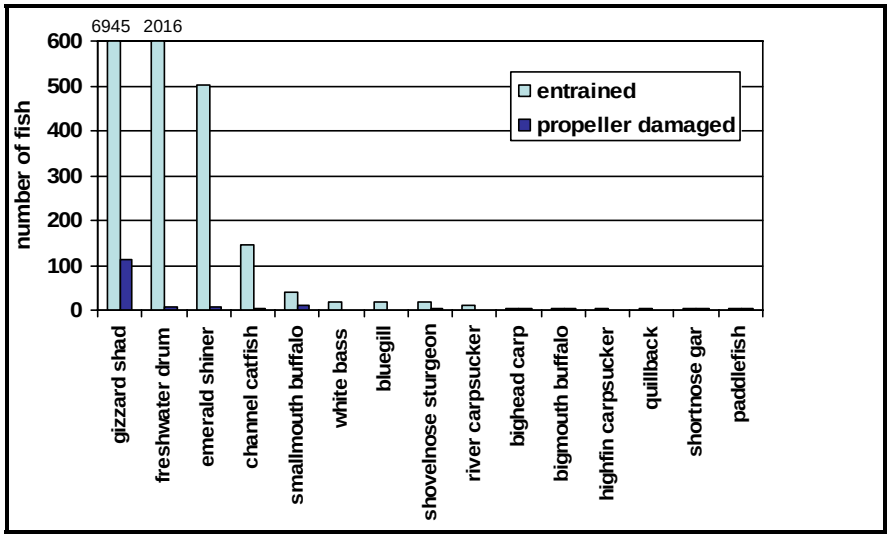


Figure 2. Comparison of fish entrained to fish damaged by the propeller in September sampling.

Submersed Aquatic Vegetation Component – Dan Wilcox

- The contractor completed the FY05 Final Report – Survey of Potential Aquatic Plant Impact Zones: Effects of Navigation Traffic on Aquatic Plants in the Upper Mississippi River, Environmental Planning Support in May.
- A SOW for FY06 work on submersed aquatic vegetation was prepared and coordinated March and a contract was awarded in June. This FY06 work was the second of three years of sampling work. This work is being repeated to account for inter-annual variation in SAV abundance due to water levels and turbidity fluctuations during the growing season.
- SAV sampling was performed in areas identified by the NavSAV model as potential plant impact zones in FY06 between mid July to mid September period. The contractor looked at survey areas that were less than 1.5m deep at low control pool elevation to determine presence or absence, community composition, and relative abundance of SAV.
- The scheduled completion date of the draft report is 27 October 2006.
- If funding allows, the third and final year of this study will be performed in FY07 in the same channel border areas of Pools 5, 9, 11, 13, and 19.

Mussel Component – Dan Kelner

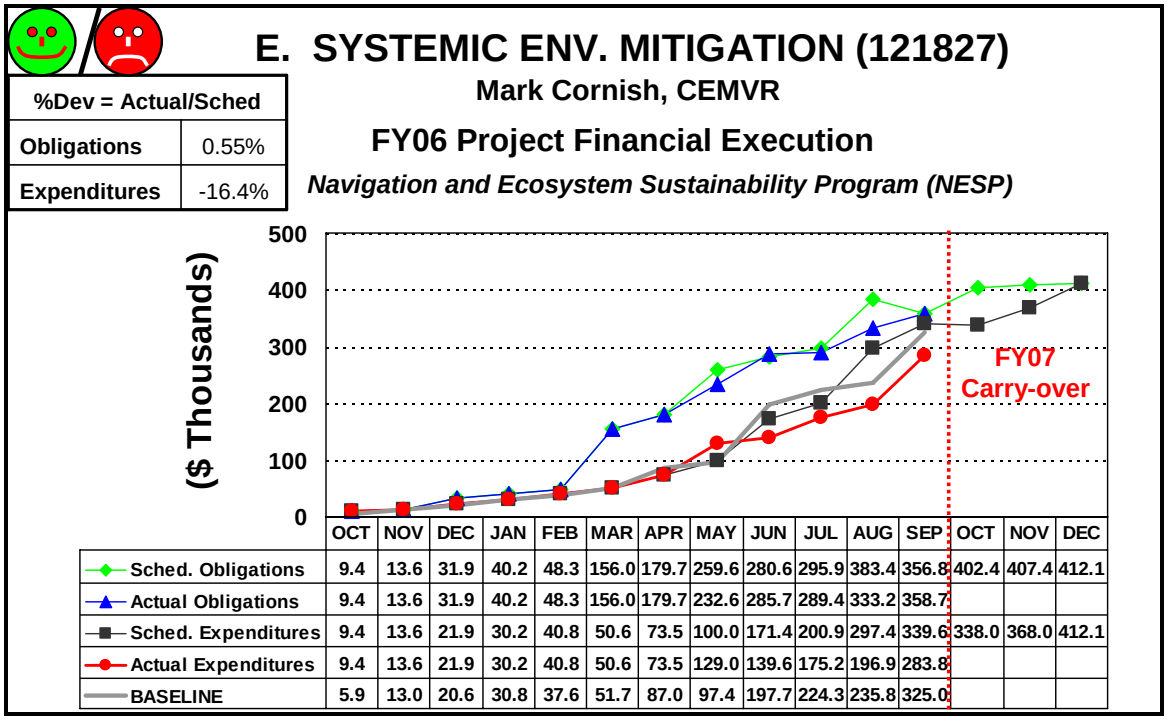
- Andrew Miller (ERDC) completed data entry into web-based CRREL spreadsheet form of his data from 1984-2005. This data will be used by the site specific mitigation teams and the Mussel Coordination Team to avoid impacts to mussels.
- Mark Cornish worked with the COR, CT and MVP to resolve a contractual dispute on an unfinished product from FY05. There were residual non-performance issues on MACTEC Work Order 19, the L&D 22 site-specific mussel study (McClane Environmental Services). The Corps received a draft report, which was rejected by the reviewers. Comments were provided to the contractor and a revised draft was requested. As of 15 October 2006, the revised draft had not been received by the Corps.
- A SOW was developed for FY06 work by Dan Kelner, but further activity was suspended due to lack of funds.

Bankline and Island Protection Component, Environmental Monitoring Component, Historic Properties Component, and Backwater/Secondary Channel Restoration Component

- No activity was scheduled for these components in FY06 due to insufficient funding

SUMMARIZED FINANCIAL DATA:	PED	CONST.
Estimated Federal Cost	$1,056,866	$90,770,567
Estimated Non-Federal Cost (IWWTF)	$0	$90,770,567
Total Estimated Cost	$1,056,866	$181,541,134[a]
Allocation through FY 2005	$343,101	$0
Allocation for FY 2006	$283,765	$0
Budget Request for FY 2007	$300,000	$0
Balance to Complete after FY 2007	$130,000	$181,541,134[a]
Amount that could be used in FY 2007	**$430,000**	**$0**

[a] – Funding estimate for Systemic Env. Mitigation for full implementation of recommended plan first increment (approx. 15 years).



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Sched. Obligations	9.4	13.6	31.9	40.2	48.3	156.0	179.7	259.6	280.6	295.9	383.4	356.8	402.4	407.4	412.1
Actual Obligations	9.4	13.6	31.9	40.2	48.3	156.0	179.7	232.6	285.7	289.4	333.2	358.7			
Sched. Expenditures	9.4	13.6	21.9	30.2	40.8	50.6	73.5	100.0	171.4	200.9	297.4	339.6	338.0	368.0	412.1
Actual Expenditures	9.4	13.6	21.9	30.2	40.8	50.6	73.5	129.0	139.6	175.2	196.9	283.8			
BASELINE	5.9	13.0	20.6	30.8	37.6	51.7	87.0	97.4	197.7	224.3	235.8	325.0			

SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
FY06 PMP Revisions	1-Dec-05	29-Jan-06	29-Jan-06	29-Jan-06	
FY06 PMP Approval	31-Jan-06		3-Mar-06		Status of approval or rejection not provided to the TL
Main Channel Fisheries Trawling	1-May-06	9-May-06	15-Oct-06		Net problems prevented some data from being collected in the Spring
Product - Field Report - Main Channel Fisheries	1-Sep-06	27-Sept-06	30-Sep-06	4-Oct-06	
Aquatic Plant Monitoring	1-Jun-06	19-Jun-06	31-Aug-06	15-Sep-06	
Product - Field Report - Aquatic	1-Sep-06	1-Sep-06	30-Sep-06	30-Sep-06	All field sampling was

Plant Monitoring					completed and the draft report is scheduled for 27 October

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
December 2006	1984-2005 ERDC mussel GIS data	Drew Miller (ERDC) completed data entry into web-based CRREL spreadsheet form.	https://maps.crrel.usace.army.mil/mvp/map.main
May 2006	FY05 Final Report – Survey of Potential Aquatic Plant Impact Zones: Effects of Navigation Traffic on Aquatic Plants in the Upper Mississippi River, Environmental Planning Support	First year of a three year study to assess the existing condition of model predicted submersed aquatic plant zones.	
October 2006	Towboat Propeller Study - Summary of findings as of September 2006	One-page summary of FY06 sampling activities	
July-Sept 2006	Monthly progress reports	One-page documentation of project progress from the contractor	

CONSTRUCTION START:

Construction start scheduled is contingent upon the authorization of the NESP, the completion of the economic re-evaluation and adequate funding. Assuming FY07 authorization, potential starts are:

PROJECT FEATURE	START DATE	COMPLETION DATE
Bank Erosion/Historic Properties	FY09	FY09
BW/SC Sediment	FY09	FY22
Submersed Aquatic Vegetation	FY09	FY15
Fisheries	FY09	FY22

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Jon Duyvejonck	USFWS	Participated in fish modeling needs meeting and fish trawling
Bernie Schonhoff	Iowa DNR	Participated in fish trawling
Mike Steuck	Iowa DNR	Participated in fish trawling
Kirk Hansen	Iowa DNR	Participated in fish trawling
Ed Britton	USFWS	Participated in fish trawling
UMRCC Fish Tech Section	Multiple Agencies	Responded to main channel trawling briefing
NECC	Multiple Agencies	Responded to a program status briefing

PUBLIC INVOLVEMENT:

No public involvement activities were held FY06. One article on main channel fisheries sampling was published in the Waterways Journal.

FY07 IMPLEMENTATION STRATEGY:

Fisheries Component

Task 1: Main channel trawling.

ERDC will continue the main channel trawling study using a tow with fifteen loaded barges in support of Navigation Study assessment of the effects of navigation on fish. Additional trawl runs may be made to seize upon opportunities to collect data at night and from other pools, including LTRMP pools, as they arise.

Main channel trawl data collection schedule:

	Fall (Oct/Nov)	Winter (Dec/Jan)	Spring (Apr/May)	Summer (Jul/Aug)
Middle Miss	**B**	**B**	**B**	**B**
Pool 26	**B**	**B**	O	
Pool 25	O	O	O	
Pool 24	O	O	O	
Pool 22	O	O	O	
Pool 21	O	O	O	
Pool 20	O	O	O	
Pool 19	O	O	O	
Pool 18	O		O	
Pool 17	O		O	
Pool 16	O		O	
Pool 14	**B**		**B**	
Pool 13	O		O	
Alton	**B**	**B**		
Marseilles	**B**	**B**	**B**	
B – Base sampling, O – Optional sampling				

Issues

- Logs/debris and hydrograph (rising) may affect timing of study for the Middle Mississippi river. It will be up to Killgore and the captain of the American Beauty to identify the appropriate time for sampling.

Work Products for Task 1 will include: Tabular data summary describing the catch from FY06 and FY07 sampling to be used in a future project report.

Task 2. Evaluate Net effects.

ERDC will examine the extent of damage to fish by the net by tagging unentrained fish and placing tagged fish into the trawl during sampling so that these fishes are subjected to the same net stress as entrained fish. Tagged fish will be recovered and separated from non-tagged (entrained) fish after a normal sampling run of 30 minutes. Study will be conducted in either Fall or Spring season in Pool 26.

Issues

- Study requires additional crew from MVS to capture fish

Work Products for Task 2 will include: Tabular data summary describing net induced damage to fish to be used in a future project report.

<u>Potential</u> Task 3. Open wheel and Kort nozzle adult and juvenile fish entrainment comparison (FY07 funding is currently not programmed for this study)

ERDC would collect trawl data using the American Beauty pushing three empty barges through Pool 26 during the summer sampling period to compare the effects of two propeller types on entrainment.

Work Products for Task 3 would include: An analysis of similarity and a tabular comparison of entrainment Cooperative Venture and American Beauty to be used in a future project report.

Potential Task 4. NavAEM Modeling (FY07 funding is currently not programmed for this study, but study necessary to complete an updated mitigation cost)

4.1 NavAEM Model development

Adapt the existing NavLEM mitigation model to accommodate information on adult and juvenile fish entrainment and call it the NavAEM (Navigation Adult Entrainment Model). This includes post-stratification based upon correlation data of the entrainment analysis and reach geomorphic classification.

Work Products for sub-task 4.1 would include: A document that describes both the model framework and the format of the model outputs to be used at the development and coordination meeting. The model should have the ability to be projected or otherwise displayed for review and discussion at the meetings mentioned in paragraph 4.2. These presentation materials should clearly show the linkages between major ecosystem components, stressors and drivers.

4.2 NavAEM Model development and coordination meeting

Present the preliminary model framework to an audience of technical experts in early January at ERDC in Vicksburg, MS. The purpose of the meeting would be to determine the mechanics of the model to formalize its framework. The agenda should cover:

- Initial proposal
- Identification of additional data sources (hydraulic and biological)
- Other resources

Attendees should include Steve Maynord, Jack Killgore, Steve Bartell, Scott Bourne, Barry Johnson, Steve Gutreuter, Steve Miranda, Jon Duyvejonck, ECO-PCX representative, and Mark Cornish

Work Products for sub-task 4.2 would include: Meeting notes that capture recommendations for modification to the model framework. These recommendations should be incorporated into the model.

4.3 NavAEM Testing

Test/calibrate the model using data from Pool 26 and compare model outputs to Killgore's entrainment data. Perform a statistical comparison of the two methodologies.

Work Products for sub-task 4.3 would include: Documentation that shows the results of the model outputs as compared with measured entrainment data.

4.4 System analysis using NavAEM

Application of the calibrated model to all pools in the Upper Mississippi River.

Work Products for sub-task 4.4 would include: A report that describes the NavAEM framework and model outputs for each pool to be used in the Economic re-evaluation study. An Excel spreadsheet containing model outputs.

Potential Task 5. Population Modeling (FY07 funding is currently not programmed for this study)

Develop population-based models to identify the significance of entrainment on the total abundance of specific species. These models should estimate abundance of smallmouth buffalo, bigmouth buffalo, shovelnose sturgeon, paddlefish, gizzard shad, channel catfish and freshwater drum and other sensitive species, possibly endangered species. Population model predictions would be integrated into the entrainment analysis to complete the report. This effort would require additional trawling work to test distribution and abundance of main channel species.

Work Products for Task 5 would include: A report to be used by ERDC as a chapter in the final main channel trawling paper.

<u>Submersed Aquatic Vegetation Component</u>

Task: Vegetation Surveys – Year 3

Repeat pre-construction monitoring vegetation surveys at 33 sites in five Pools of the Upper Mississippi River. Field work would occur in July-August.

Work Products would include: A 3 year summary report to be used by the NECC to finalize the locations where plant mitigation will be required on the UMRS.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
F. Traffic Management
Team Leader: Rich Manguno

PURPOSE: Traffic management is a nonstructural navigation measure that is designed to reduce lock congestion that in turn would result in improved overall system efficiency. Lower congestion would be accomplished through a traffic management system that would control, to some degree, the movement of tows through the system. The Traffic Management project provides a mechanism to analyze the viability of traffic management as a potential nonstructural navigation efficiency measure. Ultimate implementation of such an efficiency measure has the potential to influence the economic performance of currently proposed navigation efficiency features. To the extent that this nonstructural measure allows the existing system to operate more efficiently, the need for structural improvements could potentially be delay or even eliminated.

LOCATION AND DESCRIPTION: The UMR-IWW transportation system includes 29 Mississippi River locks between St. Paul, MN and St. Louis, MO, and 8 Illinois Waterway locks. The sub-element of the UMR-IWW system considered in the initial effort to address the larger question of traffic management for the entire system is the portion of the Mississippi River beginning with Lock 20 to the north and ending with Lock 25 to the south.

SUMMARY OF FY06 ACTIVITIES: A report prepared by the Center for Transportation Studies, University of Missouri – St. Louis provided a detailed analysis of how the potential impacts of alternative traffic management policies at locks might vary under different traffic levels.

SUMMARIZED FINANCIAL DATA:	PED	CONST.
Estimated Federal Cost	$174,585	$TBD[a]
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$174,585	$TBD[a]
Allocation through FY 2005	$40,394	$0
Allocation for FY 2006	$34,191	$0
Budget Request for FY 2007	$100,000	$0
Balance to Complete after FY 2007	$TBD[a]	$TBD[a]
Amount that could be used in FY 2007	**$0**	**$0**

[a] – Development of workplan pending review of UMSL report and meetings during 1st quarter of FY07.

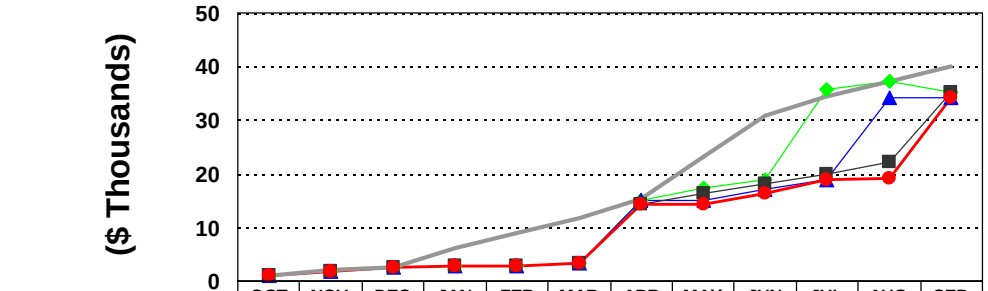
F. NAVIGATION APPT. SCHEDULING (121828)

Rich Manguno, CEMVN

FY06 Project Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)

%Dev = Actual/Sched	
Obligations	-3.2%
Expenditures	-3.2%



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	1	1.9	2.5	2.9	2.9	3.4	15.1	17.3	19	35.6	37.3	35.325
Actual Obligations	1	1.9	2.5	2.9	2.9	3.4	15.1	15.1	17.2	18.9	34.2	34.2
Sched. Expenditures	1.0	1.9	2.5	2.9	2.9	3.4	14.2	16.4	18.1	19.8	22.3	35.3
Actual Expenditures	1.0	1.9	2.5	2.9	2.9	3.4	14.2	14.2	16.3	18.9	19.2	34.2
BASELINE	1.0	1.9	2.5	6.2	9.0	11.7	15.4	23.1	30.8	34.6	37.3	40.0

SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Scope of Work – Alternative Identification and Evaluation	Jun-06	Jun-06	Jul-06	Jul-06	
Contract Award-UMSL	Jun-06	Jul-06	Jul-06	Aug-06	
UMSL Report	Aug-06	Aug-06	Sep-06	Sep-06	
Team Evaluation of UMSL work/Decision regarding need for future analysis	Oct-06	Oct-06	Oct-06		

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
9/30/06	UMSL Report	Traffic management alternatives and evaluation	

CONSTRUCTION START: TBD

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Economic Coordinating Committee	State, Federal and NGOs (Nav Interests)	Review of UMSL report and team decision regarding future analysis
External Expert Review Panel	Univ. Professors	Review of UMSL report and team decision regarding future analysis

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
	None scheduled at this time.	

FY07 IMPLEMENTATION STRATEGY: A detailed implementation strategy will be developed following the team's assessment of the need for additional investigations. Additional investigations could include identification and evaluation of further management measures, as well as defining the requirements of field testing.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
G. Moorings
Team Leader: Tim Grundhoffer

PURPOSE: The primary purpose of the Moorings project is to increase lock performance through the installation and use of mooring structures in the lock approaches. The moorings provide waiting points that are closer to the lock and allow passage of exiting tows; both decreasing lockage times.

Most Mississippi River and Illinois Waterway locks are 600 feet long by 110 feet wide. Tows this size or smaller are able to lock through as a single lockage or in one piece. Larger tows, such as the prevailing 15-barge tow size, which is about 1,200 feet long by 105 feet wide, must lock through as a double lockage or in two pieces. The double lockage adds several steps to the lockage process as well as considerable time which decreases lock performance. At some locks, the towboats waiting to lock through are forced to wait a considerable distance from the locks. There are often delays associated with the time it takes for the waiting tow to approach the lock from the waiting area.

The waiting areas can experience environmental damage due to the effects of the tow. While tows wait they must either push into the riverbank, which can cause erosion and damage to shoreline vegetation, or wait out in the currents of the river, which wastes fuel. Both options can cause scour of the bank by a vessel's propwash.

Lock performance has been defined as the lock's ability to lock tows efficiently. The lower the lock's transit time for tows, the higher the efficiency. While large scale measures eliminate steps in the lockage process, small scale measures primarily decrease delay time for tows by reducing the time required for certain steps in the lockage process. Thus, more tows could be locked in a given time period, and delays to tows using the lock could be reduced or eliminated.

Small scale measures are defined as lower cost measures that can reduce traffic delays and congestion at the system locks without the major construction and expense involved with extending the existing lock chamber or building a new lock. Small scale measures were defined and analyzed in the System Feasibility Study using quantitative and qualitative information. The Engineering Appendix to the System Feasibility Study contains the base information and served as the starting point for the PED efforts for moorings.

LOCATION: This project consists of 10 mooring sites located at various lock sites on the Upper Mississippi River and one site on the Illinois Waterway. Specific sites are between LD11-LD24 on the Mississippi and include LaGrange lock on the Illinois Waterway.

DESCRIPTION: Adjacent mooring facilities are structures that provide vessels a place to tie-off closer to the lock while waiting for their turn to lock through, thus decreasing delay times. There are three basic types of mooring facilities: mooring buoys, land-based moorings (or bank anchors) and mooring cells. It has been identified in the System Feasibility Study (SFS) that mooring facilities in 8 locations would decrease lock times and increase navigation efficiency. From the SFS, mooring cells were proposed on the upstream ends of Locks 14, 24, and LaGrange and also downstream at Lock 14. Mooring buoys are proposed on the downstream ends of Locks 12, 18, 20, and 22. Further coordination with the tow

industry in FY05 has identified a total of 10 mooring facilities. Currently, mooring cells are proposed on the upstream ends of Locks 11, 24, and LaGrange and also downstream at Locks 14, 19, 15, 18, 20, 21 and 24.

The purpose of moorings is to provide a closer point for tows to wait their turn to lock through. Cells will be designed using sheet-pile cells filled with stone or low-strength concrete. On rock-founded locations, it may be possible to use steel cans in lieu of a sheet-pile cell. Mooring buoy efforts have been suspended, as FY05 and FY06 efforts has recommended the use permanent mooring cells instead of mooring buoys, where buoys had been previously proposed. Increased mooring time and safety issues during tie off to the buoy have been reported.

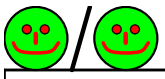
The mooring locations from the SFS have previously been coordinated and determined by a multidiscipline team, including representatives from the towing industry and environmental resource experts. A primary purpose of the mooring design is to validate its location. A cell's location and usefulness has been tested with a floating marker buoys that can be easily moved and retested. Marker buoys were installed at lock sites in FY05 and one lock site in FY06. Over 450 tow pilot comments have been evaluated to determined consensus for the location of each mooring based on navigation needs. A GPS coordinate was obtained and GIS maps were revised to show the final mooring locations. As environmental coordination, engineering and design efforts progress in FY07, the locations will continued to be evaluated for their validity and environmental impacts.

SUMMARY OF FY06 ACTIVITIES: In FY 2006, the following major activities were accomplished:

1. The DDR for the design modifications for mooring buoys and draft plans were submitted by an AE firm at the start of the year. The document provides engineering basis for the mooring buoy design, fabrication costs and a set of draft mooring buoy plans. While the SFS advanced the use of mooring buoys at some sites, this effort has been suspended (see next activity)
2. Through numerous discussions with the tow industry/RIAC, the results from testing the existing mooring buoy (at Lock and Dam 8 installed under the O&M program), and through the results of tow pilot survey on the mooring location marker buoys, the use of mooring buoys has been deemed unsafe for deckhands involved in tying off and also time consuming for tows to position themselves along a moving, unstable target. The resulting technical recommendation is for use of permanent mooring cells instead of mooring buoys. The additional costs of a mooring will be studied further.
3. Development of the draft DDR for Mooring Cell Studies has been an ongoing effort to document planning/engineering activities at the ten proposed mooring sites. The document includes, review of previous SFS reports related to moorings, mooring locations maps, documentation of tow industry user surveys, continued screening of sites that were recommended by industry but not recommended by the SFS, and documenting decisions on the use of mooring buoys. A draft review is anticipated in the first quarter of FY07.
4. Initiated EA coordination for the LaGrange Lock – Mooring Cell. The initial coordination letter was distributed to agency groups for review.

SUMMARIZED FINANCIAL DATA:	PED	CONST.
Estimated Federal Cost	$492,712	$3,200,000
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$492,712	$3,200,000
Allocation through FY 2005	$170,362	$0
Allocation for FY 2006	$62,350	$0
Budget Request for FY 2007	$260,000	$0
Balance to Complete 3 moorings after FY 2007	$0	$3,200,000
Amount that could be used in FY 2007	**$385,000**	**$0**

* Costs for remainder of moorings design and construction not shown



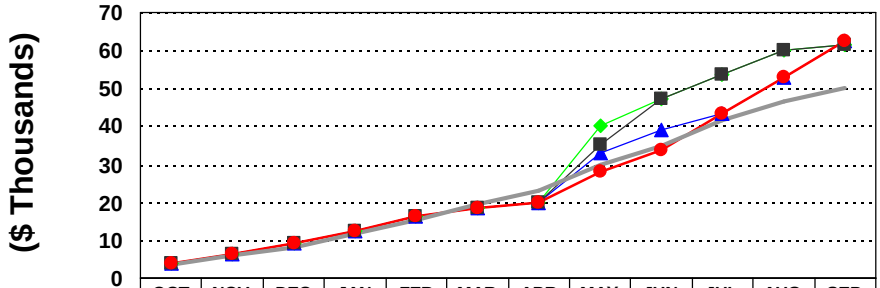
G. Mooring Cells and Buoys (121850)

Tim Grundhoffer, CEMVP

FY06 Project Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)

%Dev = Actual/Sched	
Obligations	1.5%
Expenditures	1.5%



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	3.8	6.4	9.4	12.5	16.4	18.5	20.0	40.2	47.4	53.7	59.9	61.4
Actual Obligations	3.8	6.4	9.4	12.5	16.4	18.5	20.0	33.2	38.9	43.3	53.0	62.4
Sched. Expenditures	3.8	6.4	9.4	12.5	16.4	18.5	20.0	35.2	47.4	53.7	59.9	61.4
Actual Expenditures	3.8	6.4	9.4	12.5	16.4	18.5	20.0	28.2	33.9	43.3	53.0	62.4
BASELINE	3.5	6.0	8.3	11.7	15.1	19.6	23.0	29.9	34.8	41.7	46.6	50.0

SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Revise PMP	3 Jan 06	3 Jan 06	28 Feb 06	15 Mar 06	
Mooring Buoy DDR and Draft Plans	1 0ct 06	1 Oct 06	31 Dec 06	11 Jan 06	Mooring buoy efforts have been suspended
Revised GIS Maps of Mooring Locations	1 May 06	1 May 06	24 Feb 06	17 May 06	Maps were updated based results of tow pilot survey
Lock and Dam 24 Marker Buoy Installation	15 Aug 06	29 Aug 06	Ongoing	Ongoing	Marker buoys are currently installed and tow pilot comments being taken
Draft DDR Mooring Location Study	12 Jun 06	12 Jun 06	15 Aug 06	Ongoing	Anticipate draft review in first quarter of FY07

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Mar 05	Mooring Buoy DDR and Draft Plans	Engineering and design of mooring buoy modifications to include draft plans	On PW
May06	GIS Maps of Mooring Locations	GIS maps of mooring locations for each site.	On PW
Onging	Draft DDR Mooring Location Study	Documentation of mooring studies	On PW

CONSTRUCTION START:

PROJECT FEATURE	START DATE	COMPLETION DATE
Lock 14 Mooring Cell	15 Dec 07 too soon	1 Aug 08
Lock Lagrange Mooring Cell	1 Mar 08	15 Sep 08
Lock 24 Mooring Cell	15 May 08	1 Oct 08

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Janet Sternburg	MO DNR	PDT member
Jon Duyvejonck	USFWS	PDT member
Bob Schanzle	IL DNR	PDT member
Tim Schlagenhaft	MN DNR	PDT member
Gretchen Benjamin	WI DNR	PDT member
Bernie Schonhoff	IA DNR	PDT member
Various contacts	RIAC	PDT member
Various Tow Pilots	Tow Industry	Responded to marker buoy survey

PUBLIC INVOLVEMENT: No direct public involvement was performed in FY06. As the EA progresses, public meetings and/or public review meeting needs will be assessed in FY07.

FY07 IMPLEMENTATION STRATEGY:

If NESP is authorized and funded in 2007, three mooring cells could be constructed during FY 2008 (pending authorization). The tasks listed below must be accomplished if a construction start in 2008 is to be achieved.

General Mooring:

1. Complete LD 24 Marker Buoy Study
2. DDR for Mooring Locations Approved – Dec 06

Lock 14 Mooring Cell:

1. Final P&S Submittal – Jun 07
2. ITR Routed for Signatures - Jun 07
3. P&S/ITR Sign-off – Jul 07

4. Prepared Contract documents (ready for FY08 BCOE) – Sep 07
5. Construction Contract Bid Opening – Jan 08

Lock LaGrange Mooring Cell:

1. Initiate EA – Oct 06
2. Initial Technical Review Meeting – Oct 06
3. Obtain Boring and Surveys (if required) – Nov 06
4. DTR Submittal – Jan 07
5. Submit Right of Way Drawings (if required)
6. DTR Meeting – Feb 07
7. Draft EA – Mar 07
8. FTR Submittal – Mar 07
9. Final ROW dwgs (if required) – Mar 07
10. FTR Meeting – Apr 07
11. Envir Surveys (if required) – May 07
12. P&S/ITR Sign-off – Sep 07
13. Prepared Contract documents (ready for FY08 BCOE)
14. EA– Sep 07
15. Advertise – Nov 07
16. Construction Contract Bid Opening – Jan 08

Lock 24 Mooring Cell:

1. Update DDR with Marker Buoy Survey – Oct 06
2. Initiate EA - Oct 06
3. Initial Technical Review Meeting – Oct 06
4. Obtain Boring and Surveys (if required) – Nov 06
5. DTR Submittal - Jan 07
6. Submit Right of Way Drawings (if required) – Jan 07
7. DTR Meeting – Feb 07
8. Draft EA – Mar 07
9. FTR Submittal – Mar 07
10. Final ROW dwgs (if required) – Mar 07
11. FTR Meeting – Apr 07
12. Envir Surveys (if required) – May 07
13. P&S/ITR Sign-off – Sep 07
14. Prepared Contract documents (ready for FY08 BCOE)
15. A – Sep 07
16. Advertise – Nov 07
17. Construction Contract Bid Opening – Jan 08

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
H. Switchboats
Team Leader: Dave Gordon

PURPOSE: To implement Switchboats (SWB) as a small scale measure to reduce traffic delays and congestion at the system locks without the major construction and expense involved with extending the existing lock chamber or building a new lock.

LOCATION AND DESCRIPTION: Switchboats will be implemented via contract and will remain on station through lock construction at Locks 20 – 25. The SWBs will be used to extract the first cut of a double-cut lockage in a faster manner than existing methods. Five contracted SWBs will be obtained, placing one boat at each lock tentatively planned for FY08 (pending authorization) or FY09. In reaction to a no lock construction future, a maximum of 10 contracted SWBs will be obtained. Once on station and depending on conditions, the SWBs will pull first cuts along the guidewall, to the last pin on the guidewall or to an awaiting tow for remote remake.

SUMMARY OF FY06 ACTIVITIES: In FY06, the PMP was updated; a Sources Sought Synopsis was advertised, a Legal Opinion document was compiled by OC; and a Position Paper was produced and peer reviewed.

SUMMARIZED FINANCIAL DATA:	PED (GI)	CONST. (CG)
Estimated Federal Cost (fully implemented)	$300,000	$335,000,000
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$300,000	$335,000,000
Allocation through FY 2005	$88,599	$0
Allocation for FY 2006	$34,503	$0
Budget Request for FY 2007	$60,000	$0
Balance to Complete after FY 2007	$116,898	$335,000,000
Amount that could be used in FY 2007	**$176,898**	**$0**

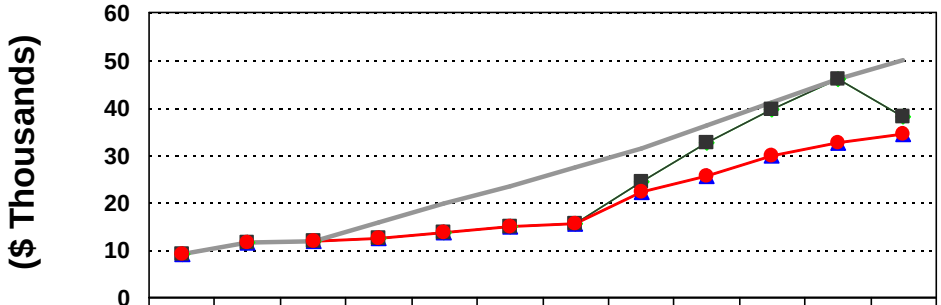
H. SWITCHBOATS (121846)

David Gordon, CEMVS

FY06 Project Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)

%Dev = Actual/Sched	
Obligations	-9.2%
Expenditures	-9.2%



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	9.2	11.6	11.9	12.6	13.8	14.8	15.5	24.5	32.5	39.5	46.0	38.0
Actual Obligations	9.2	11.6	11.9	12.6	13.8	14.8	15.5	22.3	25.5	29.7	32.4	34.5
Sched. Expenditures	9.2	11.6	11.9	12.6	13.8	14.8	15.5	24.5	32.5	39.5	46.0	38.0
Actual Expenditures	9.2	11.6	11.9	12.6	13.8	14.8	15.5	22.3	25.5	29.7	32.4	34.5
BASELINE	9.1	11.5	11.8	15.7	19.7	23.6	27.5	31.4	36.3	41.2	46.1	50.0

SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Sources Sought Synopsis	April 2006	April 2006	July 2006	July 2006	
Update PMP	March 2006	March 2006	Nov 2006		
Legal Opinion	May 2006	May 2006	July 2006	Sept 2006	
Position Paper	May 2006	May 2006	June 2006	July 2006	
Peer Review	July 2006	July 2006	Aug 2006	Sept 2006	
ITR	Nov 2006		Nov 2006		
Performance Monitoring Plan	Jan 2007		March 2007		
Cost Estimates	March 2007		June 2007		
DDR	Nov 2006		April 2007		

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Nov 06	PMP Update		
Nov 06	Legal Opinion		
Nov 06	Position Paper		
Mar 07	Performance Monitoring Plan		
Jun 07	Cost Estimates		

Apr 07	DDR		
Jun 07	VE Study		

CONSTRUCTION START: 2008 (pending authorization)

PROJECT FEATURE	START DATE	COMPLETION DATE
Switchboats Phase 1 Contract (2 SWBs)	April 2008	Oct 2009
Switchboats Phase 2 Contract (5 SWBs)	Oct 2009	Oct 2014
Full Implementation (10 SWBs)	2014	2022

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
None		

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
	None	

FY07 IMPLEMENTATION STRATEGY: Develop contract documents suitable for a FY08 BCOE, produce EAs if needed, estimate costs, and complete the DDR.

QTR 1:
- Update PMP
- ITR / Finalize Position Paper and Legal Opinion

QTR 2:
- Performance Monitoring Plan
- Complete Draft DDR
- Initiate ITR Process

QTR 3:
- Assemble Cost Estimates
- Complete DDR
- VE Study

QTR 4:
- Develop Contract Documents Suitable for FY08 BCOE

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT

I1. Lock 22 New 1200' Lock
Team Leader: Michael Tarpey

PURPOSE: The Lock 22 New 1200 ft lock project will build a new 1200 ft lock to reduce traffic delays through the existing 600 ft lock chamber. The majority of the Upper Mississippi River locks were designed and constructed in the 1930's. The 600-ft lock chamber cause significant average delays to navigation. Tows larger than 600-ft must break in half for two separate lockages.

LOCATION: Lock and Dam 22 on the Upper Mississippi River at approximately River Mile 301.2.The central control station is located in Ralls County, Missouri near Saverton, MO.

DESCRIPTION: At Lock and Dam 22, the proposed project is construction of a new 1200 ft lock in the auxiliary miter gate bay, a new upstream, ported 1226 ft guardwall, and a new downstream 800 ft guardwall. The project also includes associated channel work, relocations and site specific environmental mitigation. This cost will be shared equally (50/50) between Federal Construction General (CG) funds and the Inland Waterway Trust Fund (IWTF).

SUMMARY OF FY06 ACTIVITIES:

1. Project Management.
2. Hydraulics.

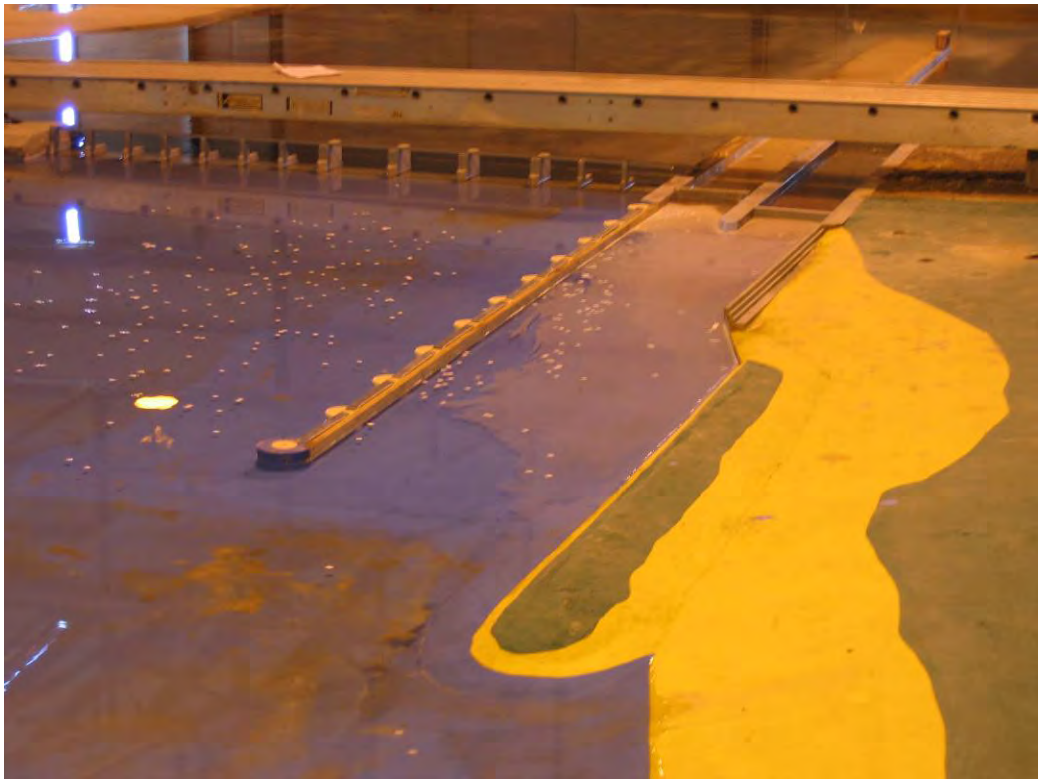


Figure 1. 120:1 Scale Physical Model at ERDC-CHL in Vicksburg, MS

   a. Baseline Numeric Model Calibration Report
   b. Baseline Physical Model Calibration Report

c. Proposed Project Numeric Model Upstream Alternatives Report

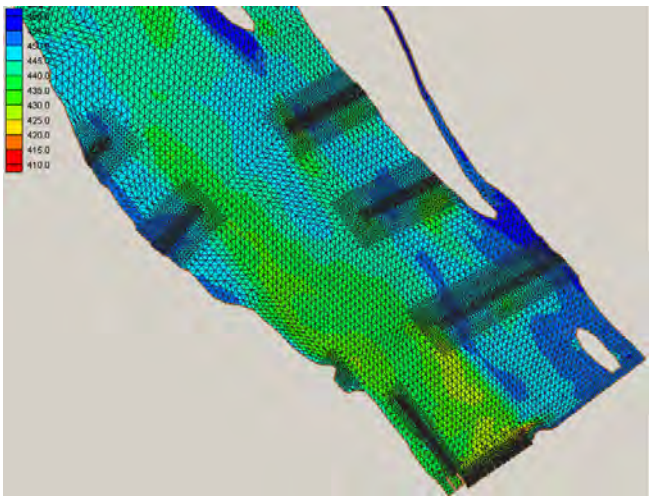


Figure 2. Original Wingdams

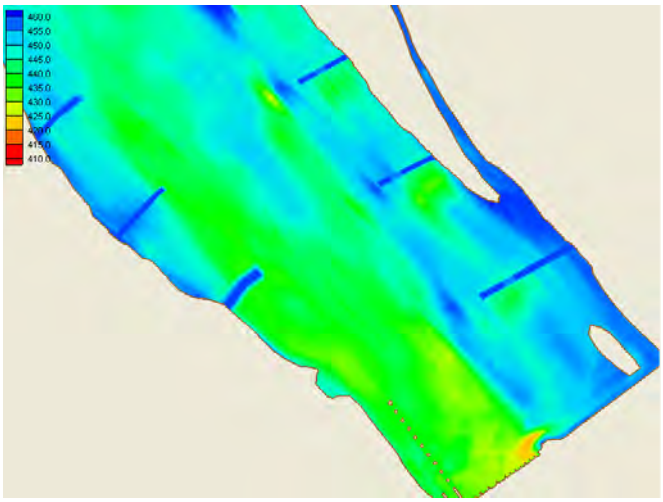


Figure 3. Modified Wingdams

d. Proposed Project Numeric Model Downstream Alternative Report
e. Proposed Project Physical Modeling work completion for upstream and downstream
f. Filling/Emptying System and Sill Height review and documentation

3. Structural.
   a. Lock Wall concept selection report. The report documents the process by which a lock wall concept has been selected for Locks 20 to 25.
   b. Approach Wall concept selection report. The report documents the process by which an approach wall concept has been selected for Locks 20 to 25.
   c. Typical Lock Wall 25% Design (A/E)

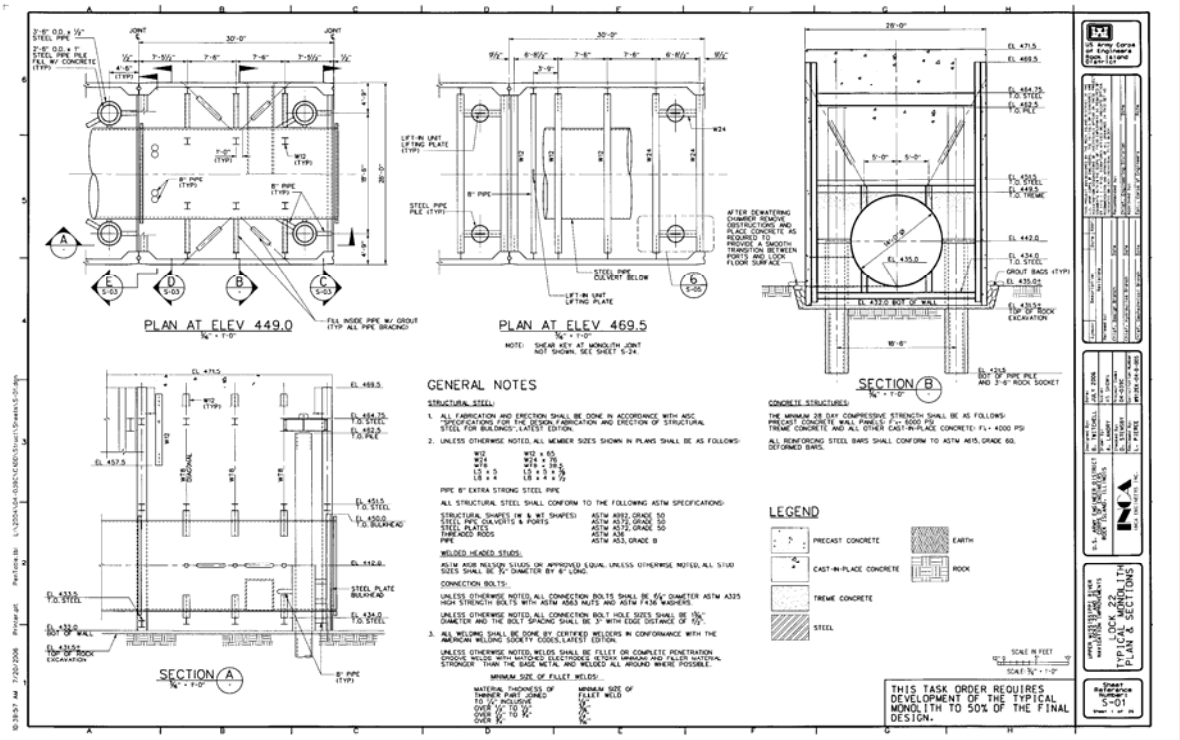
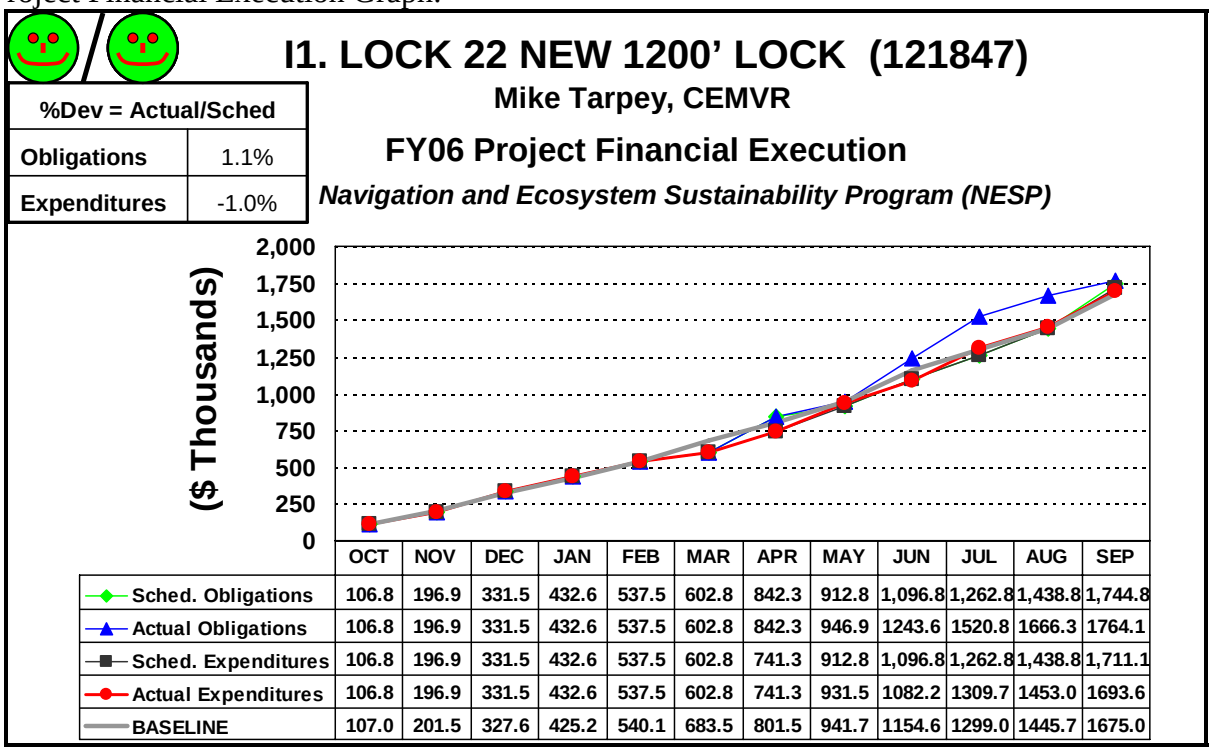


Figure 2: Lock 22 Typical Monolith Plan & Section

   d. Transition Wall 25% Design (A/E) for Intermediate and River Walls
   e. Downstream Bulkhead Sill 50% Design (A/E)
   f. Typical Lock Wall Constructability Review (A/E)
   g. Existing facility 3D CADD/BIM model (A/E)
   h. Existing Lock Wall Stability Report
   i. Generic Lockwall Features Layout
   j. Rock Removal Quantities
   k. Preliminary miter gate and valve monolith design
4. Geotechnical.
   a. Rock Removal report
5. Electrical Engineering. Existing electrical system documentation report.
6. Survey. Project boundary marker reestablishment and documentation.
7. NEPA
   a. Public Meeting – May 2006
   b. Environmental Assessment. Significant progress was made to completing the EA in summer 2007.
8. Operation & Engineering coordination meeting

SUMMARIZED FINANCIAL DATA:	PED	CONST.
Estimated Federal Cost	$12,000,000	$XXX,000,000
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$12,000,000	$XXX,000,000
Allocation through FY 2005	$1,868,004	$0
Allocation for FY 2006	$1,693,615	$0
Budget Request for FY 2007	$1,280,000	$0
Balance to Complete after FY 2007	$7,158,381	$XXX,000,000
Amount that could be used in FY 2007	$5,530,000	$0

FY06 Project Financial Execution Graph:



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	106.8	196.9	331.5	432.6	537.5	602.8	842.3	912.8	1,096.8	1,262.8	1,438.8	1,744.8
Actual Obligations	106.8	196.9	331.5	432.6	537.5	602.8	842.3	946.9	1243.6	1520.8	1666.3	1764.1
Sched. Expenditures	106.8	196.9	331.5	432.6	537.5	602.8	741.3	912.8	1,096.8	1,262.8	1,438.8	1,711.1
Actual Expenditures	106.8	196.9	331.5	432.6	537.5	602.8	741.3	931.5	1082.2	1309.7	1453.0	1693.6
BASELINE	107.0	201.5	327.6	425.2	540.1	683.5	801.5	941.7	1154.6	1299.0	1445.7	1675.0

SCHEDULE AND MILESTONES:

Task	SCH. Start Date	ACT Start Date	SCH. Finish Date	ACT FINISH Date	Comments
On-going project management	2/1/05				
FY06 PMP Revisions	12/1/05		1/29/06		
FY06 PMP Approval	1/31/06		3/3/06		
Product - Geotechnical Foundation Exploration Report	4/1/05	4/1/05	9/30/05	9/30/05	Completed
Product - Structures Lock Wall Concept	3/1/05	3/1/05	1/31/06	2/28/06	
A/E Lock Wall Concept	3/1/05	3/1/05	9/15/05	9/15/05	Completed
Lock Concept Decision Report	10/1/05	10/1/05	1/31/06	2/28/06	Completed
Product - Structures Approach Wall Concept Decision Report	6/1/05	6/1/05	2/28/06	3/31/06	Completed
Product - Hydraulics Physical Model Baseline Conditions Report	6/1/05	6/1/05	4/30/06	6/30/06	Completed
Product - Hydraulics Numeric Model Baseline Conditions Report	6/1/05	6/1/05	3/31/06	3/15/06	Completed
Product - Geotechnical Concrete Condition Report	7/1/05	7/1/05	4/30/06	7/15/06	Completed.
Product - Hydraulics Physical Model Proposed Project Report	5/1/06	5/1/06	12/30/06		In-progress.
Update physical model incl. New lock and approach walls	5/15/06	5/15/06	6/15/06	6/15/06	Completed.

Model Testing	6/16/06	6/15/06	10/15/06	9/10/06	Completed
Report Preparation	10/16/06	9/15/06	12/15/06		10/15/06 Draft report has been received and is being reviewed
Product - Hydraulics Numeric Model Proposed Project Report	3/1/06	5/1/06	12/30/06		
Product - Hydraulic Numeric Model Tail water alternatives report	3/1/06	3/1/06	5/31/06	6/4/06	Completed.
Product - Hydraulic Numeric Model Pool alternatives report	5/15/06	5/15/06	10/30/06		9/15/06 Draft report is being reviewed
Product - Construction Scheduling Report	10/1/06		5/30/07		
Product - Structures Detailed Approach Wall Design	1/1/07		5/30/07		
Product - Structures Detailed Lock Wall Design	10/1/06		5/30/07		
A/E Typical Lock Wall Design (50% Design)	1/1/06	1/1/06	7/31/06	7/26/06	Completed.
A/E Downstream Bulkhead Sill Design (50% Design)	5/15/06	5/15/06	9/15/06	9/7/06	Completed.
A/E Lock Wall Tie-in (50% design)	7/1/06	6/28/06	10/30/06		In progress. Contract awarded 6/28
Product - Cost Estimate	1/1/07		6/30/07		
Product –Hydraulics Physical model Construction Sequence	1/1/07		5/30/07		
Product - Structural Preliminary Steel Design	4/1/07		6/30/07		
Product - Architectural Preliminary Design	4/1/07		6/30/07		
Product - Mechanical Preliminary Design	4/1/07		6/30/07		
Product - Electrical Preliminary Design	4/1/07		6/30/07		
Product - 1st Construction Stage - P&S	4/1/07		8/30/07		
Product - Environmental Assessment	6/1/05	6/1/05	6/30/07		
Public Meeting – May 2005	3/1/05	3/1/05	5/10/05	5/10/05	Completed
Public Meeting – May 2006	3/1/06	3/1/06	5/9/06	5/9/06	Completed
EA Coordination Letter	2/1/06	2/1/06	3/15/06	3/15/06	Completed
Cultural Coordination letter	2/1/06	2/1/06	5/15/06		Letter sent out in early June.
FONSI signed	6/1/07		6/30/07		
Product – Real Estate Plan	1/1/07		5/1/07		
Product - Draft DDR	1/1/07		7/14/06		
Product - ITR/VE of DDR	7/15/07		9/14/07		
Product - Final DDR	9/15/07		11/15/07		

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	
Sept 05	Lock Wall Concept	INCA prepared a report documenting screening	pwname://CEMVR - Roc

	report (Stanley/INCA)	process, lock walls concept development for, including, and final A/E concept recommendation. Joint product with Lock 25. Joint product with Lock 25. MVR lead district	Sustainability Program/I. Products/Reports/Lock00
Sept 05	Geotechnical Foundation Report	Hanson Engineering prepared a report documenting the rock foundation conditions at Lock 22.	pwname://CEMVR - Roc Sustainability Program/I. Products/Reports/Lock00
Sept 05	Lock Wall Concept report (Jacobs)	Jacobs prepared a report documenting screening process, lock walls concept development for, including, and final A/E concept recommendation. Joint product with Lock 25. MVS lead district	pwname://CEMVR - Roc Sustainability Program/I. Products/Reports/Lock00
Feb 06	Lock Wall Concept Recommendation Report	A report documenting the lock wall concept selection and recommendation process. Joint product with Lock 25. MVR lead district with MVS & MVP supporting.	pwname://CEMVR - Roc Sustainability Program/I. Products/Reports/Lock00 2006.pdf
Mar 06	Numeric Modeling - Baseline Calibration report	MVR hydraulic engineers developed a numeric model of the existing project site and calibrated the model to 3 flow rates. The work is documented in a report.	
Apr 06	Approach Wall Concept Recommendation Report	A report documenting the approach wall concept selection and recommendation process. Joint product with Lock 22. MVP lead with MVR & MVS supporting	
May 06	Physical Modeling - Baseline Calibration report	ERDC-CHL rehabilitated the existing Lock 22 120:1 scale physical model and calibrated the model to 3 flow rates. The work is documented in a report.	
May 06	Numeric Modeling - Tailwater (Downstream) Alternatives report	MVR hydraulic engineers used the numeric model to screen alternative downstream wall locations and lengths to reduce the number of alternatives tested in the physical model. The work is documented in a report.	pwname://CEMVR - Roc Sustainability Program/I. Products/Reports/Lock00
Jun 06	Existing Lock Wall Stability report	MVR structural engineers analyzed and documented the existing lock wall stability.	
Jul 06	Existing electrical system report	MVR electrical engineers reviewed existing information, inspected the electrical system, and prepared and report documenting the electrical system.	
Jul 06	Typical Lock Wall Monolith Design Report (25% design level)	Approximate 50% level design for the typical lock wall monolith as developed by Stanley/INCA. Joint product with Lock 25. MVR lead district with MVS supporting	
Aug 06	Survey – Lock 22 Boundary monumentation & documentation	MVR Survey branch surveyed the project boundary, reestablish monumentation and prepared documents for recording.	
Aug 06	Lock 22 Access bridge inspection report	MVR structural engineers analyzed and documented the existing access bridge condition.	pwname://CEMVR - Roc Sustainability Program/I.

			Products/Reports/Lock00
Aug 06	Numeric Modeling - Upstream Alternatives report	MVR hydraulic engineers used the numeric model to screen alternative upstream wall locations and lengths to reduce the number of alternatives tested in the physical model. The work is documented in a report.	
Sept 06	Downstream Bulkhead Sill (50% design)	INCA developed downstream bulkhead sill 50% design report.	pwname://CEMVR - Roc Sustainability Program/I. Products/Reports/Lock00
Sept 06	Typical Lock Wall Monolith Constructability Review Letter Report	INCA hired a retired marine contractor to review the constructability of the typical lock wall monolith designs. The work is documented in a letter report. Joint product with Lock 25. MVR lead district with MVS supporting.	pwname://CEMVR - Roc Sustainability Program/I. Products/Reports/Lock00
Sept 06	Filling/Emptying and Sill Height review report	ERDC-CHL Hite reviewed the existing F/E system, proposed F/E for new lock, and prepared recommendation for additional work. ERDC-CHL Maynord reviewed the existing and proposed sill heights. Work is documenting a preliminary report. Joint product with Lock 25.	
Oct 06	Transition Monolith Design Report (25% design level)	Approximate 25% level design for the Lock 22 River and Intermediate walls transitional monoliths and Lock 25 Intermediate wall transitional monolith developed by Stanley/INCA. Joint product with Lock 25. MVR lead district with MVS supporting	
Oct 06	Rock Removal Method report	Hanson Engineers developed a rock removal plan based on discussion with contractors and the previously prepared foundation report.	
Oct 06	Lock 22 3D CADD/BIM model	Stanley Engineers prepared a 3D CADD/BIM model on the existing concrete structures. This model is the 1st civil works BIM and the 1st BIM developd in ProjectWise. The model was an important step forward and will significantly aid future design.	

CONSTRUCTION START: 2008 (pending authorization)

PROJECT FEATURE	START DATE	COMPLETION DATE
Upstream Channel Alignment Dredging	July 2008	July 2008

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Jon Duyvejonck	USFWS	PDT member
Butch Atwood	Illinois DNR	PDT member
Travis Moore	Missouri DOC	PDT member

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
5/10/05	Public Meeting	Public meeting
5/9/06	Public Meeting	Public meeting

FY07 IMPLEMENTATION STRATEGY:

QTR 1:

- Project Management
- Hydraulic - Physical Model Testing - Approach Wall Barge Impact testing
- Hydraulic - F/E Physical Model – Develop SOW & build model
- Structures - Lock Wall - Monolith w/o culvert - 25% Design (A/E)
- Structures - Lock Wall - Miter Gate & Valve Monolith - 25% Design (in-house)
- Structures – Generic Lock Layout
- NESP - Continue NEPA documentation

QTR 2:

- Hydraulic – F/E Physical Model Testing
- Hydraulic – F/E numeric model testing
- Structures - Approach Wall – 25% Steel Pile Can Design
- Structures – Structural analysis of Typ Monolith - in-house labor design
- Mech - Initiate coordination with OD
- Elec - Initiate coordination with OD

QTR 3:

- Structures - 50% Typ Lock Wall Design (A/E)
- Real Estate – Initiate RE Supplement Plan

ADDITIONAL CAPABILITY FOR FY07

HIGHEST PRIORITY:

- Initiate Steel Design - $75,000
- Elec – Initiate electrical design - $75,000
- Mech – Initiate Machinery Study - $75,000
- As-built verification (structural, electrical, mechanical) - $100,000
- Geotech – Initiate Concrete Materials Evaluation - $100,000
- Approach Wall 50 % beam design - $200,000 (A/E)
- Structures - Ice/Debris Gate 25% Design - $150,000
- Hydraulics – Ice/Debris model study - $250,000
- Draft DDR documentation - $75,000
- ITR/VE DDR - $25,000
- Final DDR documentation - $50,000
- Civil - Site Relocations / Staging / Disposal Area Design - $150,000
- Cost - Quantities and Cost Estimate- Lock & Approach Wall - $75,000

MIDDLE PRIORITY:

- Structures – NISA analysis of Typ Lock Wall w/o culvert - $150,000
- Accelerated Concrete Material Study and preliminary design-$300,000
- Structures - Approach Wall – 50% Steel Pile Can Design - $100,000

- Concrete Mix Consultation/Design ERDC - $50,000
- Accelerated lock design (A/E and in-house labor) - $500,000
- Accelerated approach wall design (A/E and in-house labor) - $500,000
- Arch - Initialize Central Control House Study - $100,000
- Rock Foundation Characterization Report - $100,000
- Detailed Downstream Bulkhead Sill - $125,000

LOWER PRIORITY:

- Structures Ice/Debris Gate 50% Design - $200,000
- Animation - incorporate lock construction sequencing - $50,000
- Accelerated electrical study and preliminary design - $250,000
- Accelerated machinery study and preliminary design - $200,000
- Detailed steel design (miter gates, valves, etc.) - $300,000

TOTAL ADDL. CAPABILITY: $4,250,000

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
I2. Lock 25 New 1200' Lock
Team Leader: Steve Hobbs

PURPOSE: The majority of the Upper Mississippi River locks were designed and constructed in the 1930's and the lock chambers are 600-ft long. The 600-ft lock chamber cause significant average delays to navigation. Tows larger than 600-ft must break in half for two separate lockages. The new proposed lock chamber will be 1200 feet long and will significantly reduce delays and increase safety.

LOCATION: Lock and Dam 25 is located in Calhoun County, Illinois, and Lincoln County, Missouri, at approximately Mile 241.1 on the Upper Mississippi River above the mouth of the Ohio River near Winfield, Missouri.

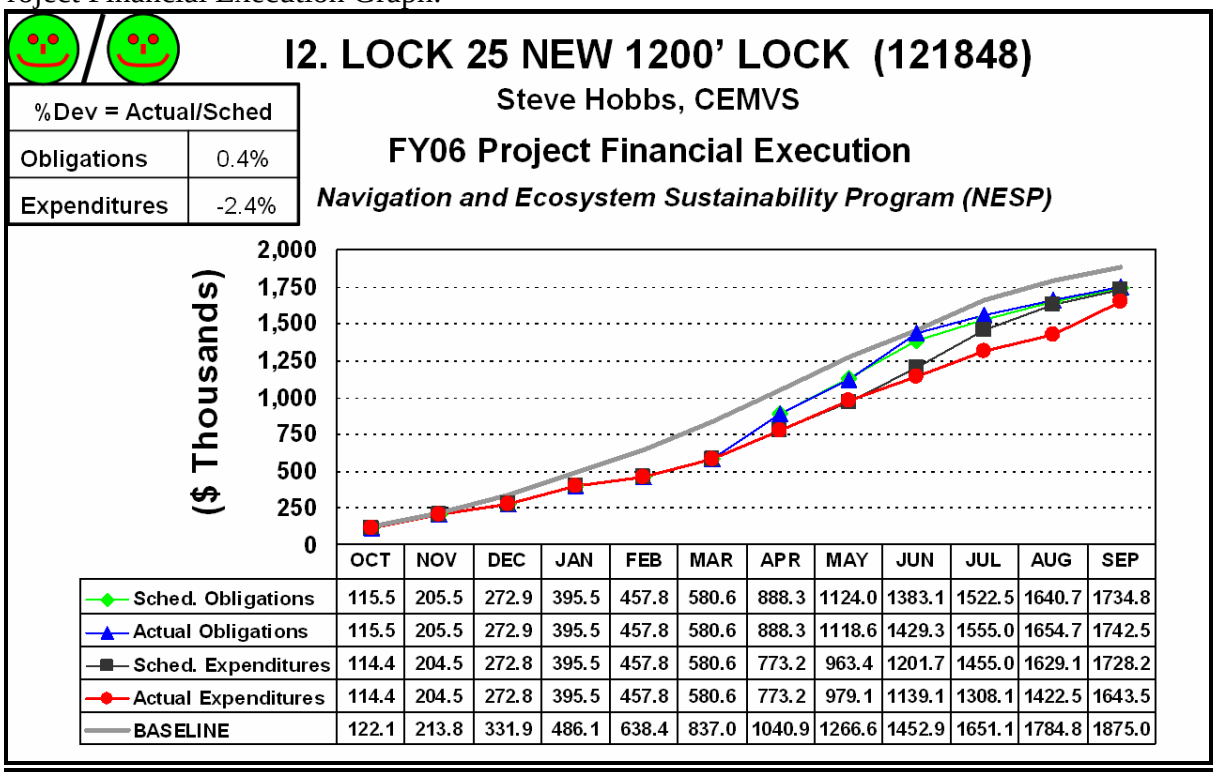
DESCRIPTION: Proposed project features include construction of new 1200-foot, pile founded, lock in the auxiliary miter gate bay, and construction of an upstream, ported guardwall totaling 1200 feet, and a downstream approach wall with minimum length 600 feet. The existing 600-foot lock remains in place and will become auxiliary lock chamber to be used primarily by recreation traffic. The project also includes associated channel work, relocations and site specific environmental mitigation and is estimated at $272,000,000(2005 price level). This cost will be shared equally (50/50) between Federal Construction General (CG) funds and the Inland Waterway Trust Fund (IWTF).

SUMMARY OF FY06 ACTIVITIES:

- Determination of lock wall concept
  - Product-Lock Wall Concept Recommendation Report
- Determination of approach wall concept
  - Product-Approach Wall Concept Recommendation Report
- Completed Phyiscal Navigation model tailwater calibration and design configuration testing
  - Tailwater Base Conditions Report-Physical Model
  - Tailwater Base Conditions Report – Numeric Model
- Initial design advancement of typical lock wall monolith and transitional monolith, including development of lock strut concepts. Also initialized constructability review of typical lock wall monolith.
  - Product-Typ Lock Wall Mono Design Report
  - I-wall Wall-Transition Mono
  - Prelim strut concepts
  - Type Lock Wall Monolith Constructability Review Letter Report
- Comparison of US Placement Alternative to DS
- Upstream Existing Guardwall Analysis Report
- Developed thru task order 3D GMS seepage model and performed preliminary seepage analysis
- Surveys conducted of lock and downstream point
- Public Meeting September 2006

SUMMARIZED FINANCIAL DATA:	PED	CONST.
Estimated Federal Cost	$12,875,000	$272,000,000
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$12,875,000	$272,000,000
Allocation through FY 2005	$1,726,537	$0
Allocation for FY 2006	$1,643,479	$0
Budget Request for FY 2007	$1,550,000	$0
Balance to Complete after FY 2007	$7,954,984	$272,000,000
Amount that could be used in FY 2007	$4,881,000	$0

FY06 Project Financial Execution Graph:



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	115.5	205.5	272.9	395.5	457.8	580.6	888.3	1124.0	1383.1	1522.5	1640.7	1734.8
Actual Obligations	115.5	205.5	272.9	395.5	457.8	580.6	888.3	1118.6	1429.3	1555.0	1654.7	1742.5
Sched. Expenditures	114.4	204.5	272.8	395.5	457.8	580.6	773.2	963.4	1201.7	1455.0	1629.1	1728.2
Actual Expenditures	114.4	204.5	272.8	395.5	457.8	580.6	773.2	979.1	1139.1	1308.1	1422.5	1643.5
BASELINE	122.1	213.8	331.9	486.1	638.4	837.0	1040.9	1266.6	1452.9	1651.1	1784.8	1875.0

SCHEDULE AND MILESTONES:

Task	SCH Start Date	ACT Start Date	SCH Finish Date	ACT FINISH Date	Comments
On-going project management					
FY06 PMP Update	10/3/2005	2/28/2006	4/28/2006	4/28/2006	Completed
FY07 PMP Revisions	11/1/2006		12/15/2006		
Geotechnical					
Product-Prelim Seepage Analysis Report-Phase 1 (Jacobs)	5/31/2006	6/29/2006	10/13/2006	10/10/2006	Completed
Product-Prelim Seepage Analysis Report-Phase 2 (Jacobs)	11/1/2006		3/1/2007		

Product-Foundation Characterization Report	10/3/2005	2/28/2005	10/31/2006		
Comparison of US Placement Alternative to DS	10/3/2005	12/1/2005	7/28/2006	8/3/2006	Completed
Structures - Lock Wall Concept Decision Process					
A/E Lock Wall Concept reports (INCA and Jacobs)	3/1/2005	3/1/2005	9/15/2005	9/15/2005	Completed
Product-Lock Wall Concept Recommendation Report	10/3/2005	10/3/2005	2/28/2006	2/24/2006	Completed
Structures - Detailed Lock Design					
Generic Lock Layout	4/1/2006	4/1/2006	11/15/2006		In progress
Product-Typ Lock Wall Mono Design Report (Stanley/INCA)	1/1/2006	1/1/2006	7/31/2006	7/26/2006	Completed
Prelim strut concepts (Stanley/INCA)	6/15/2006	6/9/2006	8/28/2006	7/26/2006	Completed
Iwall Wall-Transition Mono (Stanley/INCA)	7/1/2006	6/28/2006	10/30/2006		Final submittal early Oct 2006
River Wall-Transition Mono (AE)	2/1/2007		5/15/2007		
Typical Lock Wall (w/o culvert) (AE)	11/15/2006		3/15/2007		
Miter gate monoliths	11/15/2006		4/30/2006		
Culvert valve monoliths	11/15/2006		4/30/2006		
Downstream Sill Design	3/15/2007		8/31/2007		
Floor Strut Design	11/1/2006		4/1/2008		
Floor Design	11/2/2006		4/2/2008		
Structures - Approach Wall					
Product-Approach Wall Concept Recommendation Report	6/1/2005	6/1/2005	4/28/2006	4/28/2006	Completed
Detailed Approach Wall Design	1/8/2007		8/30/2007		
Product: Upstream Existing Guardwall Analysis (Jacobs)	4/24/2006	5/23/2006	8/1/2006	9/5/2006	Completed
Product: Upstream Existing Guardwall Recommendation	11/1/2006		12/15/2006		
Hydraulics Physical Model Baseline Conditions					
Product-Tailwater Base Conditions Report(ERDC)	11/1/2005	11/1/2005	5/15/2006	6/14/2006	Completed
Product-Pool Base Conditions Report(ERDC)	11/1/2006		3/31/2007		
Hydraulics Numeric Model Baseline Conditions	6/1/2005	6/1/2005	3/31/2006	3/15/2006	Completed
Product-Tailwater Base Conditions Report (MVS)	11/1/2005	11/1/2005	5/15/2006	6/29/2006	Completed

Product-Pool Base Conditions Report (MVS)	11/1/2006		3/31/2007		
Hydraulics - Physical Model (Proposed-Project)					
Tailwater Revisions - New lock and approach walls	5/15/2006	5/15/2006	6/15/2006	6/15/2006	Completed
Tailwater Model Testing	6/16/2006	6/16/2006	10/15/2006	9/1/2006	Completed
Tailwater Modeling Report documentation (Phys & Num)	10/16/2006		11/15/2006		
Pool Model Testing	3/1/2007		5/31/2007		
Pool Modeling Report documentation (Phys & Num)	5/1/2007		5/31/2007		
Approach Wall / Barge Impact Testing	6/1/2007		8/15/2007		
Approach Wall / Barge Impact Testing Documentation	8/1/2007		9/15/2007		
Product –Hydraulics Physical model Construction Sequence	1/8/2007		5/30/2007		
Construction Sequencing Testing	6/1/2007		7/31/2007		
Construction Sequencing Testing documentation	7/15/2007		9/30/2007		
Hydraulics – Filling/Emptying Model					
Develop SOW	10/1/2006		10/30/2006		
Build F/E model	11/1/2006		1/30/2007		
F/E model testing	2/1/2007		7/31/2007		
F/E testing documentation	8/1/2007		9/30/2007		
Product - Construction Study Report	12/1/2006		5/30/2007		
Product - Environmental Assessment					
Public Meeting – May 2005	3/1/2005	3/1/2005	5/11/2005	5/11/2005	Completed
Public Meeting – Sep 2006	3/1/2006	3/1/2006	9/26/2006	9/26/2006	Completed
EA Coordination Letter	10/1/2006		11/1/2006		
Cultural Coordination letter	11/1/2006		2/1/2007		
Coordination Act Report	11/1/2006		3/1/2007		
Supplementary EA					
PDT review	3/1/2007		3/31/2007		
ITR review & resolve comments	5/1/2007		5/30/2007		
Public Review (45days)	6/18/2007		8/1/2007		
FONSI signed	8/1/2007		9/30/2007		
Product – Real Estate Plan			9/30/2007		
Product - Draft DDR			12/31/2007		
Product - ITR/VE of DDR			1/31/2008		
Product - Final DDR			7/1/2008		

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
9/15/05	A/E Lock Wall Concept report (Jacobs)	Report documenting concept development for lock walls, including screening process, and final AE concept recommendation. Joint product with Lock 22. Jacobs	
9/15/05	A/E Lock Wall Concept report (Stanley/INCA)	Report documenting concept development for lock walls, including screening process, and final AE concept recommendation. Joint product with Lock 22. Stanly/INCA	
2/24/06	Product-Lock Wall Concept Recommendation Report	Report following the FY05 Lock Wall Concept Reports by Jacobs and Stanley/INCA documentation of decision process and final concept recommendation for lock wall concept. Joint product with Lock 22. MVS/MVR/MVP	
4/28/06	Product-Approach Wall Concept Recommendation Report	Report documenting the conceptual design development for the approach walls, including documentation of decision process and final concept recommendation for approach wall concept. Joint product with Lock 22. MVP	
6/14/06	Tailwater Base Conditions Report-Physical Model	Report on physical modeling documenting the calibration of the base conditions of the tailwater. ERDC	
6/29/06	Tailwater Base Conditions Report – Numeric Model	Report on numerical modeling in conjunction with the physical model for verification of base conditions in tailwater. MVS	
7/26/06	Product-Typ Lock Wall Mono Design Report	Approximate 50% level design for the typical lock wall monolith as developed by Stanley/INCA. Joint product with Lock 22.	
7/26/06	Prelim strut concepts	Preliminary concept development for temporary and permanent struts between the new lock walls. Stanley/INCA	
8/3/06	Comparison of US Placement Alternative to DS	Comparison of upstream placement of the new 1200-ft lock chamber to the baselilne placement of downstream. MVS	
9/5/06	Upstream Existing Guardwall Analysis Report	Report on structural and geotechnical analysis of the existing upstream guardwall for adequacy. JACOBS	
9/19/06	Typ Lock Wall Monolith Constructability Review Letter Report	Preliminary examination of the constructability of the typical lock wall monolith designs as developed by Stanley/INCA. Joint product with Lock 22.	
10/10/06	Prelim Seepage Analysis Report	Development of 3D GMS Seepage Analysis Model and preliminary analysis for new lock sand foundation, AE task order -JACOBS	
10/13/06	Iwall Wall-Transition Mono	Approximate 50% level design for the Iwall transitional monolith for Lock 25 and the Iwall and riverwall transitional monolith for Lock 22 developed by Stanley/INCA. Joint product with Lock 22.	

CONSTRUCTION START:

PROJECT FEATURE	START DATE	COMPLETION DATE

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Joyce Collins	U.S. Fish & Wildlife Service	Environmental coordination for EA
Sammy Dickey	RIAC	Physical Model input and verification

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
5/12/05	Public Meeting	Public meeting in Old Monroe, MO
9/26/06	Public Meeting	Public meeting in Old Monroe, MO

FY07 IMPLEMENTATION STRATEGY:

QTR 1:

- Project Management/Travel
- Hydraulic - Nav Physical Model - Pool Revisions and Calibration
- Hydraulic - Nav Numeric Model - Pool Calibration
- Hydraulic - F/E Physical Model – Develop SOW & build model
- Structures - Typ Wall Mono Constructability Review
- Structures – Generic Lock Layout
- Structures - Existing Guardwall Recommendation
- Geotech - Seepage Analysis Continued
- NESP - Continue NEPA documentation

QTR 2:

- Hydraulic - Nav Physical Model - Pool Testing
- Hydraulic - Nav Numeric model - Pool Testing
- Hydraulic – F/E Physical Model Testing
- Hydraulic – F/E Numeric Model Testing
- Structures - Floor Concept & Design
- Structures - Floor Strut Concept & Design
- Geotech - Seepage Analysis Continued
- Mech - Initiate coordination with OD
- Elec - Initiate coordination with OD
- NESP - Continue NEPA documentation

QTR 3:

- Hydraulic - Physical Model - Barge Impact Testing
- Hydraulic - Physical Model - Construction Sequencing
- NESP - Continue NEPA documentation
- Real Estate – Initiate RE Supplement Plan

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
I3. LaGrange New 1200' Lock
Team Leader: Toby Hunemuller

PURPOSE: Navigation Efficiency - Construct New 1200' Lock

LOCATION AND DESCRIPTION: LaGrange Lock and Dam is located at river mile 80.2 on the Illinois Waterway (IWW) approximately 8 miles downstream of the city of Beardstown in Brown County, Illinois. The new lock will be located landward of the existing lock

SUMMARY OF FY06 ACTIVITIES: The initial FY06 ($100k) funds were used to acquire data of the existing site conditions. Survey crews established site control, started to re-set lost property corner monuments, and collected additional topographic information. High resolution aerial photogrammetry mapping was obtained for areas 4 miles upstream and 5 miles downstream of the existing site. Existing flow data (medium flows) was collected to be used to calibrate the numeric models once the models are completed. Digital video cameras were installed at the upstream, downstream, and intermediate wall to record approach conditions and ice control. The video data will be used to calibrate the existing conditions of the physical model.

In June of FY06 an additional $190k was allocated to LaGrange. The funds were used to award a contract (Bergmann/Hanson Joint Venture) to review and refine possible locations for the new lock, approach requirements (landward of existing lock) and estimate earthwork quantities and cost. The locations identified in the study report were consistent with the new lock location landward of the existing lock as identified in the Navigation Feasibility Study. The study also reviewed the stability of the existing lock compared to several cofferdam alternatives. The report concluded that the hydraulic models are going to be utilized extensively in determining the approach length and cofferdam impacts and are a critical path item. The remainder of the funds were used to complete the numeric model for the pool and compile and summarize the existing boring log information.

SUMMARIZED FINANCIAL DATA:	PED (GI)	CONST. (CG)
Estimated Federal Cost	$3,993,000	$222,817,000
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$3,993,000	$222,817,000
Allocation through FY 2005	$243,500	$0
Allocation for FY 2006	$289,690	$0
Budget Request for FY 2007	$150,000	$0
Balance to Complete after FY 2007	$3,309,810	$222,817,000
Amount that could be used in FY 2007	**$974,000**	**$0**

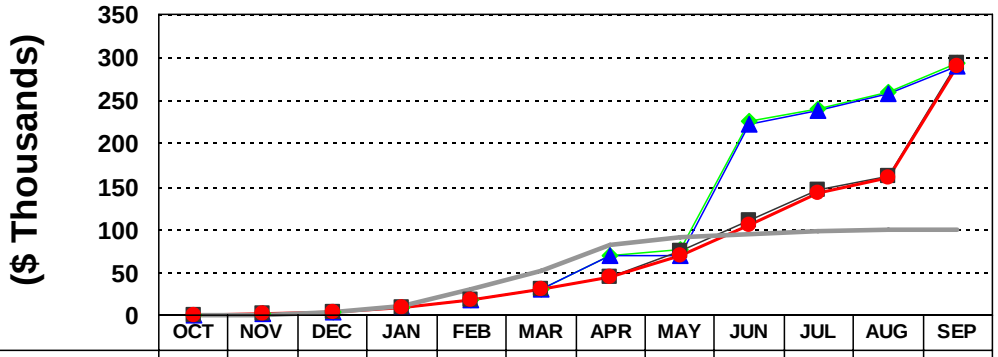
I3. LOCK La Grange (121824)

Toby Hunemuller, CEMVR

FY06 Project Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)

%Dev = Actual/Sched	
Obligations	-1.4%
Expenditures	-1.4%



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	0.0	1.0	2.9	8.1	18.6	30.1	69.9	75.8	225.4	240.3	260.2	293.8
Actual Obligations	0.0	1.0	2.9	8.1	18.6	30.1	69.9	70.1	221.5	237.7	257.1	289.7
Sched. Expenditures	0.0	1.0	2.9	8.1	18.6	30.1	44.1	74.5	110.5	145.3	162.5	293.8
Actual Expenditures	0.0	1.0	2.9	8.1	18.6	30.1	44.1	69.9	105.5	141.3	160.7	289.7
BASELINE	0.0	0.0	3.4	11.2	29.4	51.8	81.8	89.8	94.3	97.8	99.8	100.0

SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
FY06 PMP Revisions & Approval	1-Dec-05		3-Mar-06		PMP was not updated in FY06 due to funding constraints
Photogrammetric Mapping	20-Feb-06	18-Jan-06	15-Jul-06	30-Jun-06	Aerial orthophotos and topography
Install Approach Cameras	15-Feb-06	15-Feb-06	15-Apr-06	10-May-06	Cameras record data to be used in validating approach conditions
Flow Measurements (medium flow)	25-Mar-06	18-Apr-06	27-Mar-06	19-Apr-06	Data used to calibrate numeric model
Boundary Survey & Re-set Monuments	1-Mar-06	15-Mar-06	15-June-06		Work started but not completed due to survey workload
Merge Topographic & Hydrographic Data – fill in voids	19-Jun-06	19-Jun-06	17-Jul-06	30-June-06	Completed field survey along shoreline
Monument Survey (Lock Deformation)	1-Jun-06	6-Jun-06	30-Jun-06	15-Jun-06	
Compile Existing Soil Boring Data and Prepare Summary	15-Jun-06	17-Jun-06	30-Jun-06	28-Jun-06	

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
New Lock Alignment Study	15-Jun-06	28-June-06	28-Sept-06	28-Sept-06	Study investigated lock alignments and associated earthwork quantities and cost. Study also reviewed the stability of the existing lock when excavation will be taking place for the new lock
Prepare Numeric Model - Pool	15-Jun-06	15-June-06	28-Sept-06	29-Sept-06	

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
June-06	Aerial Orthophotos & Topographic Mapping	High resolution aerial imagery and 4ft contours of the site	
May-06	Approach Cameras	Installed upstream, downstream, and intermediate wall digital video cameras and recording equipment	
Sept-06	New Lock Alignment Alternatives Study	Study completed by Bergmann/Hanson JV to review site alignment, quantities, and cost. Study also reviewed stability of the existing lock compared to several cofferdam configurations.	
Sept-06	Numeric Hydraulic Model	Completed the numeric model for the pool conditions	

CONSTRUCTION START: TBD

PROJECT FEATURE	START DATE	COMPLETION DATE
Funding for LaGrange has not been at the levels needed to prepare construction schedules.		

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Funding for LaGrange has not been at the levels needed to make enough progress on the design to coordinate with non-Corps Stakeholders.		

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
Funding for LaGrange has not been at the levels needed to make enough progress on the design to conduct public involvement meetings.		

FY07 IMPLEMENTATION STRATEGY:

Funds and tasks will be aggressively scheduled for work to begin immediately in FY07. The initial tasks are to revise the PMP including a 3-year schedule, determine the location of the physical hydraulic model and allocate funds to commence construction of the physical model, complete the hydraulic numeric model for the tailwater, acquire additional flow data (low flow), complete the boundary survey and setting monuments, and initiate preliminary discussions on lockwall heights. Assuming a $150k budget, the majority of funds are scheduled to be exhausted by January-February 2007.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM (NESP)

FY06 YEAR-END PROJECT REPORTS

ECOSYSTEM RESTORATION PROJECTS

Projects Activities	Lead District	Team Leader	District Project Manager
ECOSYSTEM RESTORATION PROJECTS			
J. UMRS Ecosystem Rest. Plan	MVR	DeHaan, Hank	Whitney, Scott
K. Ecosystem Adaptive Management	MVR	Barr, Ken	Whitney, Scott
L. System Cultural Stewardship	MVR	Ross, Jim	Whitney, Scott
M. Forest Management	MVP	Urich, Randy	DeZellar, Jeff
N. Fleeting Plan	MVR	Bollman, Dorene	Whitney, Scott
O. Island Building - Pool 11	MVR	Nickel, Rick	Whitney, Scott
P1. Fish Passage - L&D 26	MVS	Atchley, Tamara	Astrack, Rich
P2. Fish Passage - L&D 22	MVR	Cornish, Mark	Whitney, Scott
Q1. Floodplain Restoration - Emiquon, IL	MVR	Project now being implemented under Sec. 206 Program	
Q2. Floodplain Restoration - Root River, MN	MVP	Petersen, Jon	DeZellar, Jeff
Q3. Floodplain Restoration - Pierce County, WI	MVP	Petersen, Jon	DeZellar, Jeff
Q4. Floodplain Restoration - Emiquon West, IL	MVR	Thompson, Brad	Whitney, Scott
R1. Pool Water Level Management - Pool 5	MVP	DeZellar, Jeff	DeZellar, Jeff
R2 Pool Water Level Management - Pool 9	MVP	Jutilla, Scott	DeZellar, Jeff
R3. Pool Water Level Management - Pool 18	MVR	Landwehr, Kevin	Whitney, Scott
S. Backwater Restoration - IWW Peoria Reach	MVR	Plumley, Marshall	Whitney, Scott
U1. Side Channel Restoration - Buffalo Island	MVS	Johnson, Brian	Astrack, Rich
U2. Side Channel Restoration - Scheniman Chute	MVS	Project on hold , pending construction authorization	
V1. Wing Dam/Dike Alteration - Herculaneum	MVS	Hopkins, Leonard	Astrack, Rich
V2. Wing Dam/Dike Alteration - Pool 2	MVP	Project on hold , pending construction authorization	
W. Island Shoreline Protection	MVR	Kirkeeng, Thomas	Whitney, Scott
X. Dam Point Control - L&D 25	MVS	Kniep, Michelle	Astrack, Rich
Y. Dam Embankment Lowering - L&D 8	MVP	Stefanik, Elliot	DeZellar, Jeff
Z. Reduce Water Level Fluctuation - IWW	MVR	Landwehr, Kevin	Whitney, Scott

3 November 2006

U.S. Army
Corps of Engineers

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
J. Ecosystem Restoration and Management Plan
Team Leader: Hank DeHaan / Chuck Theiling

PURPOSE: The NESP Ecosystem Restoration and Management Plan for the Upper Mississippi River System (UMRS) is a three-year project to refine a NESP ecosystem restoration planning process. The project will concentrate on three river reaches, one in each UMRS Corps District, that will be the focus of intensive coordination and planning. This effort will result in an efficient and coordinated project sequencing strategy, monitoring plans, and reach implementation plans that will enhance future UMRS ecosystem restoration and management. Decision support tools will be developed to help planners, program managers, and modelers. High priority ecological modeling will be incorporated to the extent possible.

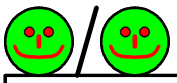
LOCATION AND DESCRIPTION: The NESP Ecosystem Restoration and Management Plan is applicable to the entire Upper Mississippi River System (UMRS). Initial pilot projects were implemented for Pools 5 and 18 as well as a Middle Mississippi River Reach near Harlow Island.

SUMMARY OF FY06 ACTIVITIES: This project, known as "reach planning" had four primary areas of activity: Planning Framework, Reach Planning, Decision Support System, and Modeling. The reach planning framework was further developed and coordinated with agency stakeholders. The framework steps through the Corps planning process, but adds steps to incorporate the learning needs of Adaptive Management. Framework developers worked over the Summer 2006 to create an evaluation process applicable to this large-scale planning. They tried several adaptations of project evaluation processes, but in the end chose to adopt a project ranking process similar to the project sequencing process. Potential projects will be ranked as high, medium, or low priority. This framework was concurrently being tested in Pilot Reaches where the best methods to apply the framework were captured and incorporated back into the Framework. The reach planning framework is ready for review, the pilot reach reports will be finished this Fall.

Decision Support System development was coordinated with ERDC System-Wide Water Resources Planning Program. The two DSS teams met individually and with other Districts nationwide. DSS objectives matrices were developed to relate environmental objectives with management actions, action agencies, monitoring parameters, indicators, and much more. The planning module of the DSS will guide PDTs through standard planning process to achieve uniformity across the NESP ecosystem projects. The project module of the DSS will compile project information that can be used by program managers, planners, and modelers. The modeling module will be the last to be integrated in the DSS, but model development and use continues independently. Modelers and DSS developers work together to ensure the separate modules can be cleanly integrated later.

Modeling activities have centered on gathering data to populate and develop ecosystem models. Pool 5 was selected for advanced modeling using the Comprehensive Aquatic System Model because of the large amount of interest in the Pool and the relative abundance of ecological data to run the model. Aquatic plant and plankton data were collected to provide field data for portions of the model. The model was constructed using very large cells, additional refinement is required to detect project impacts at finer scales. Field work was also conducted to assess ecosystem response to restoration in the Harlow Reach.

SUMMARIZED FINANCIAL DATA:	PED	CONST.
Estimated Federal Cost	$1,094,378	$0
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$1,094,378	$0
Allocation through FY 2005	$330,639	$0
Allocation for FY 2006	$363,739	$0
Budget Request for FY 2007	$400,000	$0
Balance to Complete after FY 2007	$0	$0
Amount that could be used in FY 2007	**$600,000**	**$0**



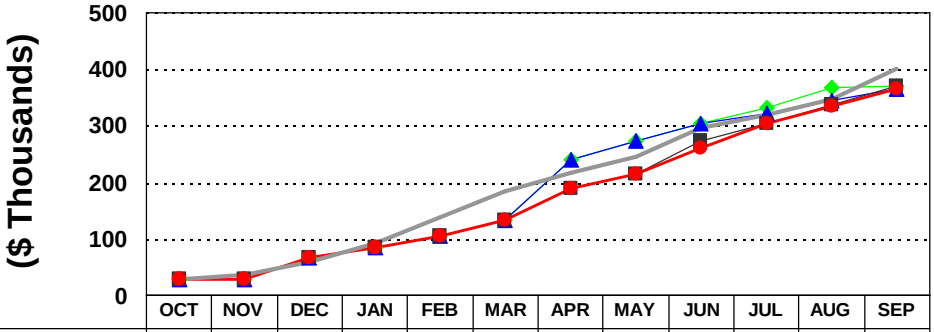
J. ECOSYSTEM RESTORATION PLAN (122280)

%Dev = Actual/Sched	
Obligations	-1.5%
Expenditures	-1.6%

Hank DeHaan, CEMVR

FY06 Project Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	28.1	29.1	65.7	84.6	105.7	133.3	239.9	271.9	302.9	332.9	366.7	369.8
Actual Obligations	28.1	29.1	65.7	84.6	105.7	133.3	239.9	272.4	302.6	322.5	345.2	364.1
Sched. Expenditures	28.1	29.1	65.7	84.6	105.7	133.3	189.5	214.0	273.1	303.1	337.0	369.8
Actual Expenditures	28.1	29.1	65.7	84.6	105.7	133.3	189.5	214.4	260.8	302.9	334.2	363.7
BAELINE	28.1	36.2	58.3	92.3	137.9	182.9	215.9	244.9	296.4	319.8	347.5	400.0

SCHEDULE AND MILESTONES:

Event/Milestone	SCHED Start Date	ACT Start Date	SCHED Finish Date	ACT FINISH Date	Comments
PDT/Science Panel Coordination Meeting	2-Dec-05	12-Dec-05	20-Dec-05	20-Dec-05	
Project J. District Lead Meeting	23-Dec-05	23-Dec-05	3-Jan-06	4-Jan-06	
Update FY06 Project Fact Sheet	3-Jan-06	3-Jan-06	15-Jan-06	13-Jan-06	
Revise FY06 Project Management Plan	3-Jan-06	3-Jan-06	31-Jan-06	31-Jan-06	
District Leads submit Draft Interim Report Comments	1-Dec-05	1-Dec-05	20-Jan-06	20-Jan-06	
Update and Distribute Interim Report to NESP Senior Staff	20-Jan-06	20-Jan-06	17-Feb-06	6-Mar-06	
PDT/Science Panel DSS Meeting	23-Feb-06	15-Feb-06	23-Feb-06	22-Feb-06	
Product: Final Interim Report	1-Oct-05	1-Oct-05	15-Mar-06	6-Mar-06	
Develop Draft Planning DSS Structure	1-Dec-05	1-Dec-05	30-Mar-06	24-Mar-06	
PDT Meeting (Topics: Interim Report, Alt. Formulation, DSS)	30-Mar-06	20-Mar-06	30-Mar-06	7-Apr-06	

Product: Draft Alternative Formulation & Evaluation Process	1-Oct-05	1-Oct-05	30-May-06	7-Apr-06	
Product: Implementation and Monitoring Plans	1-Oct-05	1-Oct-05	30-May-06	7-Apr-06	
PDT Meeting (Topics: DSS, Imp. and Monitoring Plan)	15-Jun-06	1-Jun-06	15-Jun-06	12-July-06	
Project J. District Lead Meeting	30-Jun-06	15-Jun-06	30-Jun-06	3-Aug-06	
Product: Draft Project Report (Process, Imp. & Mon. plan)	15-Mar-06	6-Mar-06	30-Sep-06	6-Oct-06	Team Lead Review
NESP Planning Framework Review – Division	15-Nov-06		15-Dec-06		
NESP Planning Framework Review – Division	1-Jan-07		15-Feb-07		
Product: Final NESP Planning Framework	31-Mar-07		31-Mar-07		
Product: Draft Reach Plans	1-Oct-05	1-Oct-05	31-Oct-06		
Regional Reach Plan Review – River Management Team	1-Nov-06		30-Nov-06		
Regional Reach Plan Review – River Management Team	1-Jan-07		15-Feb-07		
Product: Final Reach Plans	31-Mar-07		31-Mar-07		
Geomorphic Reach Planning	1-May-07		Ongoing		
Product: DSS Planning Module	1-Nov-06		30-April-07		
Product: DSS Project Module	1-May-07		30-Sep-07		
Product: Reach Specific Design Criteria	1-Jan-07		30-Apr-07		
Product: Reference Condition Database	1-Jan-07		ongoing		

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Mar-06	Final Interim Report	First 7 planning steps established and evaluated	
Apr-06	Draft Pilot Reach Plans	3 reports covering Pool 5, Pool 18, and Harlow Reach	

CONSTRUCTION START: (Not Applicable)

PROJECT FEATURE	START DATE	COMPLETION DATE

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Scot Johnson	Minnesota DNR	Reach planning PDT
Gary Wege	USFWS - ES	Reach planning PDT
Tim Schlagenhaft	Minnesota DNR	Reach planning PDT
Dan Dieterman	Minnesota DNR	Reach planning PDT
Sharonne Baylor	USFWS - Refuge	Reach planning PDT
Judy Mader	Minnesota Pollution Control Agency	Reach planning PDT
Jeff Janvrin	Wisconsin DNR	Reach planning PDT
Mark Andersen	Wisconsin DNR	Reach planning PDT
Mike Griffin	Iowa DNR	Reach planning PDT
Ed Walsh	Illinois DNR	Reach planning PDT
Bob Clevenstine	USFWS – ES	Reach planning PDT
Tom Cox	USFWS – Refuges	Reach planning PDT
Jon Duyvejonck	USFWS – ES	Reach planning PDT
Karen Westphall	USFWS – Refuges	Reach planning PDT
Kevin Oller	Illinois DNR	Reach planning PDT
Bill Ohde	Iowa DNR	Reach planning PDT
Bernard Schonoff	Iowa DNR	Reach planning PDT
Butch Atwood	Illinois DNR	Reach planning PDT
Bruce Bennet	USDA – NRCS	Reach planning PDT
Danny Brown	Missouri DOC	Reach planning PDT
Joyce Collins	USFWS – ES	Reach planning PDT
Brian Mahan	Illinois DNR	Reach planning PDT
Rob Simmonds	USFWS – ES	Reach planning PDT
Dick Steinbach	USFWS – Refuges	Reach planning PDT
Steve Widowski	US Forest Service	Reach planning PDT
Doug Blodgett	The Nature Conservancy	Reach planning PDT
Jenny Frazier	American Land Conservancy	Reach planning PDT

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION

FY07 IMPLEMENTATION STRATEGY:

Four major task areas will be addressed during 2007: Planning Framework. Reach Planning, DSS, Modeling.

Planning Framework development will conclude and stakeholder reviews will be sought during Fall 2006. The planning framework should be approved at the Feb 2007 NECC meeting.

Pool planning in three pilot reaches will be completed and coordinated during Fall 2006. The pilot reach plans should also be approved at the Feb 2007 NECC meeting. Large scale restoration planning will continue at the geomorphic reach beginning in May 2007 and continuing into future years.

DSS production was delayed by equipment and software issues during 2006, the tasks will be carried forward into 2007. The planning module should be completed for use in reach planning during May 2007. Work will then shift to developing the project module. Work on the model module will be ongoing in out-years.

Modeling work will concentrate on data collection in Harlow Reach and digitizing multiple reference conditions. There is significant additional capability in the modeling activities.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
K. Ecosystem Adaptive Management
Team Leader: Ken Barr

PURPOSE: Develop and implement adaptive management process and procedures for existing / future project(s) design, sequencing, monitoring, and evaluation from site-specific to UMR systemic levels. Oversee the Ecosystem component of the study. Maintain communication with Stakeholders, agencies and Publics.

LOCATION AND DESCRIPTION: Project K activities are both systemic to the UMRS and site-specific in support or individual NESP project planning, monitoring and eventual construction. Project K has three pieces.(a,b&c). Ka is the Management oversight, collaboration and coordination of the Ecosystem restoration component of NESP. Kb is the system level monitoring and modeling component reserved for adaptive management activities not traditionally aligned with a single project. Kc includes the activities of the Science Panel (SP) a 10 member group tasked to assist the Corps of Engineer's in bringing the best science to ecosystem restoration on the Upper Mississippi River.

SUMMARY OF FY06 ACTIVITIES

Ka - Maintaining Partner participation in this early implementation phase is crucial. This has been a dynamic year as we attempt to model a future River Council by aligning the Navigation Environmental Coordination Committee (NECC) with quarterly meetings of the EMPCC and UMRBA. To reinforce the focus on sustainability and program integration a combined EMPCC/NECC workshop on Goals and objectives was held. Partners are seeking system-scale objectives within which to fit local activities. The management component sought to maintain a balanced work plan despite funding and authorization uncertainties. The workplan was developed to have initial projects ready for near term (FY 08) construction, demonstrate the commitment to adaptive management and learning and be flexible and responsive to change. This was a very important year for continued public outreach and coordination. There was a high level of participation in numerous scientific, intra-agency, inter-agency and general public forums.

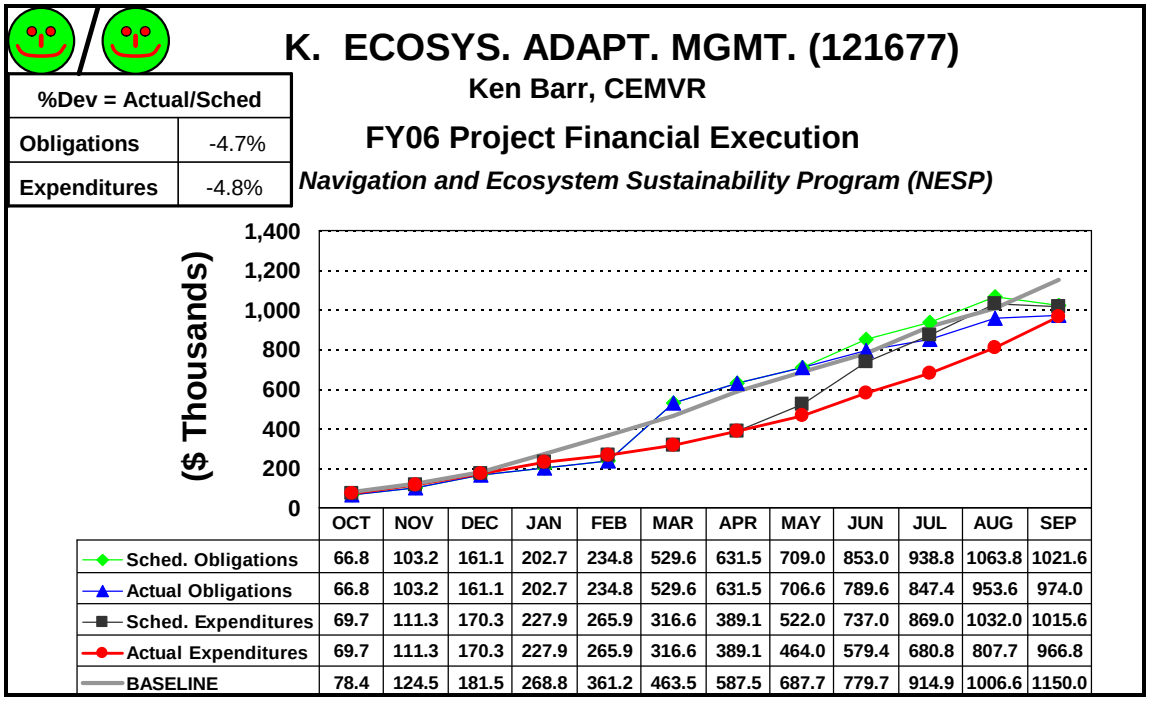
Kb - Activities under Kb are anticipated to increase significantly in the future as we assist teams in identifying the synergistic effects of management actions on the system. The 2nd year of monitoring the response of fish to the 100 mile Island project built 30 years ago was completed and a final analysis is expected in May.

Kc - The SP receives support form a Regional Support Team (RST) which includes a Senior Ecologist and River Engineer from each of the three Corps Districts. A primary focus of the SP in FY 06 was the development of protocols for efficient and productive relationships with individual project design teams (PDTs) for the consideration of system level objects, monitoring and modeling. The SP met with 4 PDTs and developed a meetings protocol. They published the Science Panel Report (NESP ENV Report 2) incorporating comments from regional stakeholders.. The SP hosted a goals and objectives workshop with river stakeholders to begin the development of quantified system objectives for the UMR. An Ecosystem goods and services workshop was held with national experts in the evolving field to initiate a process to capture and report less traditional benefits of the management actions proposed to support a sustainable UMR ecosystem. A number of actions were taken to engage the broader scientific community including meeting with the Illinois Science Advisory Committee,

full participation in the International Large Rivers Conference and symposium development for the upcoming National Conference on Ecosystem Restoration (NCER). Leveraging of ERDC and USGS R&D capabilities to meet NESP Science needs continues. A decision support system (DSS) workshop was held to facilitate this leveraging. The SP/RST group dynamic combined with a deliberate focus on outreach beyond the panel is creating a very capable and robust team to meet the Scientific challenges of implementing NESP in managing for a sustainable future.

SUMMARIZED FINANCIAL DATA:	**PED (GI)**	**CONST. (CG)**
Estimated Federal Cost	$3,277,807	$296,722,193[a]
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$3,277,807	$296,722,193[a]
Allocation through FY 2005	$983,429	$0
Allocation for FY 2006	$1,094,378	$0
Budget Request for FY 2007	$870,000	$0
Balance to Complete after FY 2007	$330,000	$296,722,193[a]
Amount that could be used in FY 2007	**$1,200,000**	**$0**

[a] – Funding estimate for Ecosys. Adapt. Mgmt. for full implementation of recommended plan first increment (approx. 15 years).



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	66.8	103.2	161.1	202.7	234.8	529.6	631.5	709.0	853.0	938.8	1063.8	1021.6
Actual Obligations	66.8	103.2	161.1	202.7	234.8	529.6	631.5	706.6	789.6	847.4	953.6	974.0
Sched. Expenditures	69.7	111.3	170.3	227.9	265.9	316.6	389.1	522.0	737.0	869.0	1032.0	1015.6
Actual Expenditures	69.7	111.3	170.3	227.9	265.9	316.6	389.1	464.0	579.4	680.8	807.7	966.8
BASELINE	78.4	124.5	181.5	268.8	361.2	463.5	587.5	687.7	779.7	914.9	1006.6	1150.0

SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Pool Planning PDT Meeting	Oct 27-28, 2006	Oct 27-28, 2006	Oct 27-28, 2006	Oct 27-28, 2006	Science Panel
Fish Passage PDT Meeting	Nov 9-10, 2006	Nov 9-10, 2006	Nov 9-10, 2006	Nov 9-10, 2006	Science Panel
Meeting with System Wide Water Resources Program	Nov 20-21, 2006	Nov 20-21, 2006	Nov 20-21, 2006	Nov 20-21, 2006	Science Panel
Pool 11 PDT Meeting	April 12, 2006	April 12, 2006	April 12, 2006	April 12, 2006	Science Panel
Ecosystem Goods & Services Workshop	May 24-26, 2006	May 24-26, 2006	May 24-26, 2006	May 24-26, 2006	Science Panel
Illinois Science Advisory Committee Meeting	June 5, 2006	June 5, 2006	June 5, 2006	June 5, 2006	Science Panel
Peoria Backwater Restoration PDT Meeting	June 6-7, 2006	June 6-7, 2006	June 6-7, 2006	June 6-7, 2006	Science Panel
Pool 5 PDT Meeting	August 15-17, 2006	August 15-17, 2006	August 15-17, 2006	August 15-17, 2006	Science Panel
Mile 100 Fish monitoring compl.					Kb
COE Planning Conf, MVD Planning Workshp, PA Program					Ka

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
June 2006	Presentations at International Large Rivers Conference (Project K PDT Members underlined)	*Re-engineering the Missouri River: Integrating Sound Science into River Rehabilitation* (D. Galat; R. Jacobson) *Spatial Distribution of Ecosystem Services within Large River Basins* (P. West; J. Foley, C. Kucharik, C. Barford) *Environmental Guidelines for Dike Notching*. (J. Kilgore, J. Hoover, S. Ellis, J. Gutshall, S. Brewer) *Ecosystem Restoration: Projects, Lessons Learned, Criteria* (J. Hendrickson, D. Powell) *River Restoration in the Upper Mississippi River Basin: Insights from Project Managers and Practitioners* (T. K. O'Donnell, D. Galat) *Resource Monitoring on the Upper Mississippi River: Past, Present, and Future* (B. Johnson). *Application of the Concept of Ecosystem Health to Adaptive Management of the Upper Mississippi River* (K. Lubinski, J. Barko, D. Galat, J. Nestler, C. Theiling)	Not applicable
June 2006	Special Session at International Large Rivers Conference	*Navigation and the Environment: Planning for a Sustainable Upper Mississippi River System with Reference to the Middle Parana River of South America* (D. Wilcox moderator)	Not applicable

		Navigation and the Environment: Recommendations for a Sustainable Upper Mississippii River-Illinois Waterway Navigation System (K. Barr) *Navigation and the Environment: Ecological Models Used to Assess Risks Posed by Commercial Navigation to Selected Resources in the Upper Mississippi and Illinois Rivers* (S. Bartell) *Integrating Information Across Continents for Improved Ecosystem Management: the Case of the Parana and Mississippi Systems* (J. Nestler; C. Baigun, N. Oldani; C. Vionnet; L. Weber)	
August 2006	Science Panel Report "*Implementing Adaptive Management*" NESP ENV 02.	Report presents an approach to river managers and stakeholders for integrated ecosystem management, restoration project planning, and "on the ground" implementation that addresses environmental objectives through the suite of spatial and temporal scales.	http://www2.mvr.usace.army
August 2006	2006 Guidance Document on Protocol for NESP Science Panel, PDT, and RST meetings.	Guidance document that summarizes a protocol for effective interactions among the NESP Science Panel / Regional Support Team and NESP PDTs. This is living document that will updated as needed to optimize communication among these groups.	Not applicable

CONSTRUCTION START: Not Applicable

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
NECC Meetings	Includes representation from State/Federal Resource Agencies and Non Governmental Organizations.	Organized and Chaired 4 meetings
IL Science Advisory Committee	IL Science Advisory Committee	Requested meeting with NESP SP to discuss mutual interests and collaboration

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
	Inland Waterways Conf	
	NE Forrest Planners Assoc	
	Funders Forum	
Aug 2006	IL Corngrowers Barge Tour	Presentations and informal discussions on NESP activities

FY07 IMPLEMENTATION STRATEGY:

Background: There are intrinsic and extrinsic risks and uncertainties in any ecosystem restoration regardless of temporal or spatial scale. Large-scale, systemic restoration efforts typically are comprised of multiple, site-specific restorations. Combining the cumulative beneficial effects of multiple small-scale, site specific restorations into a single large-scale, systemic restoration program requires not only the best management practices of reducing risk and uncertainty but also requires careful consideration to prioritizing and sequencing individual projects in order to maximize both economic and ecological efficiencies.

Adaptive management is the preferred science- and performance based approach to ecosystem management for complex systems such as the Upper Mississippi River – Illinois Waterway. Adaptive management advances desired goals for restoration by: (1) reducing uncertainty, (2) incorporating robustness into project design through rigorous monitoring, integrative assessment and synthesis, and (3) incorporating new information about ecosystem interactions and processes. Overall restoration activities are enhanced as adaptive management reconciles project-level actions within the context of ecosystem-level responses.

Implementation Strategy: The Implementation Strategy for Project K Ecosystem Adaptive Management is a two-fold undertaking premised on activities that will help restoration practitioners reduce risks and uncertainties and learn from other restoration efforts to improve future implementation efforts. The first activity is the continued development of monitoring and modeling protocols needed for reducing risks for subsequent activities. This includes pre- and post- project monitoring (data collection) and the methods for integrating and coupling biological responses to physical and chemical conditions. The development of an interactive digital-based system intended to help resource managers use data and models to identify and solve problems and make decisions (*i.e.* a decision support system) is also part of this undertaking.

The second undertaking focuses on those components which occur when combining multiple small-scale, site specific restorations into a single large-scale, systemic restoration program. This includes the development of a science-based methodology for project sequencing and implementation, development of mechanisms for measuring success (identification of endpoints and indicators of successful restoration, assessment protocols for these indicators) and mechanisms for communicating "what does success look like? (*e.g.* report card). This undertaking is guided by the Science Panel which provides scientific expertise, a framework and protocols to accomplish this undertaking.

The following is a brief characterization of the FY07 workplan for the three elements of Project K:

Ka - Preparation for and participation with River Council, Resource Management Teams, stakeholders, Tracking of financial execution, reporting on activities.

Kb - QTR 1: fish identification
QRT 2: fish identification / sample analysis
QRT 3: statistical analysis
QRT 4: submission of final report

Kc - QTR 1: finalize floodplain reach objectives; complete final draft Ecosystem Goods and Services Report. Complete phase I interactions with Fish Passage PDT
QRT 2: SP meeting with Reach Planning Team. Modeling Workshop in support of Pool 5 planning
QRT 3: lead/ participate in National Ecosystem Restoration Conference. Host Adaptive Management workshop for Mangers. Participate in Adaptive Management workshop with PDTs.
QRT 4: finalize project sequencing criteria in the context of System objectives. SP meeting with ATEAM and perhaps IL SAC.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
L. Cultural Stewardship
Team Leader: Jim Ross

PURPOSE:

Most of the federal construction associated with the UMR and IWW projects preceded implementation of the NHPA and consequently resulted in impacts to archeological sites with little or no review or documentation. To date, only a small fraction of the Upper Mississippi River System (UMRS) floodplain has been evaluated yet well over 7,000 archeological sites have been recorded. The potential for additional undocumented sites across the Navigation and Ecosystem Sustainability Program (NESP) study area is high. The purpose of the Cultural Stewardship Program (CSP) is to identify and assess critical cultural resource needs within the UMRS and implement mitigation measures as appropriate.

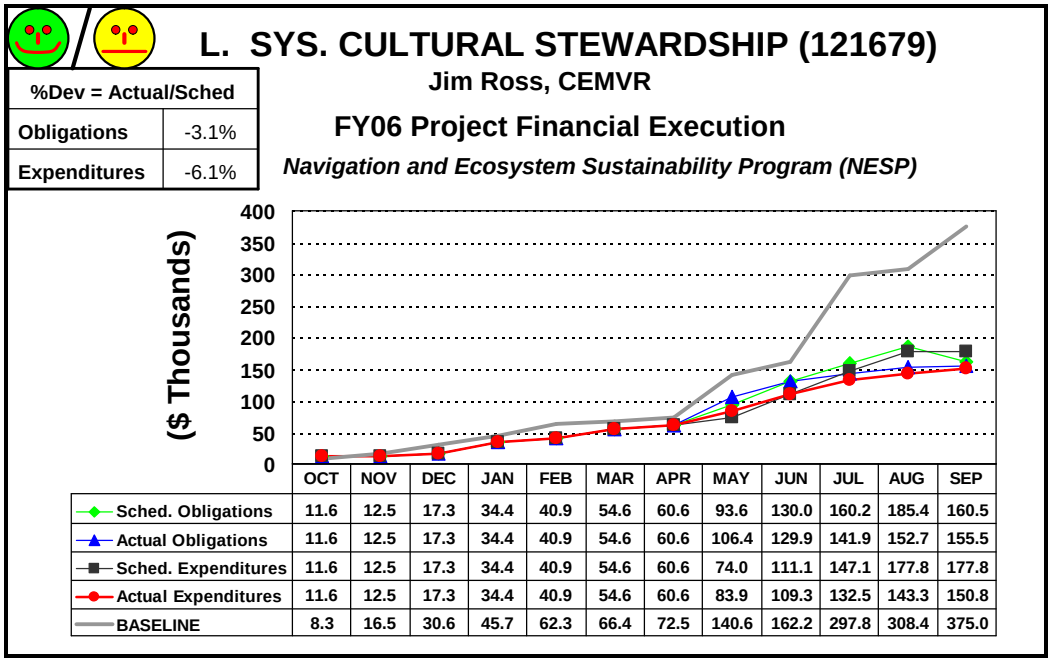
LOCATION AND DESCRIPTION:

The UMRS, as defined by Congress in the Water Resources Development Act of 1986 (WRDA 1986), includes the Upper Mississippi River from Minneapolis, Minnesota, to Cairo, Illinois; the Illinois Waterway from Chicago to Grafton, Illinois; and navigable portions of the Minnesota, St. Croix, Black and Kaskaskia Rivers. This multi-use resource supports an extensive navigation system (made up of 1200 miles of 9 foot channel and 37 lock and dam sites), a diverse ecosystem (2.7 million acres of habitat supporting hundreds of fish and wildlife species), floodplain agriculture, recreation and tourism. The CSP is specifically concerned with cultural resources located on federally-owned lands that are outside of areas associated with site-specific and systemic impacts from proposed navigation improvements. The UMRS CSP is one of 23 initial NESP ecological component projects being implemented under the UMRS program. Site-specific and systemic cultural resources impacts associated with proposed navigation improvements will be assessed under the navigation component of NESP.

SUMMARY OF FY06 ACTIVITIES:

The focus of FY06 was to initiate archeological site monitoring in MVS, complete GIS landform mapping in MVS, initiate archeological testing and NRHP eligibility assessment of threatened sites in MVP, initiate NEPA documentation for protection measures of threatened significant sites in MVP, and complete NEPA documentation for protection measures of a threatened significant site in MVR. Failure to execute contract awards in the 2nd quarter of FY06, along with the NESP Program need to redistribute funds at the end of the 2nd quarter, negatively impacted CSP goals for FY06. Consequently, only one contract was awarded (MVP testing) and NEPA documentation remains incomplete in MVR.

SUMMARIZED FINANCIAL DATA:	**PED (GI)**	**CONST. (CG)**
Estimated Federal Cost	$1,010,233	$TBD
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$1,010,233	$TBD
Allocation through FY 2005	$434,457	$0
Allocation for FY 2006	$150,776	$0
Budget Request for FY 2007	$150,000	$0
Balance to Complete after FY 2007	$275,000	$TBD
Amount that could be used in FY 2007	**$425,000**	**$0**



SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
FY06 PMP Revisions	1-Dec-05		29-Jan-06		
FY06 PMP Approval	31-Jan-06	31-Jan-06	3-Mar-06		
Survey Contract	1-Mar-06	31-Mar-06	30-Sep-06	TBD	Contract ongoing
Stakeholder Meeting	29-Jun-06	29-Jun-06	29-Jun-06	29-Jun-06	

PRODUCT LIST

DATE	PRODUCT	DESCRIPTION	WEB
	None		

CONSTRUCTION START: 2008

PROJECT FEATURE	START DATE	COMPLETION DATE
MVR Site protection/preservation	July 2008	Aug 2008
MVP Site protection/preservation	Aug 2008	Sept 2008

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Sherman Banker	Wisconsin SHPO	CSP Team Mtg (6/29/06)
Dave Mather	Minnesota SHPO	CSP Team Mtg (6/29/06)
Judith Deel	Missouri SHPO	CSP Team Mtg (6/29/06)
David Halpin	Illinois SHPO	CSP Team Conf Call (8/06)
Dan Higgenbothom	Iowa SHPO	CSP Team Conf Call (8/06)
Jerry Enzler	NMRM, Dubuque	CSP Team Mtg (6/29/06)
Danielle Benden	MMAM	CSP Team Mtg (6/29/06)
Ernie Boszhardt	MVAC	CSP Team Mtg (6/29/06)
Dave Stanley	BCA	CSP Team Mtg (6/29/06)

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
	None	

FY07 IMPLEMENTATION STRATEGY:

Work in FY07 will focus on completion of the MVR NEPA document, completion of the MVP FY06 contract, completion of the MVP NEPA document, and initiation of MVS critical cultural resource assessment/contract. Draft review of the MVR EA will occur during the 1st quarter of FY07 with completion of the public review by early in the 2nd quarter. Successful completion of MVS contract is dependent upon SOW preparation in the 1st quarter and contract award by early 2nd quarter. Consultation with the SHPOs will be required during the 3rd quarter in order to assess the draft MVS report and to finalize the MVP protection plan. MVP will complete their draft EA and initiate public review by the end of the 4th quarter. Finally, a CSP meeting with non-Corps stakeholder involvement is scheduled for St. Louis in the 4th quarter.

A total of $275,000 in additional capability has been identified including the completion of MVS geomorphic mapping, shoreline surveys in MVP and MVS, and updates to the UMRS archeological site and survey geographic information systems (GIS) database. Key decision dates for the additional capability are early in the 2nd quarter for all but the GIS update. Key decision date for the GIS update is the end of the 3rd quarter.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
M. Forest Management
Team Leader: Randy Urich

PURPOSE: The primary purpose of the forest management project is to implement forest and other terrestrial vegetation management and restoration actions within the Upper Mississippi River System floodplain to ensure sustainability of this critical ecosystem component.

LOCATION: The project location is the floodplain area along the Upper Mississippi River System (UMRS), defined as the Upper Mississippi River from Minneapolis, MN to Cairo, IL; the Illinois Waterway from Chicago to Grafton, IL; and navigable portions of the Minnesota, St. Croix, Black and Kaskaskia Rivers. Generally, the lateral extent of the project area will be the river valley from bluff to bluff, with the focus on areas that currently support or could potentially support native terrestrial vegetation types, including: floodplains forests, grasslands and shrub carr.

DESCRIPTION: The project includes two main phases. Phase 1 is the development of a systemic forest management plan. The plan will be programmatic in nature. It will establish a foundation to improve and enhance management and restoration opportunities; collaborate with partner agencies and stakeholders to identify and establish goals and objectives; develop a better understanding of the state of the resource; identify problems, opportunities and data needs; and develop recommendations that will ensure sustainability of this critical component of the UMRS ecosystem. The plan will also serve as a framework for the various entities that own or are involved in environmental stewardship of UMRS forests, to help maximize the contribution of local management efforts towards systemic goals. The plan will build upon previous and on-going reports or planning efforts, such as the Upper Mississippi River Conservation Committee's 2002 Floodplain Forest Report, Environmental Pool Plans, Comprehensive Conservation Plans for National Wildlife Refuges within the UMRS, and the Corps' Operational Management Plans. The Phase 1 document will include a 15-year implementation plan that outlines specific action and further study items recommended to meet overall project goals and management objectives. Some of these recommended items will be very specific and ready for implementation immediately when funds are appropriated. An example is the Reno Bottoms Forest Restoration Project, which involves dredging a backwater to obtain soil material, placement on degraded island habitat to elevate and improve site conditions, then planting the site to bottomland hardwoods. Another example is procurement of high resolution floodplain elevation data throughout the UMRS to provide baseline data for management decisions. Other recommended items will be more general, such as adaptively formulating new project proposals for implementation in future years of the Navigation and Ecosystem Sustainability Program (NESP).

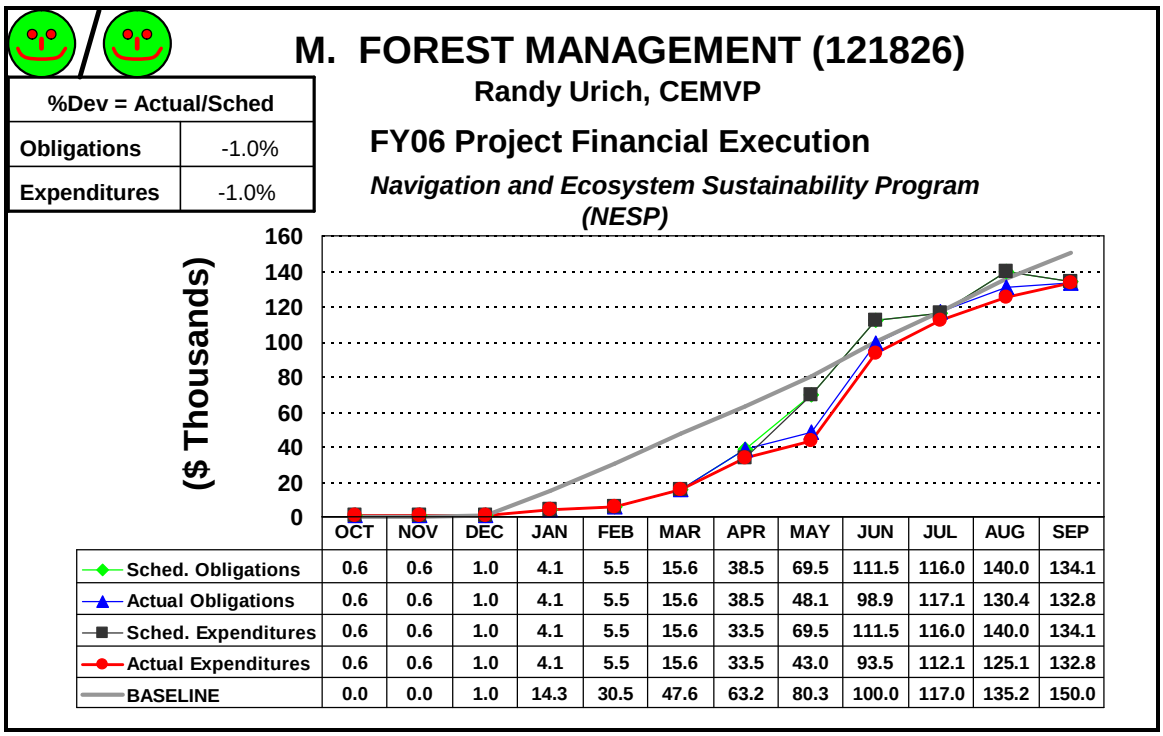
Phase 2 is the implementation of the action and further study items recommended in the systemic forest management plan. This phase will be carried out throughout the length of the NESP program. During this time, the Corps and its partners will continue to develop, coordinate and implement specific management and restoration activities within the framework of the systemic forest management plan. The initial formulation of these proposed activities may be conducted by any qualified project partner before being presented to the NESP forest management Product Delivery Team (PDT) for further consideration and potential implementation.

SUMMARY OF FY06 ACTIVITIES: In FY 2006, the following major activities were accomplished:

1. Information on the project was presented to members of the Upper Mississippi River Conservation Committee at their annual meeting in March.
2. A one-day workshop on ecological modeling was held in March. The purpose was to learn about existing models and scope a basic approach for a UMRS vegetation succession model.
3. The writing subgroup of the Regional PDT met in March to continue work on the draft systemic forest management plan. They followed-up with a new draft in June then submitted it to a writer/editor for proofreading.
4. The writing subgroup of the Regional PDT held a teleconference in June to discuss aspects of the new draft plan.
5. The PDT submitted the updated draft systemic forest management plan to the NESP Science Panel in early July, requesting review and comment. A member of the PDT met with Science Panel members at the beginning of the review period to answer questions and provide clarification.
6. The Regional PDT met in September to continue discussions about ecosystem modeling needs for this project. As a result, the group is recommending a hydro-geomorphic analysis be conducted for the entire UMRS to provide critical information for large scale and site scale ecosystem planning. This analysis would potentially benefit all NESP ecosystem initiatives.
7. The Science Panel provided comments on the draft systemic forest management plan in late September.

SUMMARIZED FINANCIAL DATA:	**PED**	**CONST.**
Estimated Federal Cost	$439,879	$42,600,000[a]
Estimated Non-Federal Cost	$0	$1,500,000
Total Estimated Cost	$439,879	$44,100,000
Allocation through FY 2005	$197,097	$0
Allocation for FY 2006	$132,782	$0
Budget Request for FY 2007	$110,000	$0
Balance to Complete after FY 2007	$0	$44,100,000
Amount that could be used in FY 2007	**$130,000**	**$0**

[a] NOTE: This estimated cost assumes an annual funding appropriation of $3 million (1 million each per the three UMR Corps districts) starting the second year of the recommended initial 15-year NESP program increment.



SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Revise PMP	23 Jan 06	23 Jan 06	23 Jan 06	23 Jan 06	
Presentation to UMRCC	15 Mar 06	15 Mar 06	15 Mar 06	15 Mar 06	
Vegetation Succession Model Workshop	28 Mar 06	28 Mar 06	28 Mar 06	28 Mar 06	
Regional PDT Meeting	29 Mar 06	29 Mar 06	29 Mar 06	29 Mar 06	
Report writing	30 Mar 06	15 May 06	05 Jun 06	30 Jun 06	
Regional PDT Conference Call	20 Jun 06	22 Jun 06	20 Jun 06	22 Jun 06	
Draft plan submitted to Science Panel for review	30 Jun 06	03 Jul 06	30 Jun 06	03 Jul 06	
Phase 1 report edit (proofread)	06 Jul 06	06 Jul 06	30 Aug 06	02 Aug 06	
Meeting with Science Panel	12 Jul 06	17 Aug 06	12 Jul 06	17 Aug 06	
Receipt of Science Panel comments	28 Jul 06	17 Sep 06	28 Jul 06	27 Sep 06	Original PDT estimate of schedule did not coincide with Science Panel's actual work and meeting schedule.
Regional PDT Meeting	03 Aug 06	06 Sep 06	03 Aug 06	06 Sep 06	Original plan was to review and discuss Science Panel comments prior to writing next draft plan. However, comments were not yet available. Meeting objective was changed to decision on ecological

					modeling.
Report revisions	04 Aug 06		30 Sep 06		Program budget reconciliation requirements at the end of Aug resulted in a cut in Project M. funding. Work was put on hold for the remainder of the fiscal year. Task is not complete as planned.

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Jun 06	Draft Systemic Forest Management Plan	Regional PDT comments from first draft of plan incorporated. Ready for Science Panel review.	On PW
Sep 06	Science Panel review comments	General and technical comments on the draft plan submitted to the PDT.	On PW

CONSTRUCTION START: Reno Bottoms Forest Improvement Project - **May 2008**

PROJECT FEATURE	START DATE	COMPLETION DATE
Public information meetings	15 Apr 08	1 May 08
Backwater dredging and placement for topsoil on area 1	1 May 08	15 Jun 08
Remove herbaceous biomass from area 2	1 May 08	15 Jun 08
Plant and protect native tree species	1 Jun 08	15 Nov 08
Control undesirable vegetation around plantings	15 Jul 08	15 Sep 10
Monitor tree survival and growth	15 Jul 08	15 Sep 10

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Mark Anderson	WI DNR	PDT member
Samuel Osinde	WI DNR	PDT member
Kathy Nelson	WI DNR	PDT member
Mike Tenney	MN DNR	PDT member
Terry Helbig	MN DNR	PDT member
Mike Griffin	IA DNR	PDT member
John Walkowiak	IA DNR	PDT member
Jim Jansen	IA DNR	PDT member
Terry Haindfield	IA DNR	PDT member
Tom Beissel	IL DNR	PDT member
Kurt Bobsin	IL DNR	PDT member
Thad Cook	IL Nat Hist Survey	PDT member
Rob Cosgriff	IL Nat Hist Survey	PDT member

Mike Flashpoler	MO DOC	PDT member
George Clark	MO DOC	PDT member
Karen Westphal	FWS	PDT member
Dick Steinbach	FWS	PDT member
Eric Nelson	FWS	PDT member
Teri Heyer	USDA Forest Service	PDT member
Eileen Kirsch	USGS	PDT member
Yao Yin	USGS	PDT member
Ginger Kopp	USDA NRCS	PDT member
Al Fennedick	US EPA	PDT member
Lyle Guyon	Lewis & Clark College	PDT member
Dan McGuiness	Audubon	Observer
Mark Martell	Audubon	Observer
Paul West	TNC	Observer
Brent Haglund	Sand County Foundation	Observer

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
04/2007	Public Information Notice and Review	Information on the Systemic Forest Management Plan will be disseminated to the public via NESP newsletter and website with opportunity for public review and comment.
01/2008	Public information meeting	Meeting in Brownsville, MN to provide information and take comment on Reno Bottoms Forest Improvement Project.
2009 and beyond	Public information meetings	Meetings at various locations in conjunction with individual forest improvement projects proposed within framework of Systemic Forest Management Plan.

FY07 IMPLEMENTATION STRATEGY:

If NESP is authorized and funded in 2006, the Reno Bottoms Forest Improvement Project in Pool 8 could be implemented as early as spring of 2008. The tasks listed below must be accomplished if a construction start in 2008 is to be achieved.

1. Agency partner coordination (including FWS) – ongoing
2. Evaluate forest inventory information collected in FY05 - Jan 07
3. Analysis of benefits and costs – Feb 07
4. Draft Project Implementation Report (PIR) – Sep 07
5. Initiate ITR process – Sep 07

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
N. Systemic Barge Fleeting Plan
Team Leader: Dorie Bollman

PURPOSE: The primary purpose of the systemic barge fleeting plan (SBFP) is to create a facilitation tool for regulators, natural resource/land managers, industry developers, and other potential applicants within the Upper Mississippi River System's water and land interface. The plan will facilitate the regulatory and real estate review processes for potential fleeting activities by identifying areas of sustainable use, associated federal and state procedures, and other guidelines used by decision makers.

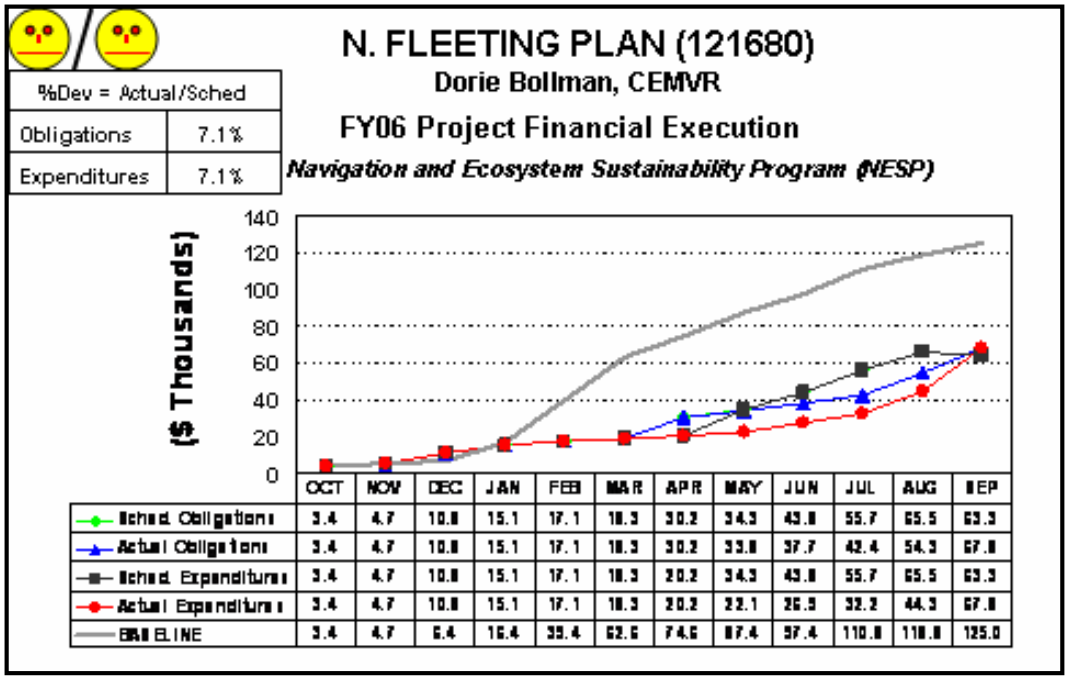
LOCATION AND DESCRIPTION: The project location is the floodplain area along the Upper Mississippi River System (UMRS), defined as the Upper Mississippi River from Minneapolis, MN to Cairo, IL; the Illinois Waterway from Chicago to Grafton, IL; and navigable portions of the Minnesota, St. Croix, Black and Kaskaskia Rivers. Generally, the lateral extent of the plan's scope will be the river's water and land interface, with the focus on areas where new fleeting or associated development activities are imminent or likely to occur in the near future. It is likely that there will be an umbrella plan followed by more specific sub-plans or chapters based on areas of greatest development need or greatest environmental concern.

SUMMARY OF FY06 ACTIVITIES: In FY 2006, the following major activities were accomplished:

1. Assembled materials that would indicate likely barge fleeting facilities. Materials included old GIS data sets and printed materials, e.g., Inland River Guide.
2. Developed data development strategies. Details were provided in an MFR (dated 16 May 2006) to Dorie Bollman on 22 June 2006.
3. Researched the SDSFIE Department of Defense **Mandatory** Standard for GIS development efforts to determine the requirements for the development of Barge Fleeting Data. Details were provided in an MFR (dated 16 May 2006) to Dorie Bollman on 22 June 2006.
4. Designed the GIS database structure for the Barge Fleeting GIS data, including the data fields and domain tables for the data fields. Determined data entry standards to ensure consistency among the Districts.
5. MVP took the lead on initial data development to test our database design. Data development included using aerial photography to digitize fleeting areas, trips with river crews to Pool 2, and consultation with MVP staff in Fountain City. MVP has created a draft Barge Fleeting Data set for the navigable portions of the Upper Mississippi and Minnesota Rivers in the St. Paul District. Best available information indicates that there are no Barge Fleeting Facilities on the navigable portions of the St. Croix and Black Rivers within the St. Paul District.
6. MVR has developed initial ArcMap projects for data development.
7. MVP recently (September 2006) provided the initial data set to MVR and MVS for review.
8. Using the initial data set, MVP has developed draft cartographic products for the St. Paul District portion of the UMRS.
9. The GIS Team has had discussion regarding the potential for deploying a Web Mapping Service to serve the Barge Fleeting map products/data. Discussion has focused on how an existing map service developed by CRREL (for the Mussel data for the UMRS) could be replicated and modified the intent of minimizing the cost for deploying a map service.

10. Received comments from AWO, MARC 2000, and some members of the PDT on the draft Sept 2005 Workshop report. Finalized the Sept 2005 Workshop Report and distributed to all PDT members. Distribution included the letters and comments received, with a matrix detailing how each comment was responded to in the report and how the comment would be carried forth in the SBFP formulation process.
11. Established a "Kitchen Cabinet" of five designated individuals from the navigation industry to help facilitate industry's input to and review of all components of the SBFP.
12. Based, on input from PDT members, initiated discussions to broaden and refine the composition of the PDT with agency representation from the USDA Agricultural Marketing Service and NRCS. Refined and updated the PDT contact information databases due to changes in PDT membership.
13. Developed a draft "expectation" checklist to guide the development and content of the SBFP. (However, this draft has not yet been provided to the entire PDT for review, analysis, and comment.)

SUMMARIZED FINANCIAL DATA:	**PED (GI)**	**CONST. (CG)**
Estimated Federal Cost	$400,000	$0
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$400,000	$0
Allocation through FY 2005	$80,380	$0
Allocation for FY 2006	$67,480	$0
Budget Request for FY 2007	$70,000	$0
Balance to Complete after FY 2007	$182,140	$0
Amount that could be used in FY 2007	**$0**	**$0**



SCHEDULE AND MILESTONES:

Task	SCHEDULED Start Date	ACTUAL Start Date	SCHEDULED Finish Date	ACTUAL FINISH Date	Comments
FY06 PMP Revisions	1-Dec-05		31-Jan-06	29-Jan-06	
FY06 PMP Approval	31-Jan-06		3-Mar-06	3-Mar-06	
Product: Final Workshop Report	1-Jan-06		1-Jul-06	28 Sep 06	
Create GIS Database	15-May-06		15-Jun-06		**
Product: Mailing list	15-Jun-06		30-Jun-06		**
Product: Website Pages	15-Jun-06		30-Sep-06		**
Hold Partner Meetings	10-Jul-06		30-Sep-06		**
Populate GIS Database (Draft)	10-Jul-06		30-Sep-06		**
Product: Barge Fleeting GIS Database	1-Feb-06		30-Jun-06		**
Complete Current Conditions Inventory	1-Oct-06		1-Nov-06		

** - The unfinished tasks are underway of will be initiated in the first quarter of FY07. Please refer to the FY07 implementation strategy section below for anticipated completion dates.

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
28 Sep 06	***Final Workshop Report***	Compilation of workshop discussion & participation	WBP

WBP = Will be placed on the web in near future

CONSTRUCTION START: Not Applicable

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Adams, Ron	WI DOT	PDT Member
Bassow, Walt	Walter Marine Enterprises	PDT Member
Beorkrum, Mark	Miss River Basin Alliance	PDT Member
Buntin, Dru	MO DNR-Alt MO State Rep to UMRBA	PDT Member
Burlingame, Chuck	ARTCO	PDT Member
Caldwell, Larry	Canton Marine Towing Company, Inc.	PDT Member
Carr, Mark	MEMCO - St Louis Area	PDT Member
Daily, Larry	Alter Barge Line, Inc. Blackhawk Fleet	PDT Member
Dickey, Samuel	American Commercial Barge Line; River Industry Action Committee	PDT Member
Duyvejonck, Jon	US Fish and Wildlife Service	PDT Member
Fischer, Jim	WI DNR	PDT Member
Foster, George	J B Marine Service; AWO Inland Harbor Group	PDT Member
Goodwin, Bob	Maritime Marine Administation	PDT Member
Harris, Quint	B &H Towing Comp.;Il River Carriers Association	PDT Member

Henleben, Ed	RIAC, Ingram Barge Line	PDT Member
Hey, John	IA DOT	PDT Member
Hudson, Todd	Il River Carriers Association	PDT Member
Jamison, Larry	Osage Marine Service - middle & lwr IL W	PDT Member
Johnson, Scot	MN DNR	PDT Member
Karnuth, Franz	US Coast Guard	PDT Member
Lambert, Dick	MN DOT	PDT Member
Martin, Sherrie	MDOT	PDT Member
Marathon, Nick	US Dept of Ag; Agricultural Marketing Service	PDT Member
Melville, Bob	US Coast Guard	PDT Member
Melvin, Darren	Material Service Corporation; Il River Carriers Association	PDT Member
Mick, Jim	IL DNR	PDT Member
Milam, Tim	IL DOT	PDT Member
Muench, Lynn	AWO -	PDT Member
Nelson, Lee	Upper River Services LLC	PDT Member
Niehaus, John	Lewis and Clark Marine	PDT Member
Nissen, Brent	ARTCO	PDT Member
Patterson, James (Goat)	Osage Marine Service	PDT Member
Pehler, Kent	Brennan Marine	PDT Member
Pisares, Chris	US Coast Guard	PDT Member
Reeves, Tom	MEMCO Barge Line	PDT Member
Richey, Sharon	US Coast Guard	PDT Member
Rohde, Paul	MARC 2000	PDT Member
Schonhoff, Bernie	IA DNR	PDT Member
Simmonds, Randy	ARTCO	PDT Member
Steinbach, Dick	US Fish and Wildlife Service	PDT Member
Sternburg, Janet	MO DOC	PDT Member
Walsh, Ed	IL DNR	PDT Member
Wilken, Royce	ARTCO (ADM Transportation Group)	PDT Member

NOTE: In an effort to create a focus group to represent the navigation industry, a "kitchen cabinet" has been developed comprised of the following individuals: Larry Daily, George Foster, Lee Nelson, Brent Nissen, and Tom Reeves.

PUBLIC INVOLVEMENT:

DESCRIPTION
Given that we are at the beginning of the planning process, no public involvement has been performed to date. However, public meetings, as well as a public review period, could occur late in FY 2007 or early in FY 2008. The public will have full opportunity to review and comment on any proposed plan.

FY07 IMPLEMENTATION STRATEGY: Based on available funding, the following tasks and products are planned.

QTR 1:
- Update PMP
- Finalize Mailing List
- Draft Expectations Table
- Draft Report Outline
- Initiate data collection activities
- Populate GIS database

QTR 2:
- Continue data collection activities
- Create Website
- Finalize Expectations Table
- Finalize Report Outline
- Initiate small group partner meetings

QTR 3:
- Continue small group partner meetings
- Complete Current Conditions Inventory
- Update Website
- Draft of Written portion of Barge Fleeting Plan

QTR 4:
- Draft Map(s) of Pool ???
- Review of Barge Fleeting Plan
- Update Website
- Public Comments of Barge Fleeting Plan

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM

FY 2006 YEAR-END PROJECT SUMMARY REPORT

P1. Fish Passage Melvin Price Locks and Dam

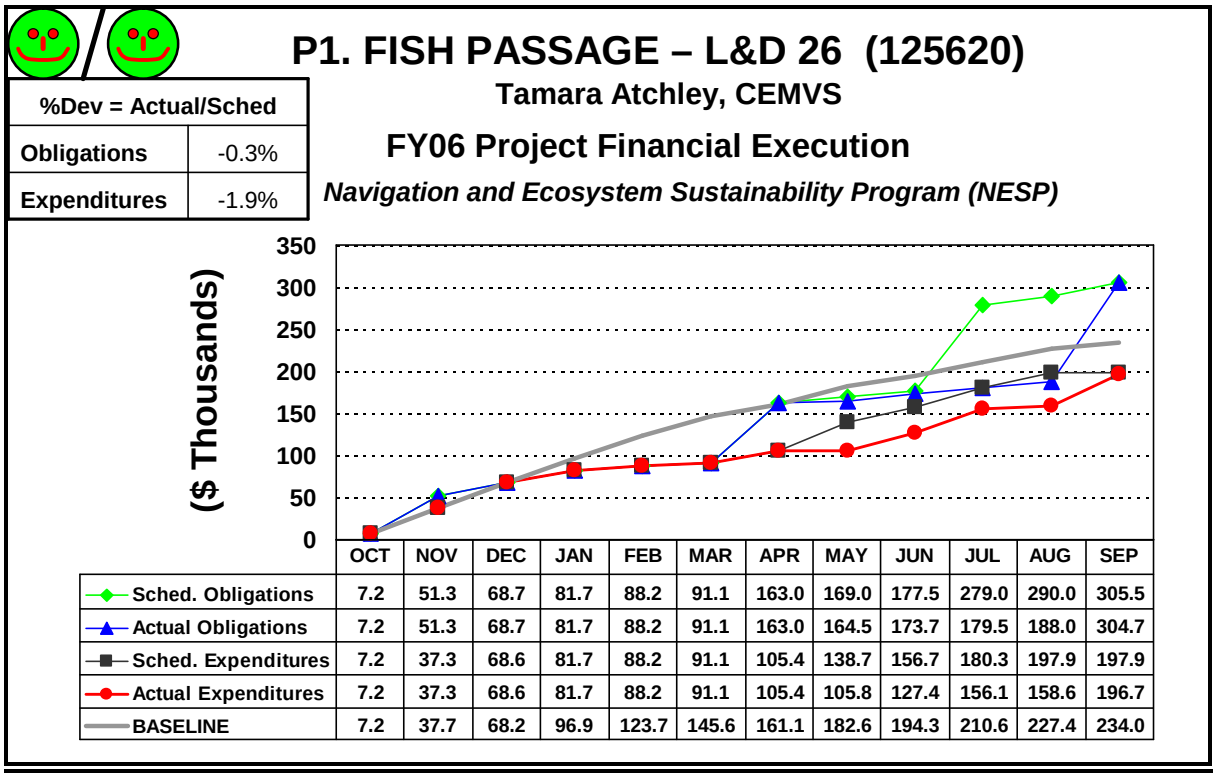
Team Leader: Tamara Atchley

PURPOSE: The purpose of this project is to restore longitudinal connectivity of the Upper Mississippi River and Illinois Waterway system (UMRIWW) for a wide range of migratory warmwater fish species.

LOCATION AND DESCRIPTION: The site for this project is the Melvin Price Locks and Dam located in East Alton, IL at River Mile (RM) 200.78 on the UMR, between St. Charles County, Missouri, and Madison County, Illinois. The locks and dam consist of two 110 foot wide locks on the Illinois side of the river (1200 foot main lock and 600 foot auxiliary lock), eleven 110 foot wide tainter gates, and a 2000 foot overflow dike.

SUMMARY OF FY06 ACTIVITIES: Continued with pre-construction monitoring in November, April, May, and September. Held initial informational meetings for ITR, VE, and Plan Formulation reviewers (Febuary 06). Conducted Feasibility scoping meeting in May 06. Held public scoping meeting in July 06. Held effectiveness index workshop in St. Louis in July. Contracted for stationary hydroacoustic monitoring design at dam gates and locks.

SUMMARIZED FINANCIAL DATA:	PED	CONST.
Estimated Federal Cost	$2,200,000	$TBD
Estimated Non-Federal Cost	$0	$TBD
Total Estimated Cost	$2,200,000	$TBD
Allocation through FY 2005	$134,183	$0
Allocation for FY 2006	$196,728	$0
Budget Request for FY 2007	$350,000	$0
Balance to Complete after FY 2007	$1,519,0890	$TBD
Amount that could be used in FY 2007	**$450,000**	**$0**



SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Develop PMP	11/01/05	11/01/05	12/5/05	12/5/05	Approved 12/14/05
Public Meeting	12/15/05	07/25/06	12/15/05	07/25/06	
Plan Form, VE, ITR Kickoff	1/24/06	2/22/06	1/24/06	2/22/06	
Feasibility Scoping Meeting	2/21/06	5/18/06	2/21/06	5/18/06	
H&H Modeling	11/21/05	TBD	8/25/06	TBD	Delayed due to modeler's part time assignment to DNR. Should be able to restart in 12/06
Additional Engineering Studies	12/15/05	12/15/05	04/06	TBD	Delayed due to lack of resources and hydraulic modeling info
ITR	2/12/08		2/25/08		May be rescheduled due to delays in engineering efforts
Alternative Formulation Briefing	04/11/08		04/11/08		May be rescheduled due to delays in engineering efforts
Public/Agency Review of Draft PIR	6/20/08		7/22/08		May be rescheduled due to delays in engineering efforts

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Jun 06	Draft Risk and Uncertainty Reduction Plan	Plan for pre, post and during construction monitoring/data gathering	
Aug 06	Stationary Hydroacoustic Monitoring Design Report		
Feb 08	Draft Decision Document	Draft Project Implementation Report	
Aug 08	Final Decision Document	Final Project Implementation Report	

CONSTRUCTION START: TBD

PROJECT FEATURE	START DATE	COMPLETION DATE
Fish Passage Structure	TBD	TBD

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Butch Atwood	IDNR	PDT Member
Jon Duyvejonck	USFWS	PDT Member
Nate Casewell	USFWS	Fish Sampling
Rob Simmonds	USFWS	Fish Sampling
Danny Moore	MDOC	PDT Member
Dr. Alex Haro	USGS	ITR Member
Dr. Luther Aadland	Minnesota DNR	ITR Member

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
25/07/06	Public Scoping Meeting	Public Meeting
6/08	Public Meeting	Public/Agency Review of Draft PIR

FY07 IMPLEMENTATION STRATEGY: Continue with hydroacoustic monitoring, fish sampling, and telemetry efforts. Further develop information on alternatives (costs/benefits).

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
P2. Fish Passage, Lock and Dam 22
Team Leader: Mark Cornish

PURPOSE: The purpose of this project is to increase opportunity for fish passage through Lock and Dam 22, thereby increasing access to upstream habitats which should result in an increase in the size and distribution of native migratory fish populations.

Because this project will be the first of this kind on the Upper Mississippi River, a second purpose is to monitor, evaluate, and learn from this project. The main reasons for monitoring and evaluation are to gain information needed for project planning and design (pre-project monitoring), to determine if the project objectives are met (project performance monitoring) and to apply lessons learned to subsequent fish passage projects (adaptive management). Project performance indicators are derived from the quantitative project objectives and serve as the focus of monitoring effort.

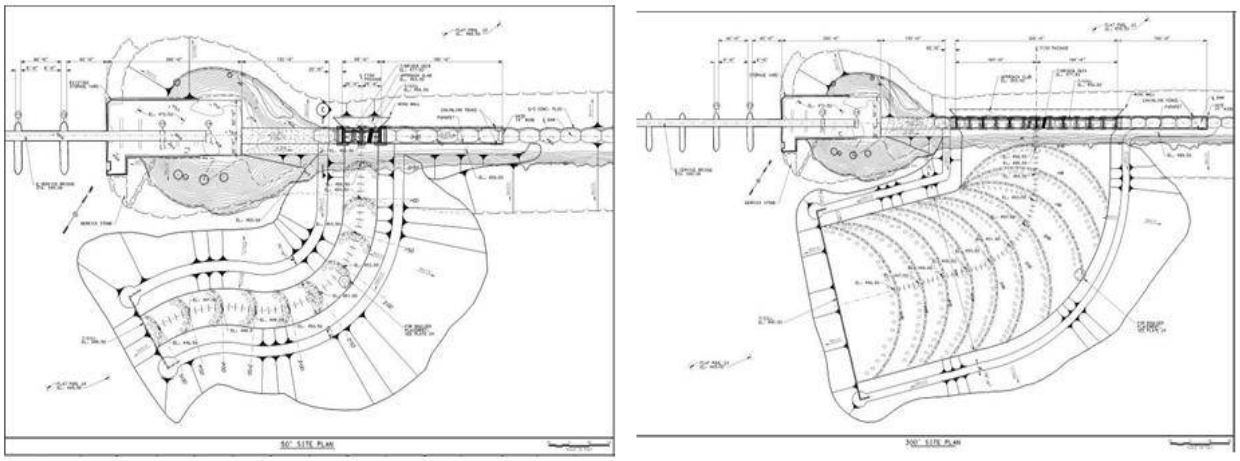
LOCATION AND DESCRIPTION: Lock and Dam 22 is located at River Mile (RM) 301.2 on the Upper Mississippi River, between Ralls County, Missouri, and Pike County, Illinois. This project is located in Congressional District 9 in Missouri and District 17 in Illinois. The average lift at Lock and Dam 22 is approximately 11 feet.

This project will aid in the restoration of longitudinal connectivity of the Upper Mississippi River for a wide range of migratory warmwater fish species. The Project Delivery Team (PDT) is in the process of evaluating alternatives that include; no project, fish lockage through the existing lock, building a semi-natural bypass channel around the dam, creating a rock ramp in the center section of the dam, extending the open river period by leaving the gates out of the water for a longer period of time, and building a technical fishway (fish ladder) in areas where fish congregate. The PDT is assessing the feasibility of these measures through pre-construction risk and uncertainty reduction studies and modeling to determine the alternative with the highest ecological and economic value.

SUMMARY OF FY06 ACTIVITIES:

Project Implementation Report Activities

- The PDT held 14 team meetings with the purpose of developing the Project Implementation Report (PIR). Notes from these meetings were posted on ProjectWise for the NESP Management team to access and review.
- The PDT held ten monthly structural-non-structural sub-team meetings which produced 78 pages of detailed design drawings for the PIR (Figure 1).
- The PDT participated in seven monthly MVR team leader meetings and led a session at the January meeting on creating Quality Management Plans.
- The Lock & Dam 22 and Mel Price PDTs completed an update of the Project Management Plan (PMP) that included a MS Project schedule and the NESP programs first detailed Quality Management Plan (QMP). The PDTs worked with Dave Vigh of the Eco-PCX to identify Independent Technical Review people for the QMP.
- The PDTs held an Independent Technical Review team kickoff meeting where the PDTs briefed the ITR team and received preliminary feedback on the project. The proceedings of this meeting were documented and posted in the ProjectWise directory.



50' Wide Rock Ramp 300' Wide Rock Ramp

Figure 1. Example design drawings for two of the nine fish passage alternatives at Lock & Dam 22.

- The PDTs took a field trip to the University of Iowa's Iowa Institute of Hydraulic Research, Hydroscience and Engineering to study options for physical modeling in February.
- The PDTs assisted in a Value Engineering team review of the project which led to the production of a 96-page Value Engineering report in May.
- The PDTs hosted a Formulation Scoping meeting/conference call for thirty people including staff from Headquarters, Division, MVS, MVP, and MVR, as well as ITR members. A Formulation Scoping Briefing Memorandum for Record (MFR) was written to document the decisions of this meeting.
- The PDTs worked with the NESP science panel on the Project P, Fish Passage projects, addressing comments and concerns of the panel through a series of briefings and written responses.
- The Lock and Dam 22 PDT developed preliminary cost estimates for three of the structural alternatives in preparation for incremental analysis in August.

Risk and Uncertainty Reduction Studies

- The PDTs published the document *2005 Monitoring Report – Fish Passage* as NESP – ENV Report 1 in June.
- The Corps' *MV Boyer* and the US Fish & Wildlife Service conducted hydroacoustic and fish aggregation sampling in November, April, May and September below Lock and Dam 22 and Mel Price Locks and Dam
- The Lock and Dam 22 PDT initiated a contract for the deployment of a telemetry system in the Upper Mississippi River in the vicinity of the project area. The study called for the deployment of remote receivers and the implantation of 120 acoustic tags into five species of fish including; white bass, paddlefish, shovelnose sturgeon, silver carp, and skipjack herring.
- The Lock and Dam 22 and Mel Price PDTs contracted with Aquacoustics to design a fixed station hydroacoustics monitoring system to assess project performance.

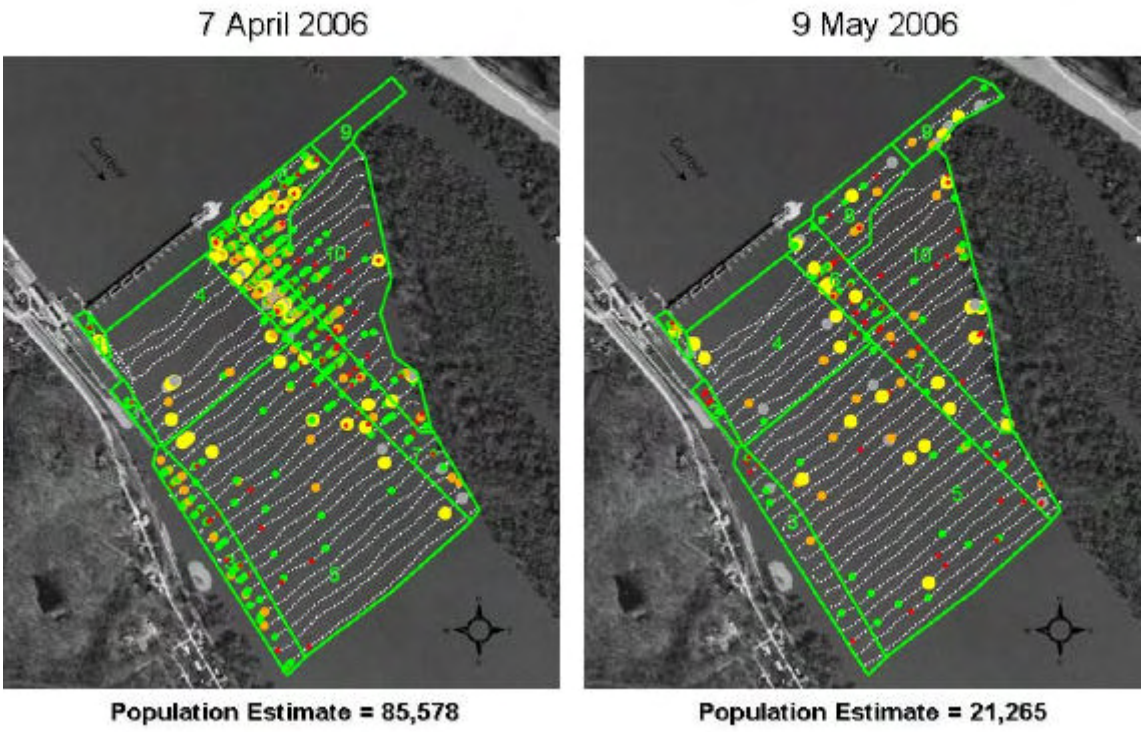


Figure 2. Fish distribution in the tailwaters of Lock & Dam 22 prior to and after open river. Circles represent fish in 10 inch size increments (from yellow circles > 40 inches to red circles < 10 inches)

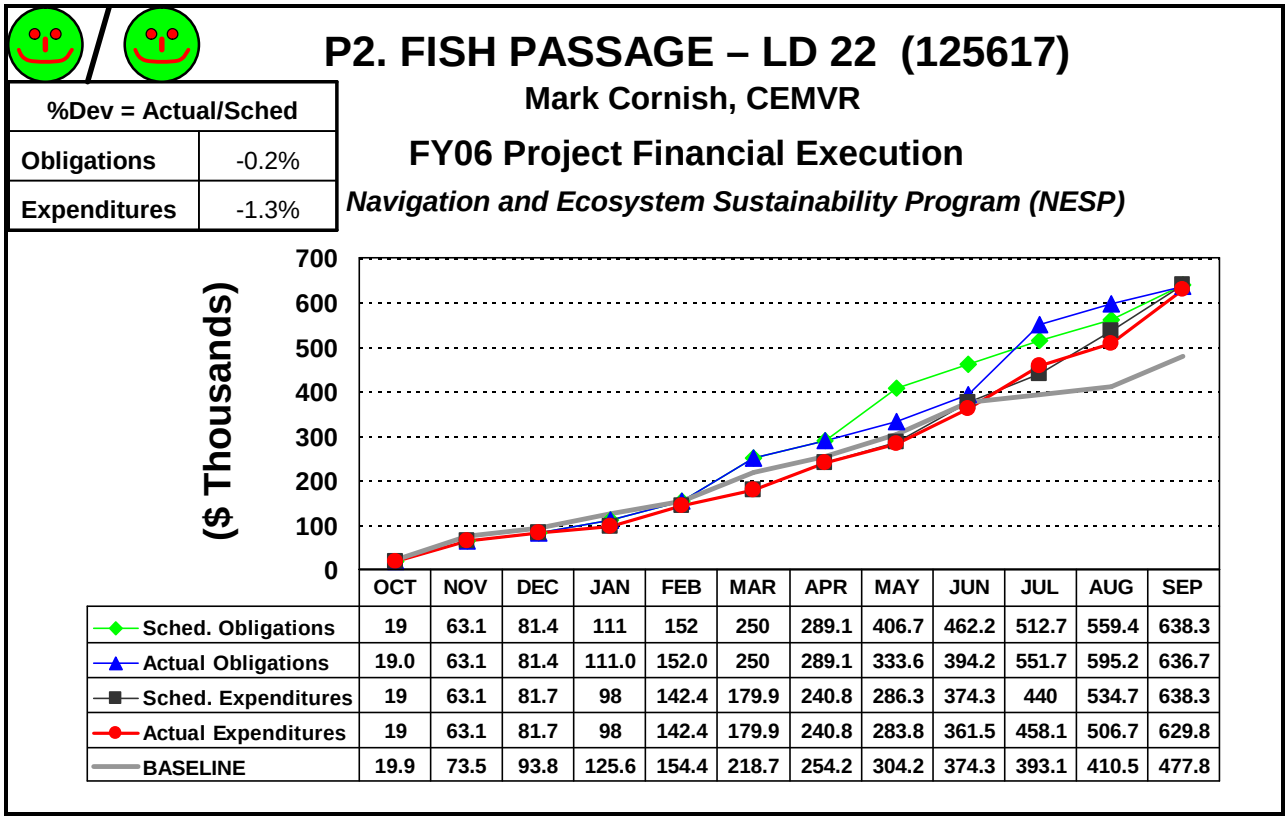
- The PDTs wrote and coordinated a draft *Risk and Uncertainty Reduction Plan* which will be used to guide project performance studies.
- The PDT observed that 50,000 fish moved out of the tailwaters in May during three weeks of Open River at Lock and Dam 22 (Figure 2). This number will be used as a project performance target objective for fish passage at this dam

Collaboration and Coordination

- The PDT completed 11 monthly NESP project progress reports to keep the NESP Management team informed of PDT activities.
- The PDTs presented the fish passage projects to the NESP science panel in November.
- The PDTs (Mel Price and L&D 22) held a joint face-to-face meeting in Saverton, Missouri to ensure communication between the Districts during the plan formulation stage of project development in November.
- The PDT presented a fish passage briefing to the River Resources Coordinating Committee in January, and to 46 attendees at the Navigation Environmental Coordination Committee meeting in February.
- The PDT presented a fish passage lecture to the IIHR-Hydroscience & Engineering of The University of Iowa at the prestigious *IIHR Seminars Series* to approximately 60 graduate students and staff in February.

- The PDT presented an overview of the fish passage risk and uncertainty reduction studies to the 200 biologists attending the plenary session of the Upper Mississippi River Conservation Committee annual meeting in Hannibal, Missouri; and the PDT briefed 20 civil engineers on the project at the annual meeting of the Iowa Chapter of the American Society of Civil Engineers in Ames, Iowa, all in March.
- The Lock & Dam 22 PDT sent the NEPA coordination letter to 55 individuals representing State, federal and local governments, NGOS and the interested public in May.
- The Lock and Dam 22 New Lock and Fish Passage PDTs held a joint public meeting attended by 38 members of the public at Camp Oko Tipi in Saverton, Missouri in May.
- The PDTs submitted an abstract which was accepted for presentation at the Midwest Fish & Wildlife Conference in Omaha, Nebraska.
- The Lock & Dam 22 PDT presented the Risk and Uncertainty Reduction study results and gave a tour of the project area to 21 fisheries professionals at the UMRCC Fall Fish tech in Saverton, Missouri in September.

SUMMARIZED FINANCIAL DATA:	**PED**	**CONST.**
Estimated Federal Cost	$1,567,676.60	$TBD
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$1,567,676.60	$TBD
Allocation through FY 2005	$310,459.63	$0
Allocation for FY 2006	$629,817.07	$0
Budget Request for FY 2007	$ 325,000.00	$0
Balance to Complete after FY 2007	$896,300.00	$TBD
Amount that could be used in FY 2007	$ 1,194,300.00	$0



SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
FY06 PMP Revisions	1-Dec-05	1-Dec-05	29-Jan-06	29-Jan-06	
FY06 PMP Approval	31-Jan-06		3-Mar-06		
Product - Monitoring Plan	10-Nov-05	10-Nov-05	30-Jun-06		Draft monitoring plan completed on schedule. Awaiting review comments from the science panel
ITR/Plan Form/VE Meeting	22-Feb-06	22- Feb-06	28-Feb-06	23-Feb-06	
Product - ITR/Plan Form/VE MFRs	22-Feb-06	22-Feb-06	31-May-06	31-May-06	Memorandums have been used to guide development of the Project Implementation Report
HQ Feasibility Scoping Meeting	15-Apr-06	18-May-06	18-May-06	18-May-06	
Product - HQ and MVD Guidance Memorandum	18-May-06	18-May-06	30-Jun-06	28-Jun-06	Memorandum has been used to guide development of the Project Implementation Report
Product - FY05 Monitoring Report (Final)	3-Jan-06	3-Jan-06	28-Feb-06	6-Jun-06	Monitoring report was distributed to stakeholders through the NECC
Mobile Hydroacoustic Field Sampling	10-Nov-05	10-Nov-05	1-May-06	12-May-06	MV Boyer conducted mobile hydroacoustics sampling four times during the Fiscal Year
Comparison of Alternatives - Incremental Analysis	3-Sep-06		30-Sep-06		
Select Preferred Plan	1-Dec-06		15-Dec-06		
PDT Draft Project Implementation Report	1-Oct-05	1-Oct-05	1-Jan-07		
Coordination Act Report (USFWS)	1-Dec-06		31-Dec-06		
ITR/Coordinate Project Implementation Report	1-Feb-07		16-Feb-07		
Alternative Formulation Briefing	1-Mar-07		15-Mar-07		

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Jan 06	Quality Management Plan	An appendix to the PMP, the Quality Management Plan is a detailed document that describes the Project Review process for the project as well as identifying the VE and ITR people and how the team is addressing EC 1105-2-408.	
Jan 06	Project Management Plan	Project Plan	
Mar 06	Draft Risk and Uncertainty Reduction Plan	Project performance study plan	
June 06	2005 Monitoring Report	Hydroacoustic identification and sampling of fish aggregations in tailwater areas	
May 06	Value Engineering Report	production of a 96-page Value Engineering report to aid the PDT in developing the PIR.	
Aug 06	Draft Project Plates	A PIR appendix of 78 design drawings showing project alternatives	
June 06	Formulation Scoping Briefing Memorandum for Record (MFR)	MFR was written to document the input of the vertical team	

CONSTRUCTION START: 2008

PROJECT FEATURE	START DATE	COMPLETION DATE
Fishway	TBD	TBD

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Jon Duyvejonck	USFWS	PDT member
Butch Atwood	Illinois DNR	PDT member
Travis Moore	Missouri DOC	PDT member
Rob Simmonds	USFWS	PDT member and participated on PDT and led project performance study of tailwater fisheries
Nate Caswell	USFWS	PDT member and participated on PDT and led project performance study of tailwater fisheries
Rick Nelson	USFWS	Participated in Plan Formulation review
ITR Team	Various	Participated in Plan Formulation review and offered design recommendations and reviewed Risk and Uncertainty Reduction Plan
UMRCC Fish Tech Section	State and Fed Agencies	Participated in a field trip and offered design recommendations to PDT
Science panel	Various	Performed a review of alternatives and assisted in the development of the Risk and Uncertainty Reduction Plan

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
May	Public Meeting	38 people attended a meeting at Camp Oko Tipi in Saverton, Missouri
May	NEPA Coordination Letter	A letter with a project map sent to 55 individuals representing State, federal and local governments, NGOS and the interested public

FY07 IMPLEMENTATION STRATEGY:

QTR 1:

Physical and numeric modeling studies
Science panel workshop
Draft FY06 Monitoring Report
Hydroacoustics and Fish Sampling of Tailwaters
Engineer managerial review
Draft Sections of Environmental & Engineering Sections of PIR
Contract award - Telemetry contract

QTR 2:

Revised Project Management Plan
Hydroacoustics and Fish Sampling of Tailwaters
Telemetry monitoring of Fish in Tailwaters
Contract award - hydraulic environement quantification contract, ITR team contracts
Complete PDT draft of the PIR

QTR 3:

Hydroacoustics and Fish Sampling of Tailwaters

QTR 4:

Initiate Plans & Specs
Hydroacoustics and Fish Sampling of Tailwaters

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
Q2. Floodplain Restoration - Root River, MN
Team Leader - Jonathan Petersen

PURPOSE: Create project agreement documents which are set to be signed when NESP is authorized and funding provided for this project. The project statement outlines alternatives to be analyzed once a formal relationship is started. The project purpose is to improve the floodplain ecosystem of the Mississippi River.

LOCATION: This project is located in Pool 8, Upper Mississippi River Mile 693 - 695, in Houston County, Minnesota.

DESCRIPTION: Project alternatives are all located in the Root River floodplain, with some features in the Mississippi River floodplain. Much of the Root River floodplain, once comprised of wetlands, floodplain forest, and prairies, has been converted to agricultural uses along with river segments being straightened for flood control. Effects on the Mississippi River are apparent in environmental habitat decline and increased sedimentation in the main channel. Project features include restoring a historic Root River channel and breaching levees to reconnect the floodplain to the main channel. The initially proposed historic channel for restoring and levees for breaching are located between Hwy. 16 and Hwy. 26. Other possible levee breaches are located downstream of Hwy. 26.

SUMMARY OF FY06 ACTIVITIES: The initial draft project alternatives were created in conjunction with the MN DNR, the document is called the "Root River Floodplain Restoration Project Statement". The formal agreement document is set up to be signed once NESP is authorized and funding received. Documents are created with NESP restrictions accounted for, however the sponsor's vision diverges somewhat from this which may make a contractual agreement difficult. NESP restrictions include a project time frame which follows funding sources, cost share applicable for land within the agreed upon project feature boundaries, and project goals being tied to improving the Mississippi River hydraulics and ecology. The project evaluation will be similar to other Corps studies, including cost and benefits analysis in terms of monetary and environmental values through hydraulic modeling and the ecological response.

MN DNR's vision contains a large scale view of goals including an existing long term plan for acquiring land and restoration efforts as they present themselves, as well as draft alternatives (breech levees, restore historic channels, etc.) achievable when enough land is acquired. Also, the plan provides example restoration efforts for lands already acquired. All land acquired within the Root River 500-year floodplain valid for sponsor cost share funding, regardless if required for project construction.

SUMMARIZED FINANCIAL DATA:	PED	CONST.
Estimated Federal Cost	$550,000	$2,500,000
Estimated Non-Federal Cost	$150,000	$1,500,000
Total Estimated Cost	$700,000	$4,000,000
Allocation through FY 2005	$0	$0
Allocation for FY 2006	$14,500	$0
Budget Request for FY 2007	$0	$0
Balance to Complete after FY 2007	$685,500	$4,000,000
Amount that could be used in FY 2007	**$0**	**$0**

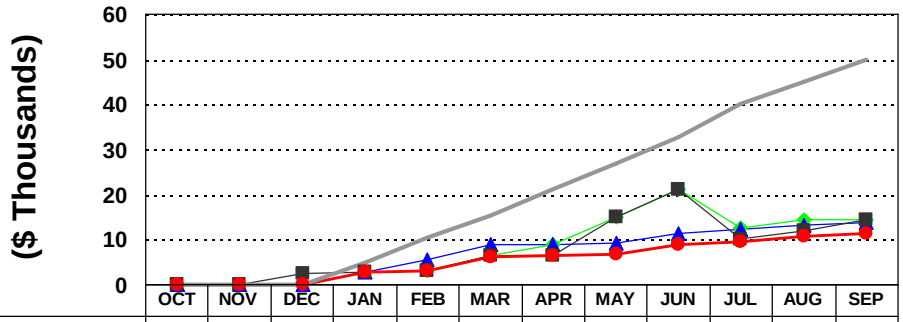
Q2. FLDP. REST. – ROOT RIVER (129911)

Jon Petersen, CEMVP

FY06 Project Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)

%Dev = Actual/Sched	
Obligations	-5.1%
Expenditures	-22.3%



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	0.0	0.0	0.0	2.7	3.1	6.3	9.0	15.0	21.0	12.5	14.5	14.5
Actual Obligations	0.0	0.0	0.0	2.8	5.6	8.8	9.0	9.3	11.2	12.1	13.2	13.8
Sched. Expenditures	0.0	0.0	2.4	2.7	3.1	6.3	6.5	15.0	21.0	10.0	12.0	14.5
Actual Expenditures	0.0	0.0	0.0	2.8	3.1	6.3	6.5	6.8	8.7	9.6	10.7	11.3
BASELINE	0.0	0.0	0.0	4.8	10.4	15.2	21.0	26.9	32.8	40.2	45.1	50.0

SCHEDULE AND MILESTONES:

Task	SCH. Start Date	ACT Start Date	SCH. Finish Date	ACT FINISH Date	Comments
Complete initial draft of Project Statement	Nov 2005	Nov 2005	Jan 2006	Jan 2006	
Complete Project Statement with initial MN DNR comments	Jan 2006	Jan 2006	Jan 2006	Jan 2006	
Complete Project Statement with initial Corps comments	Jan 2006	Jan 2006	Mar 2006	Mar 2006	
Complete Project Statement with final MN DNR comments	June 2006	June 2006	July 2006	July 2006	
Complete Project Statement with final Corps comments	July 2006	July 2006	Aug 2006	July 2006	
Meet with MN DNR to discuss program authority restrictions and final	Aug 2006	Aug 2006	Aug 2006	Sept 2006	NESP authority restrictions have been discussed with MN DNR

documents					
Sign project agreement with MN DNR *	Sept 2006	Not Complete	Sept 2006	Not Complete	*Subject to NESP Authority & Funding

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Sept. 2006	Project Statement	Outlines alternatives to be analyzed	
Sept. 2006	Formal Agreement	Set to be signed with authorization and funding	

CONSTRUCTION START: 2010

PROJECT FEATURE	START DATE	COMPLETION DATE
To Be Determined		

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Tim Schlagenhaft	MN DNR	PM from sponsor
Jim Nissen	U.S. Fish & Wildlife Service	
Rich Biske	The Nature Conservancy	
Bob Slater	MN Department of Transportation	
Ralph Tuck	Soil & Water Conservation District	
Gary Larson	Natural Resource Conservation Service	
Renee Mierau	City of Hokah	
Tom van der Linden	Houston County Trails	

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
9-1-05	Partnering Meeting	Bring forth project alternatives

FY07 IMPLEMENTATION STRATEGY: Wait for NESP authorization and funding.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM

FY 2006 YEAR-END PROJECT SUMMARY REPORT

Q3. Floodplain Restoration- Pierce County Islands, WI

Team Leader - Jonathan Petersen

PURPOSE: Create project agreement documents which are set to be signed when NESP is authorized and funding provided for this project. The project statement outlines alternatives to be analyzed once a formal relationship is started. The project purpose is to improve the floodplain ecosystem of the Mississippi River.

LOCATION: This project is located in Pool 4, Upper Mississippi River Mile 785 – 790.2, in Pierce County, Wisconsin.

DESCRIPTION: Project alternatives are all located in the Mississippi River floodplain, within the designated wildlife refuge. WI DNR owns and operates the Pierce County Islands Wildlife Area (PCIWA), approximately 950 acres; the wildlife refuge is within this area and is about 100 acres in area. Project features include repairing existing dikes, constructing control structures, an access road, and bank stabilization.

SUMMARY OF FY06 ACTIVITIES: The initial draft project alternatives were created in conjunction with the WI DNR, the document is called the "Pierce County Islands Floodplain Restoration Project Statement". The formal agreement document is set up to be signed once NESP is authorized and funding received. Documents are created with NESP restrictions accounted for; the sponsor's vision diverges somewhat from this which may make a contractual agreement difficult. NESP restrictions include project boundaries of applicable floodplain regions which are above the Ordinary High Water Mark (OHWM). The only portion of the PCIWA above the OHWM suggested for restoration is the Wildlife Refuge; this area contains a set of dikes in disrepair, an artesian well, and three impoundments no longer able to be controlled for water levels and filled with sediment due to recent floods.

WI DNR's vision is to complete a study for the entire Upper Pool 4 area, including restoration endeavors below as well as above the OHWM. Other areas WI DNR would like evaluated through modeling and a formal study process include the Head of Lake Pepin Islands, Central Islands, and Mud Lake area.

SUMMARIZED FINANCIAL DATA:	PED	CONST.
Estimated Federal Cost	$550,000	$2,500,000
Estimated Non-Federal Cost	$150,000	$1,500,000
Total Estimated Cost	$700,000	$4,000,000
Allocation through FY 2005	$0	$0
Allocation for FY 2006	$10,000	$0
Budget Request for FY 2007	$0	$0
Balance to Complete after FY 2007	$690,000	$4,000,000
Amount that could be used in FY 2007	**$0**	**$0**

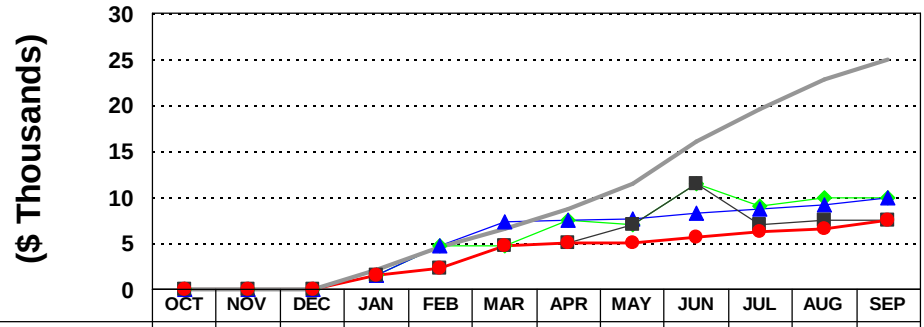
Q3. FLDP. REST. – Pierce County, WI (129922)

Jon Petersen, CEMVP

FY06 Project Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)

%Dev = Actual/Sched	
Obligations	0.6%
Expenditures	-24.5%



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	0.0	0.0	0.0	1.5	4.8	4.8	7.5	7.0	11.5	9.0	10.0	10.0
Actual Obligations	0.0	0.0	0.0	1.5	4.8	7.3	7.5	7.6	8.2	8.8	9.1	10.0
Sched. Expenditures	0.0	0.0	0.0	1.5	2.3	4.8	5.0	7.0	11.5	7.0	7.5	7.5
Actual Expenditures	0.0	0.0	0.0	1.5	2.3	4.8	5.0	5.1	5.7	6.3	6.6	7.5
BASELINE	0.0	0.0	0.0	2.2	4.7	6.6	8.8	11.5	16.0	19.7	22.8	25.0

SCHEDULE AND MILESTONES:

Task	SCH. Start Date	ACT Start Date	SCH. Finish Date	ACT FINISH Date	Comments
Complete initial draft of Project Statement	Nov 2005	Nov 2005	Jan 2006	Jan 2006	
Complete Project Statement with initial MN DNR comments	Jan 2006	Jan 2006	Jan 2006	Jan 2006	
Complete Project Statement with initial Corps comments	Jan 2006	Jan 2006	Mar 2006	Mar 2006	
Complete Project Statement with final MN DNR comments	June 2006	June 2006	July 2006	July 2006	
Complete Project Statement with final Corps comments	July 2006	July 2006	Aug 2006	July 2006	
Meet with WI DNR to discuss program authority restrictions and final documents	Aug 2006	Aug 2006	Aug 2006	Sept 2006	NESP authority restrictions have been discussed with MN DNR
Sign project agreement with MN DNR *	Sept 2006	Not Complete	Sept 2006	Not Complete	*Subject to NESP Authority & Funding

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Sept. 2006	Project Statement	Outlines alternatives to be analyzed	
Sept. 2006	Formal Agreement	Set to be signed with authorization and funding	

CONSTRUCTION START: 2010

PROJECT FEATURE	START DATE	COMPLETION DATE
To Be Determined		

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Jeff Janvrin	WI DNR	Project Manager from sponsor

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
8-15-05	Partnering Meeting	Bring forth project alternatives

FY07 IMPLEMENTATION STRATEGY: Wait for NESP authorization and funding.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
Q4. Emiquon West Floodplain Restoration
Team Leader: Amy Moore/Brad Thompson

PURPOSE: Anthropogenic changes to the landscape have severely altered the topography, plant community, and drainage patterns of the Emiquon West project area. In order to convert the project area to agricultural production, the existing bottomland hardwood forest was clearcut, the surrounding creeks were channelized, and a flood protection levee was constructed. Runoff control ditches were constructed on the interior of the levee district, and drain tiles were installed. Native vegetation was displaced with row crops.

The opportunities of the project are to restore, to the extent practical, desired, high-quality, functional floodplain habitat and ecological processes that will sustain plant and animal communities that were native to the Illinois River Valley prior to construction of the Illinois Waterway 9-Foot Navigation Channel Project and the North and South Globe Drainage and Levee Districts.

LOCATION: The project is located in Fulton County, Illinois, just outside of Havana, IL.

DESCRIPTION:
Research into the historic conditions of the project area indicate that the area was once populated with bottomland hardwood species. These tree species once extended from the bluff of the Illinois River to the bank of the Spoon River. Proposed modifications would convert portions of the study area to this bottomland hardwood habitat.

The creation of the 9 foot navigation channel raised water levels in this area from their historic levels. Additionally, creation of the levees and drainage ditches lowered elevations in some of the project area. This combination of increased water height and lowered elevations will cause some areas in the project area to be too wet to support the historic bottomland hardwood trees. In these areas, wetland or wet mesic communities will be developed.

The current levee system will need to remain in place to protect the bottomland hardwoods and wetland communities from the unnatural water level fluctuations that are common on the Illinois River. The current levee system has sustained some damage that may impact the function of this system. In order to insure the success of the bottomland hardwood community, the levee may have to be repaired. Further project work will be completed in FY 2007 to determine if this work is needed.

SUMMARY OF FY06 ACTIVITIES:

In FY 2006, the following major activities were accomplished:

1. Collection of topograpic data for the study area.
2. Creation of detailed maps for the study area.
3. Completion of reconnaissance level planning efforts for the project.
4. Sponsor coordination for project scoping. During the summer of FY 06, the scope of this project was changed from an extensive system of highly managed moist soil units, complete with pump stations, stop log structures, and diversion berms, to the current plan outlined in previous pages.

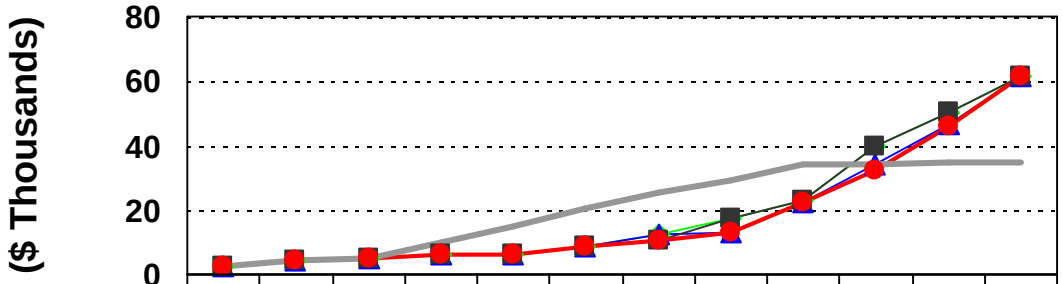
This change led to the alteration of all previous cost estimates, including PED and construction costs. The PDT will work to update these costs during FY 07.

SUMMARIZED FINANCIAL DATA:	PED	CONST.
Estimated Federal Cost	TBD[1]	TBD
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	TBD	$0
Allocation through FY 2005	$13,951	$0
Allocation for FY 2006	$61,343[2]	$0
Budget Request for FY 2007	$100,000	$0
Balance to Complete after FY 2007	$0	TBD
Amount that could be used in FY 2007	**$60,000**	**$0**

1 Major scope changes occurred at the end of FY 06, making previous labor and construction estimates invalid. PDT will work to develop these estimates during early FY 07.

2 Allocations for FY 2006 include $6,000 of labor charged to this project in error. These charges were removed from the project during early FY 07, but still appear in the year-end summary information.

FY06 Financial Execution Graph for NESP Project Q4.



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	2.6	4.1	5.2	6.1	6.3	8.6	12.2	17.2	23.2	40.0	50.0	61.3
Actual Obligations	2.6	4.1	5.2	6.1	6.3	8.6	12.2	13.2	22.6	34.4	46.7	61.3
Sched. Expenditures	2.5	4.1	5.2	6.1	6.3	8.6	10.5	17.2	23.2	40.0	50.0	61.3
Actual Expenditures	2.5	4.1	5.2	6.1	6.3	8.6	10.5	13.2	22.6	32.5	46.0	61.3
BASELINE	2.6	4.2	5.3	9.7	15.0	20.3	25.4	29.4	34.0	34.0	35.0	35.0

PROJECT SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Draft PMP	1-Aug-05	15-Aug-05	10-Feb-06	9-Dec-05	
Final PMP	10-Feb-06	4-Jan-06	31-Mar-06	17-Mar-06	
PMP Approval	31-Mar-06	20-Mar-06	30-Apr-06	--	PMP approval delayed to accommodate scope changes. PMP will be recirculated during FY 07.
Initiate Project Implementation Reports	1-May-06	20-Mar-06	30-Sep-06	--	Work is ongoing.
Planning Charette	1 Aug 06	1 Aug 06	15 Dec 06	--	
Updated Construction Estimate/ PMP	15 Oct 06	--	15 Dec 06	--	
Analyses of alternatives	2-Jan-07	--	30-Sep-07	--	
Develop Draft PIR/EA	2-Jan-07	--	30-Sep-07	--	
Final PIR/Signed FONSI	1 Oct 07	--	1-Feb-08	--	

FY 2006 PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
12 June 06	Topographic Mapping	Available data was used to create topographic maps for reconnaissance level planning purposes. From these maps, it was realized that portions of the study area are too low to support bottomland hardwood trees.	
30 June 06	Reconnaissance Level Planning Analysis	Answers were developed for the major planning questions for this project. This was the basis for future sponsor coordination.	
1 Aug 06	Sponsor Coordination Meeting	The refuge manager's view of this project was discussed. This project sparked the scope change for this project.	

CONSTRUCTION START: 2008 or 2009

PROJECT FEATURE	START DATE	COMPLETION DATE
Project Features will be determined during the study process. Project features would be identified during 2007. Construction tentatively could start in FY2008. A construction start in 2009 may be more likely if significant issues are identified during alternatives formulation or public review.	To Be Determined	To Be Determined

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Matt Sprenger	U.S. Fish and Wildlife Service	Member of Project Delivery Team.

PUBLIC INVOLVEMENT: Given that we are at the beginning of the planning process, no public involvement has been performed to date. However, public meetings, as well as a public review period, could occur late in FY 2007 or early in FY 2008. The public will have full opportunity to review and comment on any proposed project.

FY07 IMPLEMENTATION STRATEGY: Work in FY07 will begin with completing a PMP and construction cost estimate to incorporate the change in project scope. Following these updates, a planning charette will be held to vet the new project scope. Additional work will include continuation of Feasibility Analysis and planning. This will largely include formulating and assessing project alternatives; and develop a Draft DPR/EA. Alternatives formulation and assessment will include identifying a range of alternatives, selecting a set of alternatives for detailed assessment, and evaluating the financial, ecological and social costs and benefits of the selected alternatives.

Additional field work/baseline monitoring will be considered for FY07, if the PDT determines it is needed.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
R1. Pool Water Level Management – Pool 5
Team Leader: Jeff DeZellar

PURPOSE: The primary purpose of the Pool 5 drawdown project is to increase fish and wildlife habitat in Pool 5 by improving growing conditions to increase the production, extent, and diversity of aquatic vegetation, with special emphasis on perennial emergent species. Another purpose is to design and implement a monitoring program to increase understanding of the effects of the pool drawdown to support an adaptive management approach for future decisions concerning the use of this management measure.

In planning and implementing the drawdown, important project constraints include the need to continue to operate and maintain the 9-foot channel project, and to minimize any adverse effects of a drawdown on river resources and river users, including commercial navigation and recreational boating access.

LOCATION: This project is located in Pool 5, Upper Mississippi River Mile 738.2-752.8, in Wabasha and Winona Counties, Minnesota, and Buffalo County, Wisconsin.

DESCRIPTION: The construction of the Lock and Dam 5 created a shallow impoundment (navigation pool) with a relatively stable water level during non-flood periods. Over the last 60 years, aquatic vegetation beds in Pool 5 have deteriorated due to loss of natural river flows and increased sedimentation, which has in turn reduced habitat quantity and quality in Pool 5.

Over the past 10 years, river managers, including the Corps, USFWS, state agency partners and the navigation industry, have investigated water level management as a river management tool, and have implemented several pool-scale drawdowns and a couple of smaller scale drawdowns in the St. Paul District. These efforts have been strongly supported by the River Resources Forum, and an associated partner group, the Water Level Management Task Force, as well as by the river-using public.

Pool-scale drawdowns were implemented in Pool 8 in 2001 and 2002, and in Pool 5 in 2005 and 2006. In each case, over 1000 acres were exposed for some period during the drawdown. These efforts created a dramatic vegetation response, as emergent aquatic vegetation thrived on the mud flats exposed by the drawdowns. Monitoring has demonstrated that the improved habitat created attracted larger numbers and variety of fish and wildlife. This is supported by anecdotes from river users describing improved hunting and fishing after a drawdown was implemented. Other beneficial effects of the drawdowns include sediment consolidation and improved water clarity. Potential impacts of concern include mussel mortality, main channel conditions during the drawdown, and recreational access.

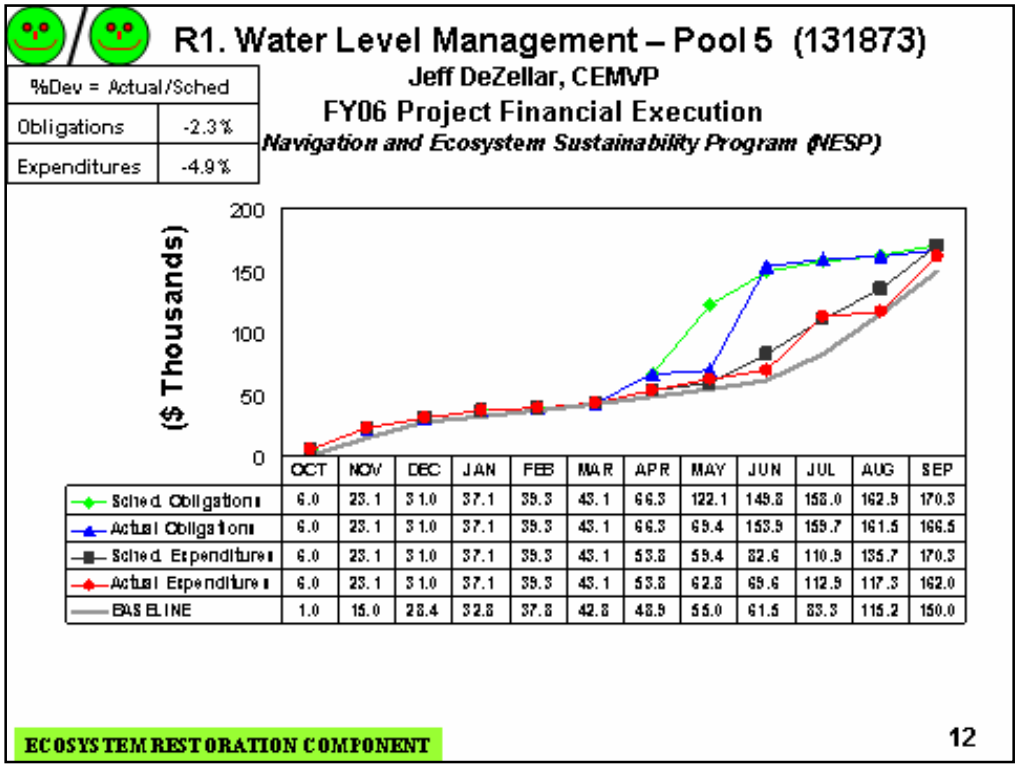
The Pool 5 drawdowns in 2005 and 2006 were implemented using O & M funding. For both years, extensive monitoring was conducted for vegetation response, mussels, fish and wildlife, main channel conditions, sediment transport, and recreational access and usage. Most of this monitoring was conducted using NESP PED funding.

For a future drawdown of Pool 5, after authorization and funding of NESP, CG funding will be used to implement the project. Major project features will include advanced and supplemental (environmental) dredging of the main channel, recreational access dredging, monitoring to quantify project benefits and impacts, and a high level of partner and public involvement.

SUMMARY OF FY06 ACTIVITIES: In FY 2006, the following major activities were accomplished:

1. The 2005 Pool 5 drawdown was evaluated, including monitoring results for vegetation response, mussel impacts, sediment transport, recreational usage, fish and wildlife.
2. Two public meetings were held in April 2006 to present plans for the 2006 Pool 5 drawdown, and to receive public input.
3. The drawdown was initiated on 12 June 2006, and achieved the target drawdown level (1.5-foot at LD 5, 1.0-foot at the primary control point) on 26 June 2006. Shortly thereafter, the Corps began raising Pool 5 due to low and declining river flows. On 8 July 2006, a grounding occurred in Pool 5, and the drawdown was suspended. A subsequent main channel survey indicated that some infilling of the channel had occurred at key locations. Because of this, the drawdown was terminated due to an unacceptable risk of impacts on commercial navigation.
4. Follow-up monitoring was conducted for vegetation response and mussels in 2006. This monitoring program continued as planned even though the drawdown was terminated early.

SUMMARIZED FINANCIAL DATA:	**PED**	**CONST.**
Estimated Federal Cost	$552,175	$1,500,000
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$552,175	$1,500,000
Allocation through FY 2005	$230,187	$0
Allocation for FY 2006	$161,988	$0
Budget Request for FY 2007	$160,000	$0
Balance to Complete after FY 2007	$0	$1,500,000
Amount that could be used in FY 2007	**$160,000**	**$0**



SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Revise PMP	3 Jan 06	3 Jan 06	31 Jan 06	31 Jan 06	
Conduct public information meetings	1 Feb 06	18 Apr 06	1 May 06	19 Apr 06	
Conduct field monitoring	1 May 06	1 May 06	30 Sep 06	30 Sep 06	Final monitoring reports will be submitted in FY 07
Conduct recreational access dredging	1 May 06	1 May 06	1 Jun 06	1 Jun 06	Recreational access dredging funded by non-Corps partners
Conduct drawdown	12 Jun 06	12 Jun 06	30 Sep 06	9 Jul 06	Drawdown terminated due to main channel conditions
Product – Monitoring Reports	1 May 06	1 May 06	15 Mar 07		Mussel report – 31 Dec 06; Vegetation response report – 15 Mar 07

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Nov 05	Recreational boating usage in Pool 5	Survey to identify recreational usage in Pool 5 during the drawdown	On PW
Jan 06	Mussel monitoring report	Field work and report prepared by WI DNR	On PW
Mar 06	Vegetation response monitoring interim report	Field work and report prepared by USGS-UMESC	On PW

CONSTRUCTION START: May 2008

PROJECT FEATURE	START DATE	COMPLETION DATE
Public information meetings	15 Apr 08	1 May 08
Main channel dredging for drawdown	1 May 08	15 Jun 08
Rec. access dredging	1 May 08	15 Jun 08
Initiate monitoring program	1 May 08	31 Dec 08
Pool-scale drawdown of Pool 5	15 Jun 08	30 Sep 08

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Mary Stefanski	USFWS	PDT member
Tim Schlagenhaft	MN DNR	PDT member
Mark Anderson	WI DNR	PDT member
Gretchen Benjamin	WI DNR	PDT member
Gary Wege	USFWS	PDT member

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
11/2005	WLM Update newsletter	Summary of WLM activities for public
4/2006	WLM Update newsletter	Summary of WLM activities for public
18 Apr 06	Public information meeting	Meeting in Wabasha, MN
19 Apr 06	Public information meeting	Meeting in Fountain City, WI
FY 2006	Numerous press interviews and published articles	Media coverage regarding Pool 5 drawdowns in 2005 & 2006

FY07 IMPLEMENTATION STRATEGY:

If NESP is authorized and funded in 2006, the water level management project in Pool 5 could be implemented as early as the summer of 2008. The tasks listed below must be accomplished if a construction start in 2008 is to be achieved.

1. Review draft Project Implementation Report (PIR) for Pool 18 drawdown – Jan 07
2. Continue dialogue with Pool 18 WLM PDT - ongoing
3. Evaluate monitoring reports prepared for 2006 Pool 5 drawdown – Jun 07
4. Update H/H and environmental analysis – Jul 07
5. Analysis of benefits and costs – Jul 07
6. Agency partner coordination (including FWS) – ongoing
7. Draft Project Implementation Report (PIR) – Sep 07
8. Initiate ITR process – Sep 07

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
R2. Pool Water Level Management – Pool 9
Team Leader: Scott Jutila

PURPOSE: The primary purpose of the Pool 9 drawdown project is to increase fish and wildlife habitat in Pool 9 by improving growing conditions to increase the production, extent, and diversity of aquatic vegetation, with special emphasis on perennial emergent species. Another purpose is to design and implement a monitoring program to increase understanding of the effects of the pool drawdown to support an adaptive management approach for future decisions concerning the use of this management measure.

In planning and implementing the drawdown, important project constraints include the need to continue to operate and maintain the 9-foot channel project, and to minimize any adverse effects of a drawdown on river resources and river users, including commercial navigation and recreational boating access.

LOCATION: This project is located in Pool 9, Upper Mississippi River Mile 648.1-679.0, in Houston County, Minnesota, Allamakee County, Iowa, and Vernon and Crawford Counties County, Wisconsin.

DESCRIPTION: The construction of the Lock and Dam 9 created a shallow impoundment (navigation pool) with a relatively stable water level during non-flood periods. Over the last 60 years, aquatic vegetation beds in Pool 9 have deteriorated due to loss of natural river flows and increased sedimentation, which has in turn reduced habitat quantity and quality in Pool 9.

Over the past 10 years, river managers, including the Corps, USFWS, state agency partners and the navigation industry, have investigated water level management as a river management tool, and have implemented several pool-scale drawdowns and a couple of smaller scale drawdowns in the St. Paul District. These efforts have been strongly supported by the River Resources Forum, and an associated partner group, the Water Level Management Task Force, as well as by the river-using public.

Pool-scale drawdowns were implemented in Pool 8 in 2001 and 2002, and in Pool 5 in 2005 and 2006. In each case, over 1000 acres were exposed for some period during the drawdown. These efforts created a dramatic vegetation response, as emergent aquatic vegetation thrived on the mud flats exposed by the drawdowns. Monitoring has demonstrated that the improved habitat created attracted larger numbers and variety of fish and wildlife. This is supported by anecdotes from river users describing improved hunting and fishing after a drawdown was implemented. Other beneficial effects of the drawdowns include sediment consolidation and improved water clarity. Potential impacts of concern include mussel mortality, main channel conditions during the drawdown, and recreational access.

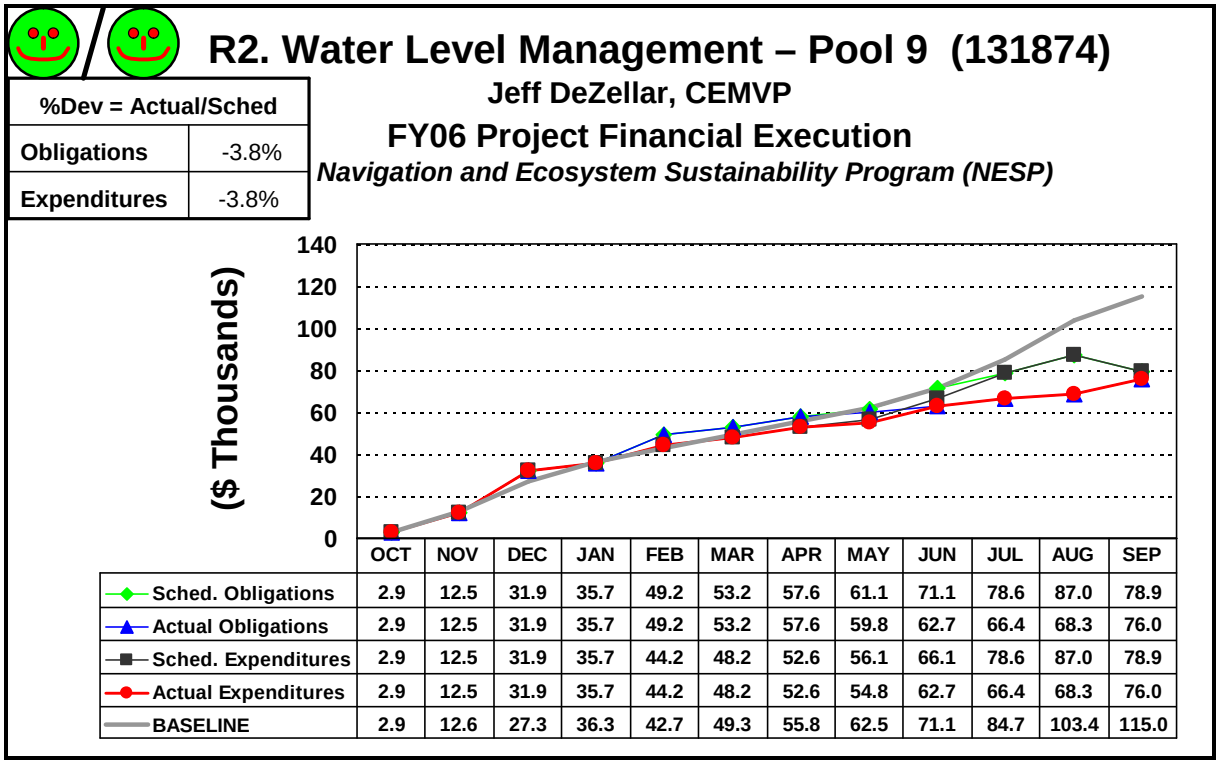
Pool 5 drawdowns in 2005 and 2006 were implemented using O & M funding. For both years, extensive monitoring was conducted for vegetation response, mussels, fish and wildlife, main channel conditions, sediment transport, and recreational access and usage. Most of this monitoring was conducted using NESP PED funding.

For a future drawdown of Pool 9, after authorization and funding of NESP, CG funding will be used to implement the project. Major project features will include advanced and supplemental (environmental) dredging of the main channel, recreational access dredging, monitoring to quantify project benefits and impacts, and a high level of partner and public involvement.

SUMMARY OF FY06 ACTIVITIES: In FY 2006, the following major activities were accomplished:

1. Hydraulic Analysis of several levels of drawdown at the primary and secondary control points was completed. The analysis included a range of discharges between 5,000 cfs and 90,000 cfs. Drawdown levels at the dam were analyzed for 0.5-feet, 1.0-feet, 1.5-feet, 2.0-feet, 2.5-feet, and 3.0-feet. In combination with the drawdown at the dam, drawdowns of between 0.5-feet and 3.0-feet were analyzed at the control point. Low controlled pool (LCP) profiles were computed for each combination of Primary and Secondary control drawdown.
2. A preliminary mussel survey was completed integrated with the hydraulic analysis. Impacts on mussels were analyzed for the range of drawdown options for the each plan LCP.
3. Water Level Management interagency meetings were held with stakeholders to present plans for the 2009 Pool 9 drawdown. Concerns were express by agency stakeholders on impacts to mussels and submerged aquatic vegetation. The agency stakeholders recommended a comprehensive mussel population survey for Pool 9 and further analysis of existing submerged aquatic vegetation.

SUMMARIZED FINANCIAL DATA:	**PED**	**CONST.**
Estimated Federal Cost	$553,340	$1,500,000
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$553,340	$1,500,000
Allocation through FY 2005	$75,957	$0
Allocation for FY 2006	$87,383	$0
Budget Request for FY 2007	$40,000	$0
Balance to Complete after FY 2007	$350,000	$1,500,000
Amount that could be used in FY 2007	**$40,000**	**$0**



SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Revise PMP	3 Jan 06	3 Jan 06	31 Jan 06	31 Jan 06	
Hydraulic Analysis	1 Oct 05	1 Oct 05	1 Mar 06	1 Mar 06	Initial Hydraulic Analysis of alternative complete.
Product – Monitoring Reports	1 May 05	1 May 05	15 Dec 06	31 Dec 06	Initial Mussel report – 31 Dec 06

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Mar 06	Hydraulic Analysis	Hydraulic Analysis of Drawdown Alternatives	
Dec 06	Mussel monitoring report	Field work and report prepared by Mn DNR	

CONSTRUCTION START: May 2009

PROJECT FEATURE	START DATE	COMPLETION DATE
Public information meetings	15 Aug 08	1 May 09
Main channel dredging for drawdown	1 May 09	15 Jun 09
Rec. access dredging	1 May 09	15 Jun 09
Initiate monitoring program	1 May 08	31 Dec 08
Pool-scale drawdown of Pool 9	15 Jun 09	30 Sep 09

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Mary Stefanski	USFWS	PDT member
Tim Schlagenhaft	MN DNR	PDT member
Mark Anderson	WI DNR	PDT member
Mike Griffin	IA DNR	PDT member
Gary Wege	USFWS	PDT member

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
11/2005	WLM Update newsletter	Summary of WLM activities for public
4/2006	WLM Update newsletter	Summary of WLM activities for public

FY07 IMPLEMENTATION STRATEGY:

If NESP is authorized and funded in 2006, the water level management project in Pool 9 could be implemented as early as the summer of 2009. The tasks listed below must be accomplished if a construction start in 2009 is to be achieved.

1. Review draft Project Implementation Report (PIR) for Pool 18 drawdown – Jan 07
2. Continue dialogue with Pool 18 WLM PDT - ongoing
3. Evaluate monitoring reports prepared for 2006 Pool 5 drawdown – Jun 07
4. Update H/H and environmental analysis – Jul 08
5. Complete comprehensive Pool 9 mussel population survey – Jul 08
6. Analysis of benefits and costs – Jul 08
7. Agency partner coordination (including FWS) – ongoing
8. Draft Project Implementation Report (PIR) – Sep 08
9. Initiate ITR process – Sep 08

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
R3. Pool Water Level Management – Pool 18
Team Leader: Kevin Landwehr

PURPOSE: Prior to construction of the lock and dam, water levels (responding to declining river discharges) in the mid- to late-summer months receded exposing thousands of acres of land along the banks of the river. Emergent and moist soil vegetation would grow in the exposed areas providing for a source of food and cover for wading and shore birds, migratory waterfowl, and furbearers. Since the start of the 1939 navigation season, the lock and dam system has artificially maintained the river at the project pool level in the interest of maintaining a reliable navigation channel.

The Pool 18 Water Level Management project is designed to reproduce, to a lesser degree, this seasonal water level effect while still maintaining a safe and reliable navigation channel. In addition, the needs of other users of the river (including recreation, water supply, and other commercial uses) are considered in identifying the recommended plan for implementation of a pool drawdown. The ecological and social goals associated with implementing a growing season drawdown are:

- Partially restore the natural variability in seasonal water levels, particularly during mid to late summer, allowing for improved conditions for the growth of moist soil and emergent vegetation with the emphasis on establishing perennial vegetation beds,
- Provide for the continued maintenance of a safe and reliable 9-foot navigation channel,
- Minimize the adverse effects on other users of the river; including recreation, water supply, and other commercial uses,
- Conduct sufficient monitoring of the effects of the drawdown to support future recommendations regarding the need for, and frequency of, future drawdowns of Pool 18.

LOCATION AND DESCRIPTION: Lock and Dam 18 is part of the 9-Foot Navigation Channel Project on the Upper Mississippi River. Lock and Dam 18 is located near Gladstone, IL, approximately 6.5 miles north of Burlington, Iowa. Pool No. 18 extends from river mile 410.5 upstream 26.6 river miles to New Boston, IL, and includes portions of Louisa and Des Moines Counties in Iowa and Mercer and Henderson Counties in Illinois. The bluff-to-bluff extent of the river reach covers approximately 135,000 acres.

One major (Iowa River) and several minor tributaries join the Mississippi River along Pool 18. The Iowa River enters the Mississippi River near the upstream end of the pool, 3.1 miles downstream of Lock & Dam 17.

The Pool 18 floodplain is dominated by agriculture, occupying 61 percent of the entire reach in 2000. The East side of the river is a large floodplain terrace situated above normal flood stages and is therefore mostly unleveed. Nearly the entire Iowa floodplain downstream of the Iowa River is protected by levees. The Lake Odessa/Port Louisa wildlife areas are wetland management areas located in former agricultural levee districts. These units and the Keithsburg management units (also a former agricultural district) support the most diverse habitats present in 2000. The Big River State Forest supports an unusual mix of pine plantation and deciduous forest on sandy soils.

SUMMARY OF FY06 ACTIVITIES:

In FY 2006, the following major activities were accomplished:

1. Completed and distributed the Comment Response Package for the public scoping meetings completed in late FY05.
2. Initiated NEPA coordination.
3. Completed initial archeological assessment by private sector contract (PSC).
4. Developed project alternatives and identified evaluation methodology.
5. Completed analysis of project costs and direct benefits (acres dewatered). HEP analysis (WHAG with the MOFISH/AHAG matrix) used to quantify expected habitat benefits. IWR Plan will be used for final incremental analysis.
6. Benefit and cost information, as well as the preliminary preferred plan, presented to state and Federal partners.
7. Initiated completion of the Project Implementation Report (PIR) and Environmental Assessment. PDT is working toward an ITR draft by end of December 06.
8. Completed Internal Feasibility Scoping Meeting and informal In-Progress Review with MVD.
9. Conducted face-to-face and phone discussions with boat ramp and marina operators in Pool 18 to discuss our proposed actions for maintaining access during a drawdown. Results of discussions are summarized in a MFR and Conversation Record, and have been incorporated into the draft PIR.
10. Initiating coordination of two new thalweg dredged material disposal sites near the Oquawka riverfront and immediately upstream of Lock & Dam 18. The new sites would allow for the advanced dredging to be done hydraulically and thereby avoid more costly mechanical removal and transport.
11. IDIQ work order for mussel survey awarded. The purpose of the survey is to determine the species composition and relative abundance of freshwater mussels in shallow water areas of lower Pool 18 that will potentially be exposed during a drawdown. Field work occurred during last 2 weeks of September 06. Draft Report due in November 06.
12. EC-HQ conducted sampling to establish baseline water clarity and sediment hardness conditions in shallow water areas of lower Pool 18 that will be exposed during a pool drawdown. Information will be used for project performance evaluation.

SUMMARIZED FINANCIAL DATA:	**PED (GI)**	**CONST. (CG)**
Estimated Federal Cost	$523,548	$1,150,000
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$523,548	$1,150,000
Allocation through FY 2005	$132,563	$0
Allocation for FY 2006	$190,985	$0
Budget Request for FY 2007	$150,000	$0
Balance to Complete after FY 2007	$50,000	$1,150,000
Amount that could be used in FY 2007	**$200,000**	**$0**

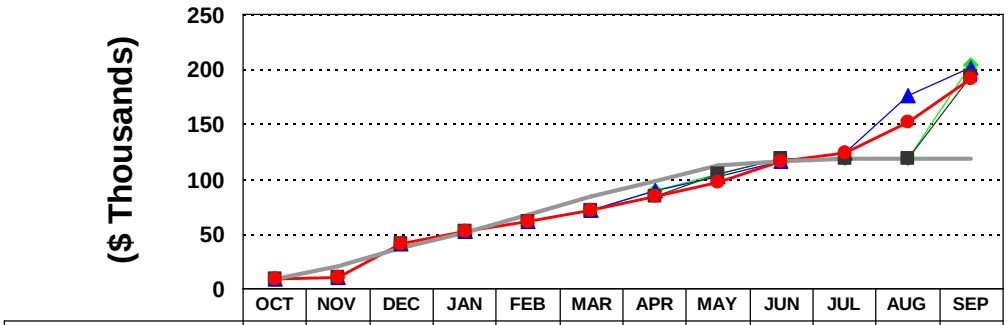
R3. Water Level Management – Pool 18 (131876)

Kevin Landwehr, CEMVR

FY06 Project Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)

%Dev = Actual/Sched	
Obligations	-1.1%
Expenditures	-1.3%



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	8.50	10.40	40.30	52.0	61.4	71.7	89.7	105.0	118.0	118.0	118.0	203.5
Actual Obligations	8.50	10.40	40.30	52.0	61.4	71.7	89.7	101.5	116.2	123.2	176.4	201.2
Sched. Expenditures	8.50	10.40	40.30	52.0	61.4	71.7	84.7	105.0	118.0	118.0	118.0	193.5
Actual Expenditures	8.50	10.40	40.30	52.0	61.4	71.7	84.7	96.5	116.2	123.2	151.5	191.0
BASELINE	8.64	20.54	37.13	51.1	67.6	83.6	97.6	112.0	116.0	118.0	118.0	118.0

SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
FY06 PMP Revisions	1-Dec-05	1-Dec-05	29-Jan-06	27-Jan-06	
Feasibility Scoping Meeting	15-Dec-06	15-Dec-06	5-Jan-06	5-Jan-06	
Completion of Benefits and Cost Analysis	6-Jan-06	6-Jan-06	28-Feb-06	8-Mar-06	
Draft Project Implementation Report (PIR)	6-Jan-06	6-Jan-06	31-Dec-06		
ITR Review and Signoff	1-Jan-07		15-Feb-07		
Complete AFB	16-Feb-07		28-Feb-07		
Complete Public Review PIR	1-Mar-07		15-Mar-07		
Public Review of PIR	16-Mar-07		15-May-07		
Public Meetings	1-May-07		1 May-07		
Complete Final PIR	16-May-07		15-Jun-07		

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Jan 06	Archeological Assessment	Final Report from PSC evaluating potential occurrence of sites within the drawdown impact zone.	
Jan 06	Aquatic Vegetation Survey	Final Report from PSC containing mapping of existing aquatic plant beds, including information on species present.	

12/31/06	Draft Project Implementation Report (PIR)	Draft decision document for ITR.	
6/15/07	Final PIR	Final decision document.	

CONSTRUCTION START: <March 2008>

PROJECT FEATURE	START DATE	COMPLETION DATE
Recreational Access Work	March 2008	April 2008
Advanced Main Channel Dredging	May 2008	June 2008
Conduct Drawdown	July 2008	September 2008

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Bob Clevenstine	USFWS	Review of Products, FWIC Coord.
Tom Cox	USFWS	PDT Member
Jon Duyvejonck	USFWS	PDT Member
Karen Westphall	USFWS	PDT Member
Mike Griffin	Iowa DNR	PDT Member
Ed Walsh	Illinois DNR	PDT Member

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
11/05	Distribution of Comment Response Package	Distributed results of the August 2005 Public Scoping Meetings.
4/20/06	Targeted Meetings with Recreational Facility Operators	Face-to-face meetings with recreational facility operators (including private and municipal operators) in lower Pool 18 to discuss approach for maintaining access during a drawdown.
4/27/06	Telephonic discussions with Recreational Facility Operator	Telephonic discussions with the Des Moines County, Iowa, Conservation Board regarding County operator recreational facilities in Pool 18.
10/12/06	Targeted Meetings with Recreational Facility Operators	Face-to-face meetings with remaining recreational facility operators (including private and state park operators) in lower Pool 18 to discuss approach for maintaining access during a drawdown.

FY07 IMPLEMENTATION STRATEGY:

First quarter efforts in FY07 will focus on completing the draft Project Implementation Report (PIR). Second quarter efforts will consist of completing the Independent Technical Review, Alternatives Formulation Briefing, and Initiation of public review of the draft Report. Public meetings on the draft report are scheduled for Spring 2007. Remaining funds, and any funding made available later in the year, will be used for a second year of water quality sampling in Pool 18 and initiation of plans and specifications for potential construction in 2008.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
S. Backwater Restoration – Middle Peoria Pool
Team Leader: Marshall Plumley

PURPOSE: A dramatic loss in productive backwaters areas along the Illinois River due to excessive sedimentation is limiting ecological health and altering the character of this unique floodplain river system. In particular, the Illinois River has lost much of its critical spawning, nursery, and overwintering areas for fish, habitat for diving ducks and aquatic species, and backwater aquatic plant communities.

This project will look at various alternatives including configurations, placement options, and technologies and approaches. There is great potential for adaptive management activities with the backwaters based on their proximity, different size openings to the main channel, sizes, etc. Dredging options currently being studied include channels and more expansive areas with varied depths. Placement Options include: (a) on existing islands (increase elevations in selected areas to increase vegetation diversity and potential for mast trees); (b) creation of new islands (create habitat and potentially reduce sediment resuspension from wind and waves); (c) on adjacent agricultural lands; and (d) Beneficial reuse on brownfields, former mined lands, stockpile, gravel pits, etc.

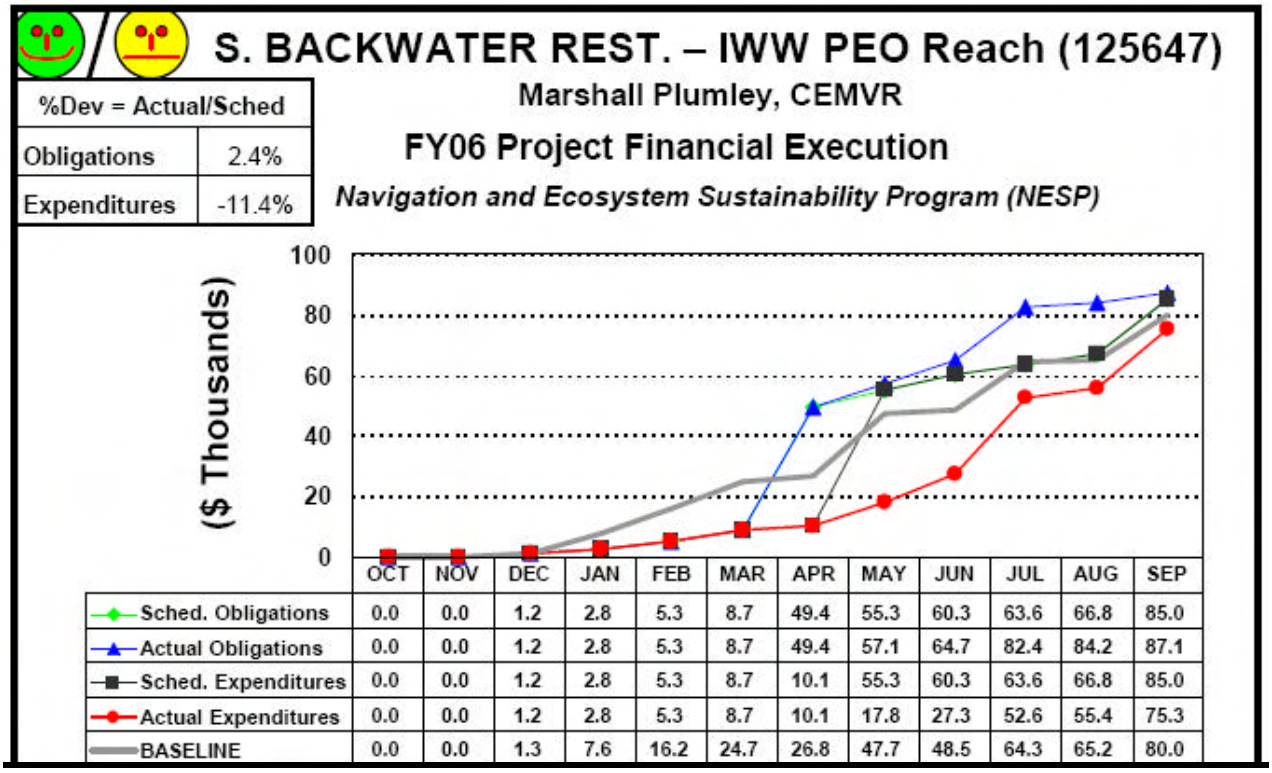
Technologies and approaches include: (a) hydraulic, mechanical, and high solids dredging; (b) dewater backwater areas and use conventional equipment; (c) traditional staging (one backwater at a time); (d) Multiple backwaters at one time; and (e) Continuous construction (ongoing construction/O&M to address sedimentation)

Backwater restoration activities will increase critical spawning, nursery, and overwintering areas for fish, habitat for diving ducks and aquatic species, and backwater aquatic plant communities. Improvements in water quality, temperature, and dissolved oxygen are also anticipated.

LOCATION AND DESCRIPTION: This project is focused on the reach of the Illinois River from Chillicothe, IL (RM 190) upstream to Lacon, IL (RM 182) Previous Corps studies (2003) conducted an analysis of the rate of loss of backwater capacity and surface area for three backwaters (Babbs Slough-Sawyer Slough, Meadow Lake, and Wightman Lake) in the Peoria Pool.

SUMMARY OF FY06 ACTIVITIES: Awarded contract and completed work to characterize sediments from the project area including physical and contaminant properties.

SUMMARIZED FINANCIAL DATA:	PED (GI)	CONST. (CG)
Estimated Federal Cost	$569,000	$25,000,000
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$569,000	$25,000,000
Allocation through FY 2005	$45,022	$0
Allocation for FY 2006	$75,300	$0
Budget Request for FY 2007	$150,000	$0
Balance to Complete after FY 2007	$298,678	$25,000,000
Amount that could be used in FY 2007	**$250,000**	**$0**



SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Middle Illinois Regional Team Meeting	6-06	6-06	6-06	6-06	Meeting with Illinois and Federal Agencies to coordinate the project and begin plan formulation of project measures.
Sediment Characterization Contract	2-06	05-06	10-06	10-06	

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
10/5/2006	Sediment Characterization of Middle Peoria Pool	Sediment cores were taken and analyzed for physical and chemical properties and establish baseline HTRW	

CONSTRUCTION START: TBD

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Middle Illinois Regional Team	All State of Illinois and Federal Agencies with jurisdiction	Coordination, plan formulation, and habitat evaluation.

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
Mar-07	Middle Illinois Regional Team Meeting	Stakeholder Meeting

FY07 IMPLEMENTATION STRATEGY: Development of potential project features and completion of analysis tools for evaluation of features.

1. Regular PDT meetings throughout the year.
2. A site visit in late October or early November with the Illinois DNR to evaluate existing conditions.
    a. Acquisition of existing biological data
3. Update of the PMP during the first quarter to reflect existing funding constraints and schedule impacts.
4. Completion of the Historic HH model, in the third quarter, so as to have this tool available for alternative evaluation.
5. Work by Real Estate to answer IWW Bed-of-River issues identified in FY 06.
6. Conduct a planning workshop to identify potential project features and develop evaluation methodology.

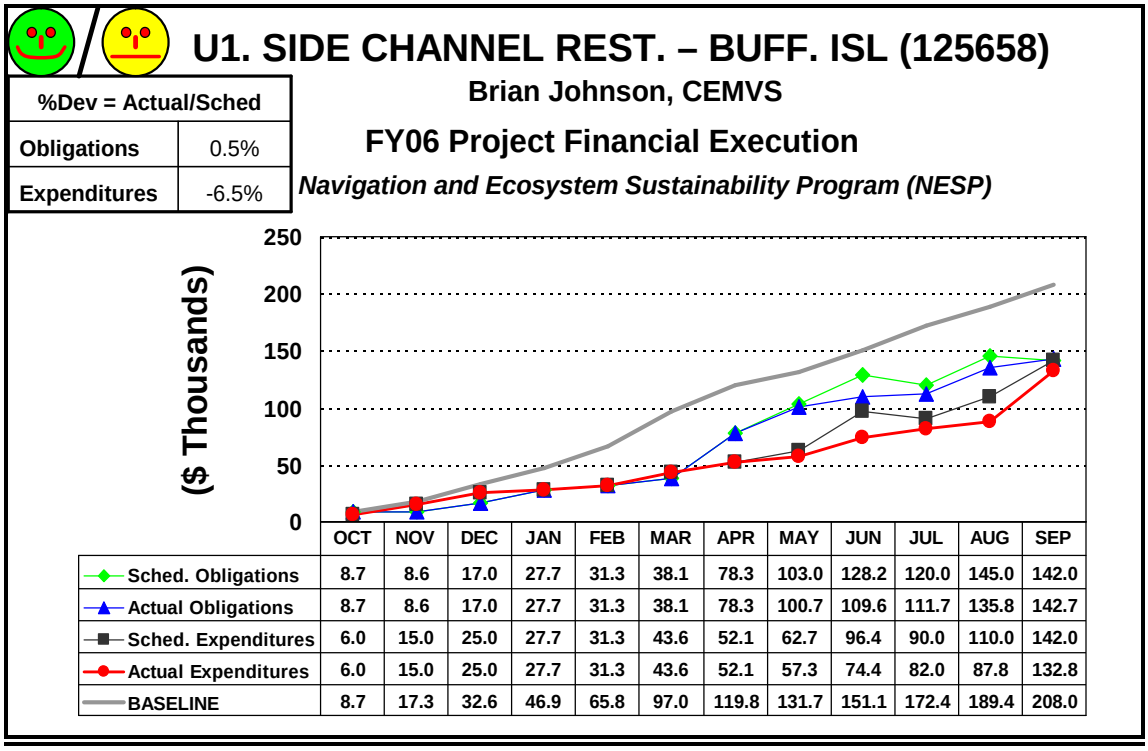
UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
U1. Side Channel Restoration- Buffalo Chute
Team Leader: Brian Johnson

PURPOSE: Side Channel Restoration – Ecosystem Sustainability – Middle Mississippi River

LOCATION AND DESCRIPTION: Buffalo Chute is a side channel restoration project designed to improve aquatic habitat in the middle Mississippi River. The project is located near river mile 25. Project features will include dike notching and dike construction. Final products will include and EA and PDA. Project is expected to be ready for construction in FY 2008.

SUMMARY OF FY06 ACTIVITIES: Efforts in FY06 focused on completion of the incremental cost analysis, selection of a recommended plan, and pre-project monitoring. The recommended plan was Alternative 6, which included notching of closing structures in the lower end of the chute, placement of two stub dikes in the lower end of the chute, and placement of two wood dikes in the upper end of the chute. Monitoring in 2006 included completion of the first year of fish and water quality monitoring and the start of the second year. Thirty seven species of fish were collected in the first year of monitoring. Water quality varied greatly in the chute. A bathymetric survey scheduled for FY06 could not be completed due to low water. It will be rescheduled for FY07. Coring samples were completed in the area of the proposed stub dikes. The USFWS completed and furnished the draft Fish and Wildlife Coordination Act Report.

SUMMARIZED FINANCIAL DATA:	**PED**	**CONST.**
Estimated Federal Cost	$570,191	$1,200,000
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$0	$1,200,000
Allocation through FY 2005	$212,437	$0
Allocation for FY 2006	$132,754	$0
Budget Request for FY 2007	$150,000	$0
Balance to Complete after FY 2007	$75,000	$1,200,000
Amount that could be used in FY 2007	**$150,000**	**$0**



SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
ICA analysis	Oct 05	Oct 05	Feb 06	March 06	Completed
USFWS Coord Act Report	Feb 06	Feb 06	July 06	July 06	Completed and received
Year one monitoring	Oct 05	Oct 05	Feb 06	Feb 06	Completed
Winter hydroacoustics	Dec 05	Jan 06	March 06	April 06	Completed
Recommended Plan	March 06	March 06	March 06	March 06	Completed
Substrate coring	March 06	March 06	June 06	June 06	Coordinated with MDNR
Year one monitoring report	April 06	June 06	June 06	Sept 06	Completed
Bathymetric sampling	April 06	Not started	May 06	Not started	Unable to complete due to low water
Year two monitoring	June 06	June 06	Sept 06	Sept 06	Work will continue till 2/07

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
9/06	monitoring report	Year 1	No
7/06	USFWS draft CAR		No
3/06	Incremental Cost Analysis Report		No

CONSTRUCTION START: 2008

PROJECT FEATURE	START DATE	COMPLETION DATE
Notched dikes	April 2008	May 2008
Stub dikes	April 2008	May 2008
Wood dikes	April 2008	May 2008

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Bob Hrabik	MDC	PDT member, monitoring
Butch Atwood	IDNR	PDT member
Joyce Collins	USFWS	PDT member, FWCAR report
Rob Simmonds	USFWS	PDT member

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
	None	

FY07 IMPLEMENTATION STRATEGY: FY07 plan efforts including completion of pre-project monitoring, completion of a real estate plan, and completion of cultural resources compliance and HTRW compliance. PDT will prepare a PDA report, which will include an EA. Design plates will be completed. ITR will also be completed this FY.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM

FY 2006 YEAR-END PROJECT SUMMARY REPORT

V1. Wing Dam / Dike Alteration – Herculaneum

Leonard Hopkins / Dawn Lamm

PURPOSE: To create a more diverse depositional pattern in an existing homogeneous dike field to promote a more diverse biological population.

LOCATION AND DESCRIPTION: Middle Mississippi River Miles 149.5-156.5, Monroe County, Illinois, and Jefferson County, Missouri, St. Louis District.

SUMMARY OF FY06 ACTIVITIES: Year 1 biological monitoring completed, year 2 biological monitoring initiated. All FY06 work was directed towards monitoring, budget was reduced from $185k to $176k to help fund economic analysis.

SUMMARIZED FINANCIAL DATA:	PED (GI)	CONST. (CG)
Estimated Federal Cost	$599,036	$3,349,272
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$599,036	$3,349,272
Allocation through FY 2005	$185,086	$0
Allocation for FY 2006	$173,950	$0
Budget Request for FY 2007	$170,000	$0
Balance to Complete after FY 2007	$70,000	$3,349,272
Amount that could be used in FY 2007	**$240,000**	**$0**

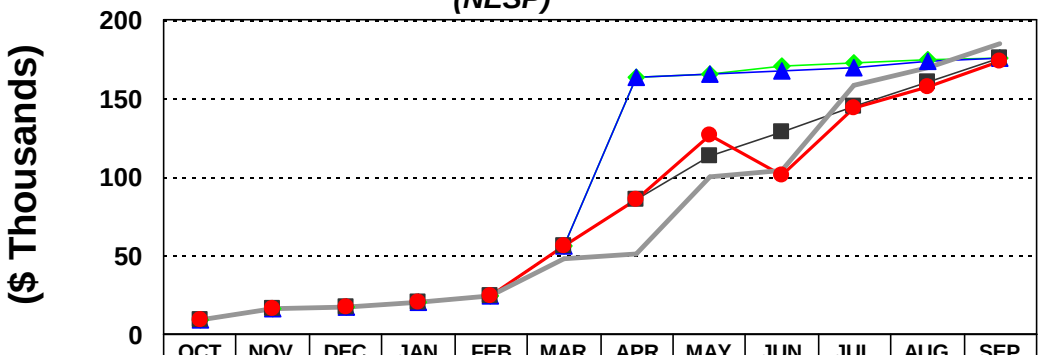
V1. WD/WD ALTERATION – HERC. (125643)

Leonard Hopkins, CEMVS

FY06 Project Financial Execution

Navigation and Environmental Sustainability Program (NESP)

%Dev = Actual/Sched	
Obligations	-0.1%
Expenditures	-1.1%



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	9.6	16.3	17.6	20.2	24.9	55.7	163.6	165.1	170.5	172.3	174.1	175.9
Actual Obligations	9.6	16.3	17.6	20.2	24.9	55.7	163.6	165.1	167.3	168.9	173.6	175.7
Sched. Expenditures	9.6	16.3	17.6	20.2	24.9	55.7	86.2	113.2	128.7	144.4	160.2	175.9
Actual Expenditures	9.6	16.3	17.6	20.2	24.9	55.7	86.2	126.8	101.1	143.9	157.0	173.9
BASELINE	9.6	16.3	17.4	20.8	24.3	47.7	51.1	100.0	104.5	157.9	169.1	185.0

Note: $27K dip in Exp. attributed to TL directed reversal of May accrual.

SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
FY06 PMP Revised Approval			31 Aug 06		
Year 1 FWS Biological Monitoring			30 Jun 06	30 Jun 06	
Year 2 FWS Biological Monitoring	1 Jul 06	1 Jul 06	30 Jun 07		
FY07 Capability Submittal			21 Apr 06	12 May 06	
Draft EA			FY07		
Draft PIR			FY07		
ITR Signoff			FY07		

PRODUCT LIST: NONE

CONSTRUCTION START: 2008

PROJECT FEATURE	START DATE	COMPLETION DATE
Stone Dike Construction	Apr 08	Sept 08

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Joyce Collins/Dick Steinbach/Rob Simmons	USFWS	Biological Monitoring/ report
Rob Hrabik/Janet Sternberg	MDNR	Project coordination
Butch Atwood/Jim Mick	IDNR	Project coordination

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
None		

FY07 IMPLEMENTATION STRATEGY:

Continue Biological monitoring, perform water quality and sediment sampling, and begin reports if additional funding is provided.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
V2. Wing Dam/Dike Alteration – Pool 2
Team Leader: Elliott Stefanik

PURPOSE: Approximately 215 wing dams and closing dams were historically constructed for the purpose of channel management within Pool 2 of the Upper Mississippi River (UMR). These channel training structures have significantly modified hydraulic conditions and sediment transport, generally resulting in degraded main channel border and secondary channel habitat within Pool 2. This project will implement notches within wingdam and closingdam structures to improve hydraulic conditions, and resulting habitat conditions, at over 30 structures. This project also will include excavation of a side channel Pool 2 that has become completed filled with sediment. This will return this side channel back to useable aquatic habitat.

LOCATION: The project would be located at in middle and lower Pool 2, Upper Mississippi River Miles 836.0 to 817.5, Ramsey, Washington and Dakota County, MN

DESCRIPTION: The St. Paul District, Corps of Engineers has evaluated wing dams and closing dams in Pool 2 for potential modification in an attempt to improve habitat. Notching winged dams and closing dams is intended to improve aquatic habitat by increasing current velocity within these areas, resulting in improved bathymetric and substrate diversity, and by increasing flow in secondary channels where applicable. The District also has evaluated the potential for restoration of a specific side channel area for aquatic habitat benefits.

This evaluation of wing dam and closing dam notching, as well as side channel restoration, was performed as a part of the Lower Pool 2 Channel Management Study completed in 2003. This study included an integrated Definite Project Report (DPR) and Environmental Assessment (including a singed statement for Finding of No Significant Impact). As such feasibility-level planning, including coordination with appropriate State and federal resource agencies, as well as public review, has largely been performed.

Remaining activities addressed under NESP include development of appropriate reporting requirements not addressed under the original Study Report. It also includes necessary actions for Baseline Monitoring, securing of appropriate Real Estate requirements and developing project P&S with the intent to move to construction. P&S preparation includes producing a brief report that identifies: 1) the location of all proposed activities, 2) the associated quantities, and 3) the associated costs. It is assumed that MVP will perform all construction work for this effort. Conversely, baseline Monitoring will include collection of baseline data necessary to evaluate project effectiveness. Baseline Monitoring will be performed by both MVP staff as well as external entities.

This project was originally pursued under authority of Operation and Maintenance associated with the currently authorized 9-foot channel navigation project. The environmental components of this project will now be pursued under the NESP. However, this project will work concurrently with other project features that will be performed as a part of the District O&M program.

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SUMMARY OF FY06 ACTIVITIES: In FY 2006, the project was put on hold due to limited funding available within the NESP Program. This was appropriate given that no authorization for construction was available, and that the majority remaining work is project construction. Although work still remains to fulfill NESP reporting requirements, Corps Real Estate requirements, and finalizing projects Plans and Specs (including a revised construction cost estimate), this work is relatively minor and could be completed with a few months of focused work. Therefore, work will resume in FY07 to complete these last requirements in the event that a construction authorization is provided at some point.

SUMMARIZED FINANCIAL DATA:	**PED**	**CONST.**
Estimated Federal Cost	$133,071	$375,000
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$133,071	$0
Allocation through FY 2005	$95,409	$0
Allocation for FY 2006	$2,662	$0
Budget Request for FY 2007	$35,000	$0
Balance to Complete after FY 2007	$0	$375,000
Amount that could be used in FY 2007	**$35,000**	**$0**

Work was halted during the first quarter of FY06 with only $2,662 expended.

PROJECT SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Bathymetric Surveys		2005		2005	
Baseline Fisheries Surveys		2005		2005	
Pre-Construction Surveys		2006		2006	Preconstruction surveys performed through MVP OP Program for 9-foot channel project. This was originally to be performed under NESP, but work here was completed in 2006. Reason for completion under the O&M program (and not NESP) was that this activity was rolled into other OP work in the immediate project vicinity. Future work is expected to be performed under NESP.
Develop Plans and Specs for Construction	1-Mar-07	--	30-Apr-07	--	
Complete appropriate NESP Letter Report	1-Dec-06	--	30-Apr-07	--	

.

FY 2006 PRODUCT LIST: No products produced in 2006. Products from 2005 include:

DATE	PRODUCT	DESCRIPTION	WEB
2005	Baseline fisheries monitoring report for Pool 2 wingdam modification project	Baseline fisheries sampling within wingdam areas proposed for notching, as well as similar wingdam control sites. Data contained within a final report.	
2005	Bathymetric data for proposed Pool 2 wingdam notching.	Bathymetry data collected for the immediate vicinity of all wingdams proposed for notching. Bathymetry data has been converted to an ArcGIS shape file and will serve as a pre-project comparison to evaluate effects of notching on project area bathymetry.	

CONSTRUCTION START: Upon authorization.

PROJECT FEATURE	START DATE	COMPLETION DATE
Project Features will include notches at the selected wingdams. It will also include excavation of side-channel that has been filled in as a result of wingdams and closing dams.	Largely dependent on authorization. Construction could likely begin immediately upon project authorization.	Construction would likely be completed within one field season. Dependent on availability of in-house construction staff and funds.

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Gary Wege and Pam Thiel	U.S. Fish and Wildlife Service	Member of Project Delivery Team.
Scot Johnson and Dave Zappetillo	Minnesota DNR	Member of Project Delivery Team.
Judy Mader	Minnesota PCA	Member of Project Delivery Team.

PUBLIC INVOLVEMENT: Public review was performed as a part of the NEPA review process in 2003. No public meetings were performed. A press release may be provided prior to project construction.

FY07 IMPLEMENTATION STRATEGY: Work in FY07 will include completing appropriate NESP reporting requirements, Corps Real Estate requirements, and finalizing projects Plans and Specs (including a revised construction cost estimate). Additional field work/baseline monitoring could be considered for FY07, though none is planned at this time. Any additional work would only be performed if the value of the data is worthy of the associated costs.

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UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
W. Island and Shoreline Protection
Team Leader: Thomas Kirkeeng

PURPOSE: Shoreline and island erosion are natural processes that characterize dynamic rivers. In the Upper Mississippi River System (UMRS), shoreline erosion is exacerbated by commercial and recreational boats and by wind-generated waves in the impounded system. Shoreline erosion is a problem where it damages social resources, important habitats, or archeological resources.

Existing planform features of the UMRS need to be protected. Critical resources such as forest stands, heron and egret colonies, eagle roosting trees, and cultural sites are being threatened.

Natural resource managers have identified numerous locations where island and bank erosion is threatening critical resources. Highly valuable forest stands such as heron and egret nesting colonies, eagle roosting trees, or rare bottomland hardwoods are targets for protection of terrestrial resources. Erosion of natural levees or islands is undesirable in locations where introduction of sediment laden river flow, bed load, or currents may degrade backwater habitat.

LOCATION AND DESCRIPTION: The program area comprises the Upper Mississippi River System, as defined by Congress in the Water Resources Development Act of 1986 (WRDA 1986), which includes the Upper Mississippi River from Minneapolis, Minnesota, to Cairo, Illinois; the Illinois Waterway from Chicago to Grafton, Illinois; and navigable portions of the Minnesota, St. Croix, Black and Kaskaskia Rivers. The products of the Island and Shoreline Protection Team will be to construct bank protection on various sites throughout this 1200 mile river system. Innovative and cost effective methods of bank stabilization will be developed.

This NESP component will outline a process to provide erosion protection for Mississippi River and Illinois Waterway islands and shorelines. Areas that will be protected will be located where valuable ecosystem is being threatened by eroding banklines. This process will extend out for the 15-year life of NESP.

Island and shoreline protection (either bankline or offshore revetments) traditionally includes armoring banks with stone or vegetation to prevent erosion. This is viewed as a habitat protection measure that maintains existing conditions to the extent possible. This restoration measure will be applied widely throughout the river system.

SUMMARY OF FY06 ACTIVITIES:

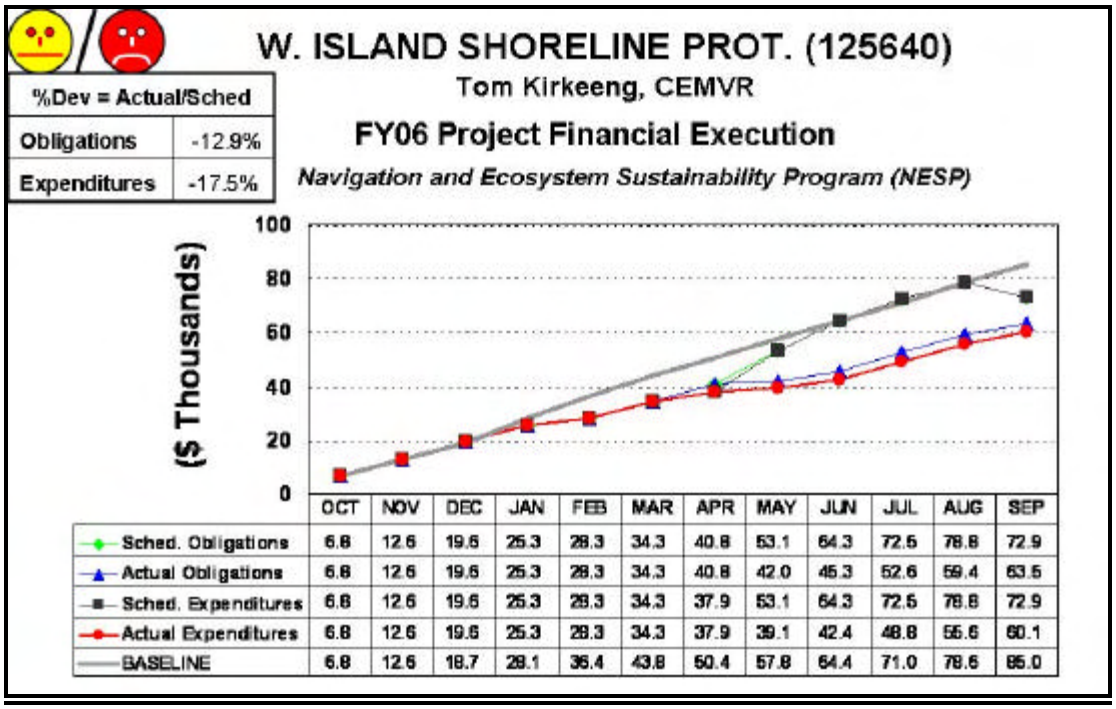
- Product Delivery Team (PDT) Meetings
    - Conference Calls with the PDT were held in October, November, December, January, February, March, May, and August.
- Strategy for FY06
    - Based on PDT discussions and input from the NESP Management Team, it was decided to pursue construction of one ecosystem site in MVS. The ecosystem site in MVS was Twin Island on the Illinois Waterway
- Site Specific Work - Twin Island (Illinois Waterway)

- Bathymetric Surveying completed
- Real Estate initiated their investigations
- Preliminary mussel survey completed - showed 3 species – dive survey needed
- Dive Survey completed in September
- Flow measurements completed
- Preliminary designs developed
- Work on EA progressing

- Science Panel Interaction
  - Discussion about SP Interaction took place throughout the year. Some members of the PDT wish to receive guidance from the SP at some point. Possible issues might include:
    - How dynamic should the river be?
    - What are human impacts, what should be natural changes?
  - PDT will develop a list of topics that they feel they could use SP guidance and present to them
  - PDT will use forthcoming guidance from the SP to develop a strategy
- Workshop Report
  - Workshop held on 11 August 2005. Comments to the report were incorporated and a final version published.
- Field Data Sheet:
  - Developed to enable quick recording of possible bank erosion sites and easy submission into the Bank Erosion Site Database

SUMMARIZED FINANCIAL DATA:	**PED (GI)**	**CONST. (CG)**
Estimated Federal Cost	$385,000	$45,121,075[a]
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$385,000	$45,121,075[a]
Allocation through FY 2005	$100,000	$0
Allocation for FY 2006	$85,000	$0
Budget Request for FY 2007	$100,000	$0
Balance to Complete after FY 2007	$100,000	$45,121,075[a]
Amount that could be used in FY 2007	**$200,000**	**$0**

[a] – Funding estimate for Shoreline Protection (est. 40 sites) for full implementation of recommended plan first increment (approx. 15 years).



SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Write PMP	15-Jan-06	1-Feb-06	15-Feb-06	15-Feb-06	
Real Estate – Rights of Entry	1-June-06	1-July-06	31-July-06	Not Complete	
Engineering Analysis – Preliminary Design/Layout	1-May-06	15-July-06	1-Aug-06	Not Complete	
Environmental – Planning/NEPA Coordination	1-Mar-06	1-Aug-06	1-July-06	Not Complete	
Environmental – Engineering Support	1-Mar-06	15-June-06	1-July-06	30-Sep-06	
Envrionmental – Mussel Survey	1-May-06	15-May-06	1-June-06	15-Sep-06	
Envrironmental – Cultural Survey	1-May-06	Not Started	1-July-06	Not Complete	

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
5-15-06	Preliminary Mussel Survey	Twin Island Site – to determine whether more detailed investigations needed	
5-30-06	Bathymetric Surveying	Twin Island Site – needed to initiate design	
6-30-06	Flow Measurements	Twin Island Site – needed for design	
9-15-06	Dive Survey	Twin Island Site – Detailed mussel survey	

CONSTRUCTION START: 2008

PROJECT FEATURE	START DATE	COMPLETION DATE
Bank Protection – Twin Island – Illinois Waterway – River Mile 38	1 May 2008	30 August 2008

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Jim Fischer	Wisconsin DNR	Member of Project Delivery Team
Don Hultman	FWS	Member of Project Delivery Team
Jeff Janvrin	Wisconsin DNR	Member of Project Delivery Team
Jim Mick	Illinois DNR	Member of Project Delivery Team
Jon Duyvejonck	FWS	Member of Project Delivery Team
Sharonne Baylor	FWS	Member of Project Delivery Team
Travis Moore	Missouri DOC	Member of Project Delivery Team
Scot Johnson	Minnesota DNR	Member of Project Delivery Team
Bernie Schonhoff	Iowa DNR	Member of Project Delivery Team

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
	None	

FY07 IMPLEMENTATION STRATEGY:

- $100k earmarked for FY07 efforts
- PDT Recommendation is as follows:
    - MVS determine what funds they need for Twin Island to accomplish as much as possible towards construction, then split the balance between MVR and MVP
    - MVP and MVR each select a #1 priority ecosystem site early in Ocotober
        - ✍ Put together a team of Engineer, Biologist, Cultural, FWS, State
        - ✍ Conduct site visit in October and consider
            - Alternative analysis
            - Engineering and construction considerations
            - Habitat benefit / cost analysis
            - Survey needs
            - Cultural
            - Endangered species
    - Using this strategy with the available funds, at the end of FY07 the PDT plans to be at this stage:
        - ✍ MVS completed EA/PIR ready to go to P&S on one site (Twin Island)
        - ✍ MVR and MVP each will have a partially completed PIR/EA (35%) towards one ecosystem site

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM

FY 2006 YEAR-END PROJECT SUMMARY REPORT

X. Dam Point Control - Lock and Dam 25

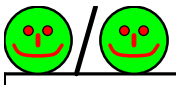
Team Leader: Michelle Kniep

PURPOSE: The project will examine the possibility of altering the Pool 25 water regime to better accommodate fish and wildlife resources management needs.

LOCATION AND DESCRIPTION: Navigation Pool 25. The project as currently being developed may consist of (1) revising the L&D 25 water control manual, (2) proving just compensation for impacts, and (3) acquiring all necessary real property rights required to implement, operate, and maintain the modified water regime.

SUMMARY OF FY06 ACTIVITIES: Continued existing conditions HEC-RAS modeling, including acquisition of side channel bathymetry data; Initiated HEC-EFM (ecosystem model) modeling with stakeholder input; Generated a range of alternatives and modeled them in HEC-RAS.

SUMMARIZED FINANCIAL DATA:	PED	CONST.
Estimated Federal Cost	$628,300	$1,971,700
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$628,300	$1,971,700
Allocation through FY 2005	$223,400	$0
Allocation for FY 2006	$179,900	$0
Budget Request for FY 2007	$225,000	$0
Balance to Complete after FY 2007	$0	$1,971,700
Amount that could be used in FY 2007	**$400,000**	**$0**



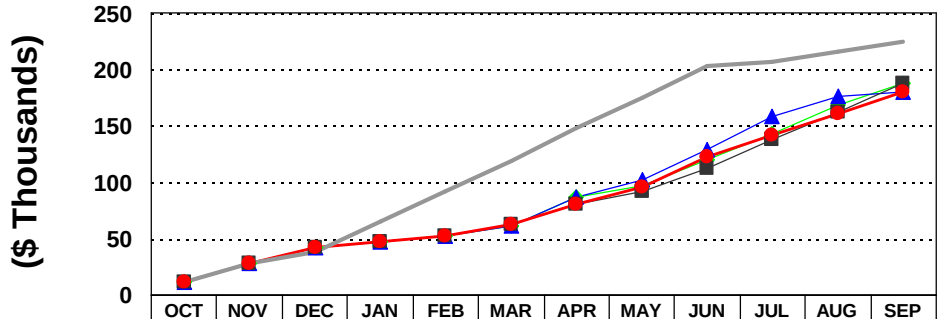
%Dev = Actual/Sched	
Obligations	-3.9%
Expenditures	-4.1%

X. DAM PT. CONTROL – LD 25 (125639)

Michele Kniep, CEMVS

FY06 Project Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	11.1	28.5	42.6	47.2	51.9	60.9	86.5	97.5	119.8	142.5	168.1	187.5
Actual Obligations	11.1	28.5	42.6	47.2	51.9	60.9	86.5	101.9	128.7	157.9	176.3	180.3
Sched. Expenditures	11.1	28.5	42.6	47.2	51.9	62.2	80.6	91.6	111.8	137.6	162.5	187.5
Actual Expenditures	11.1	28.5	42.6	47.2	51.9	62.2	80.6	96.0	122.8	141.4	160.7	179.9
BASELINE	11.2	28.0	38.6	65.5	92.2	118.6	147.5	174.9	203.3	206.7	216.0	225.0

SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Complete HEC-RAS Existing Conditions model	1-Jul-05	1-Jul-05	30-Dec-06		
Feasibility Scoping Meeting			30-Dec-06		
Complete HEC-EFM Existing Conditions model	1-Dec-05	1-Dec-05	15-Feb-07		
Initial Alternatives Analysis	15-Feb-07		30-Jun-07		
Final PIR			June 2010		
Design Complete			Sept 2011		
Construction Complete			Sept 2013		

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
May 2005	Hinge Point/Dam Point Concept Demonstration	Powerpoint demonstration illustrating the difference between the two control scenarios.	
May 2006	Ecosystem Functions Model input form and instructions	Form and instructions given to stakeholders prior to meeting to discuss the input parameters for the EFM	

CONSTRUCTION START: **Estimate 2011**

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Brian Loges	Missouri Department of Conservation	Team Member
Danny Brown	Missouri Department of Conservation	Team Member
Janet Sternberg	Missouri Department of Conservation	Team Member
Butch Atwood	Illinois Dept of Natural Resources	Team Member
Jim Mick	Illinois Dept of Natural Resources	Team Member
Dick Steinbach	US Fish and Wildlife Service	Team Member
Dave Ellis	US Fish and Wildlife Service	Team Member
Jon Duyvejonck	US Fish and Wildlife Service	Team Member
Joyce Collins	US Fish and Wildlife Service	Team Member
Ken Dalrymple	US Fish and Wildlife Service	Team Member
Rob Simmonds	US Fish and Wildlife Service	Team Member
Todd Strole	The Nature Conservancy	Team Member

PUBLIC INVOLVEMENT:

DATE	ACTIVITY	DESCRIPTION
May 2005	Public Meeting	Public Scoping Meeting
April 2008	Public Meeting	Present Alternatives
July 2009	Public Meeting	Present Recommended Plan

FY07 IMPLEMENTATION STRATEGY:

With 225k: Hold Feasibility Scoping Meeting; Complete existing conditions modeling in HEC-RAS and HEC-EFM; Initiate alternatives analysis; Complete initial alternatives evaluation with existing data.

If an additional 175k was available: Obtain borings to continue alternatives evaluation.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
Y. Dam Embankment Lowering – L&D 8
Team Leader: Elliott Stefanik

PURPOSE: An earth fill embankment is part of the Upper Mississippi River Lock and Dam 8. The existing high embankment contributes to degradation of the river ecosystem, particularly in the Reno Bottoms area of upper Pool 9. The embankment particularly alters hydraulic connectivity between Pools 8 and 9, and results in a highly artificial condition in the Reno Bottoms. This project will evaluate whether potential modification of both existing spillway structures could improve hydraulic conditions, and resulting habitat conditions, around and downstream of the embankment.

LOCATION: The project would be located at the Lock and Dam 8 Embankment, Upper Mississippi River Mile 679.2, Houston County, MN

DESCRIPTION:
The proposed modifications would increase flow over or through the embankment to downstream channels, backwater lakes, and floodplain areas. Potential modifications could include new or modified culverts, notching of existing spillways, and/or creation of a rock-ramp style fish passage structures. Such modifications could be done at one or both of the existing spillways along the Lock and Dam 8 Embankment. These types of actions would increase longitudinal connectivity between the upstream impoundment and downstream floodplain areas, and potentially improve long-term ecological conditions.

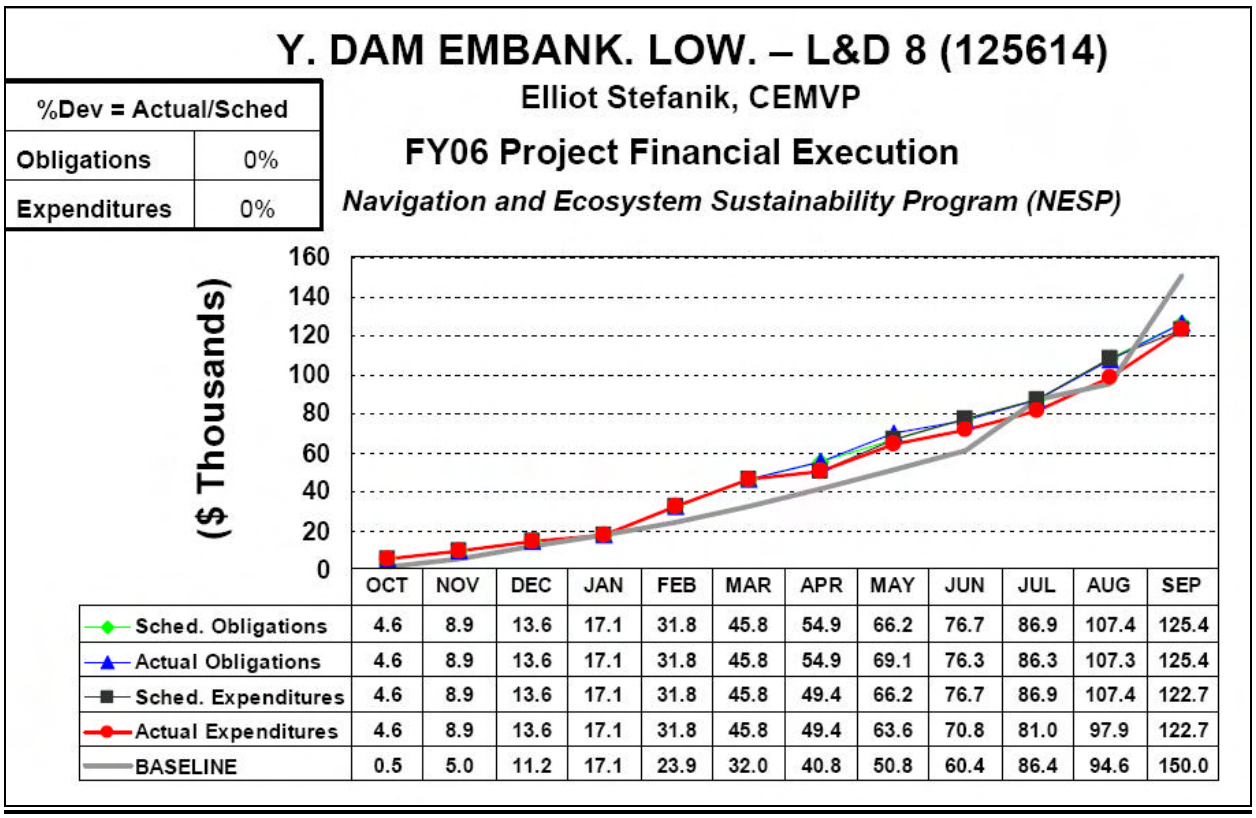
The project also would consider other possible project features. The project would look for opportunities for other site-specific habitat actions in Reno Bottoms (upper Pool 9 below the embankment), as well as immediately above the embankment (lower Pool 8). These would likely be features that would compliment the modifications associated with hydraulic changes associated with embankment modification.

SUMMARY OF FY06 ACTIVITIES:

In FY 2006, the following major activities were accomplished:

1. Collection of hydraulic data for Reno Bottoms, including stage-discharge relationships at several locations under multiple flow conditions. This data is essential for hydraulic model development.
2. Development of a 1-dimensional hydraulic flow model that predicts how water flows through culverts and over the spillway under existing conditions; as well as how water would flow through under different project conditions. This is a critical tool for alternatives formulation and evaluation.
3. Development of a 2-dimensional hydraulic flow model that predicts how water flows through major channels within Reno Bottoms. Model predicts water stage, discharge and velocity under different flow regimes. This is a critical tool for alternatives formulation and evaluation.
4. Collection of baseline vegetation and forestry data for 21 locations within Reno Bottoms. This data will be used to document any potential change in vegetative cover, soil conditions, etc. as a result of potential projects that alter flow regimes in Reno Bottoms.

SUMMARIZED FINANCIAL DATA:	PED	CONST.
Estimated Federal Cost	$432,396	$4,000,000
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$432,396	$0
Allocation through FY 2005	$109,728	$0
Allocation for FY 2006	$122,668	$0
Budget Request for FY 2007	$125,000	$0
Balance to Complete after FY 2007	$0	$4,000,000
Amount that could be used in FY 2007	**$150,000**	**$0**



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	4.6	8.9	13.6	17.1	31.8	45.8	54.9	66.2	76.7	86.9	107.4	125.4
Actual Obligations	4.6	8.9	13.6	17.1	31.8	45.8	54.9	69.1	76.3	86.3	107.3	125.4
Sched. Expenditures	4.6	8.9	13.6	17.1	31.8	45.8	49.4	66.2	76.7	86.9	107.4	122.7
Actual Expenditures	4.6	8.9	13.6	17.1	31.8	45.8	49.4	63.6	70.8	81.0	97.9	122.7
BASELINE	0.5	5.0	11.2	17.1	23.9	32.0	40.8	50.8	60.4	86.4	94.6	150.0

FY06 Financial Execution Graph for NESP Project Y.

PROJECT SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Compile Existing Data	1-Oct-05	1-Oct-05	1-Apr-06	1-Apr-06	
Revise PMP	3-Jan-06	-	31-Jan-06	31-Jan-06	
Hydraulic Surveys of Reno Bottoms	1-May-06	1-May-06	1-Sep-06	1-Sep-06	Majority of data collection complete. Not all data collected due to extremely low summer flows in 2006. One or two additional collections may be performed in 2007 if the need is warranted.
1-dimensional model construction of modified spillway	1-May-06	1-June-06	30-Sep-06	30-Sep-06	Model development largely completed. Some calibration may be necessary in 2007.
2-dimensional model construction of Reno Bottoms	1-Jun-06	1-June-06	30-Sep-06	30-Sep-06	Model development largely completed. Some calibration may be necessary in 2007.
Baseline Forestry and Vegetation Monitoring	1-Sept-06	30-Aug-06	6-Oct-06	30-Sept-06	
Bathymetric Surveys of Reno Bottoms	1-May-06	--	1-Sep-06	--	Surveys postponed due to low water conditions in 2006. Will re-evaluate need for surveys in Dec. 2007
Water Quality Monitoring of Reno Bottoms	1-Mar-07	--	1-Sep-07	--	Will re-evaluate need for surveys in Nov. 2007
Fisheries Surveys of Reno Bottoms	1-Mar-07	--	1-Sep-07	--	Will re-evaluate need for surveys in Nov. 2007
Formulate alternatives	1-May-07	--	30-Sep-07	--	
Analyses of alternatives	1-Jun-07	--	30-Dec-07	--	
Develop Draft PIR/EA	1-Jun-07	--	30-Dec-07	--	
Final PIR/Signed FONSI	2-Jan-08	--	1-May-08	--	

FY 2006 PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
30-Sept-06	1-dimensional hydraulic model of flow through L&D 8 spillway	Essential model that predicts how water flows through culverts and over the spillway under existing conditions; as well as how water would flow through under different project conditions. This is a critical tool for alternatives formulation and evaluation.	
30-Sept-06	2-dimensional hydraulic model of flow through Reno Bottoms	Essential model that predicts how water flows through major channels within Reno Bottoms. Model predicts water stage, discharge and velocity under different flow regimes. This is a critical tool for alternatives formulation and evaluation.	
30-Sept-06	Forestry/Vegetation Surveys of Reno Bottoms	Baseline forestry/vegetation survey that provides pre-project conditions at 21 sites within Reno Bottoms. Includes data on vegetation and soil characteristics.	

CONSTRUCTION START: 2008 or 2009

PROJECT FEATURE	START DATE	COMPLETION DATE
Project Features will be determined during the study process. Project features would be identified during 2007. Construction tentatively could start in FY2008. A construction start in 2009 may be more likely if significant issues are identified during alternatives formulation or public review.	To Be Determined	To Be Determined

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Gary Wege, Tim Yager, Jim Nissen, Pam Thiel	U.S. Fish and Wildlife Service	Member of Project Delivery Team.
Scot Johnson, Dan Dieterman	Minnesota DNR	Member of Project Delivery Team.
Judy Mader	Minnesota PCA	Member of Project Delivery Team.
Mike Griffin	Iowa DNR	Member of Project Delivery Team.
Jeff Janvrin, Jim Fischer	Wisconsin DNR	Member of Project Delivery Team.

PUBLIC INVOLVEMENT: Given that we are at the beginning of the planning process, no public involvement has been performed to date. However, public meetings, as well as a public review period, could occur late in FY 2007 or early in FY 2008. The public will have full opportunity to review and comment on any proposed project at the embankment.

FY07 IMPLEMENTATION STRATEGY: Work in FY07 will include continuation of Feasibility Analysis and planning. This will largely include formulating and assessing project alternatives; and develop a Draft DPR/EA. Alternatives formulation and assessment will include identifying a range of alternatives, selecting a set of alternatives for detailed assessment, and evaluating the financial, ecological and social costs and benefits of the selected alternatives.

Additional field work/baseline monitoring also will be considered for FY07. The need for additional monitoring will be considered by the PDT within the first quarter of FY07. Possible field work could include resuming bathymetry data collection, LiDAR collection for Reno Bottoms, water quality monitoring and/or fisheries monitoring at section locations/dates within Reno Bottoms. This work would only be performed if the value of the data is worthy of the associated costs.

UMRS NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM
FY 2006 YEAR-END PROJECT SUMMARY REPORT
Z – Reduction of Short-Term Water Level Fluctuations on the Illinois Waterway
Team Leader: Kevin Landwehr

PURPOSE: Short-term water level fluctuations, that is, water level changes occurring over several hours to several days, have been implicated in degradation of Illinois Waterway ecosystem function because of the stress that rapid changes in river conditions places on plants and animals. Increases in water level during the summer (especially June through September) can prevent the growth of aquatic plants in floodplain areas. Receding water levels are also a concern, as rapidly falling water levels in the summer, and any recessions during the winter have the potential to strand fish using floodplain or other off-channel areas. The magnitude and frequency of water level fluctuations have notably increased in portions of the river since daily water level monitoring began in the 1880's; many aquatic ecologists believe that fluctuations continue to negatively affect ecological function and that reducing the amount of water level fluctuation would be likely to immediately benefit native biological communities.

Multiple sources contribute to the water level fluctuations that occur on the Illinois Waterway, including: stormflow from the developed watersheds of tributary streams feeding the river; changes in rainfall patterns; diversion of water from Lake Michigan; and dam operation procedures. Additionally, water levels in the upstream portions of the river basin fluctuate in response to flood control operations in the Chicago Metropolitan area. Flow pulses, due to drawdowns at Lockport Dam, along with stormwater generated by the storms translate through the downstream pools causing water levels to fluctuate until their effects are gradually attenuated downstream.

The focus of this project was on evaluating the potential to reduce short-term water level fluctuations associated with, or through, dam operation procedures. A reduction in the number and degree of fluctuations would serve to eliminate disturbances to shallow aquatic and channel border habitats benefiting moist soil and emergent vegetation and fish utilizing these areas.

Hydraulic modeling conducted as part of the Illinois River 519 Study indicated the potential for a reduction in the number of small-scale fluctuations through more frequent dam gate operations. These initial results led to initiation of this study under NESP.

As part of the PDT's efforts during FY05, a re-evaluation of historical water level data and review of the analysis performed as part of the Illinois River 519 Study was conducted. While hydraulic modeling predicted that small, short-term water level fluctuations could be reduced through more frequent gate adjustments, the dams are not capable of reducing the large stage changes that also occur quite rapidly. River stage changes of more than 10 feet over only a few days are not uncommon and can fall off rapidly, or level off as a prolonged flood. Changes in hydrologic conditions due to urban development in the upper portions of the basin, and agricultural development throughout the basin and floodplain, are major stressors affecting the rate, frequency, and magnitude of water level fluctuations on the system.

In the absence of basin-level efforts to restore a more natural basin-level response to rainfall, and thereby reduce the occurrence and magnitude of mid- to late-summer floods, the restoration potential associated through improved dam operations is limited. For this reason, the PDT recommended that work on gate

automation to reduce short term water level fluctuations be curtailed and that the results of these investigations be incorporated into the Illinois River 519 Study's plan formulation process.

The study team met with Illinois Waterway stakeholders (including the FWS, TNC, and the ILDNR) and the Illinois River 519 Study Team on September 19, 2005, to discuss our initial conclusions and the future direction of this effort. Meeting participants agreed that the information presented accurately described current hydrologic conditions and that the discussions explained the reasons creating these conditions. The group agreed that there are multiple causes for the current impaired hydrology on the IWW. The group also agreed that, for the time being, it is not desirable to continue work to reduce short term stage fluctuations through more intense management of dam gates. The group felt that at this time available funds would be better spent on other ecosystem restoration measures. The overall conclusion of the meeting was that the factors affecting IWW hydrology are numerous, widespread, and persistent. A multifaceted approach including work in the watershed, floodplains, and dam operations will be required to naturalize Illinois River hydrology.

LOCATION AND DESCRIPTION: The project focused on the lower six dams on the Illinois Waterway (Brandon Road, Dresden Island, LaGrange, Marseilles, Starved Rock, and Peoria Dams) and their associated pools (River Miles 80.2-286.1), and included portions of Bureau, Grundy, La Salle, Marshall, Peoria, Putnam, Tazewell, Will, and Woodford Counties in Illinois.

SUMMARY OF FY06 ACTIVITIES:

In FY 2006, the following major activities were accomplished:

1. Completed survey of aquatic vegetation
2. Coordinated decision to terminate work on project with RRCT, NECC
3. Completed documentation of decision to terminate project.
4. Completed review of Illinois River Ecosystem Study evaluation of reducing water level fluctuations through improved dam operations; coordinating with Ecosystem PDT for inclusion of findings in their draft report.
5. Coordinated findings with Illinois River 519 Study Team.

SUMMARIZED FINANCIAL DATA:	PED	CONST.
Estimated Federal Cost	$119,914.66	$0
Estimated Non-Federal Cost	$0	$0
Total Estimated Cost	$119,914.66	$0
Allocation through FY 2005	$107,933.26	$0
Allocation for FY 2006	$11,981.40	$0
Budget Request for FY 2007	$0	$0
Balance to Complete after FY 2007	$0	$0
Amount that could be used in FY 2007	**$0**	**$0**

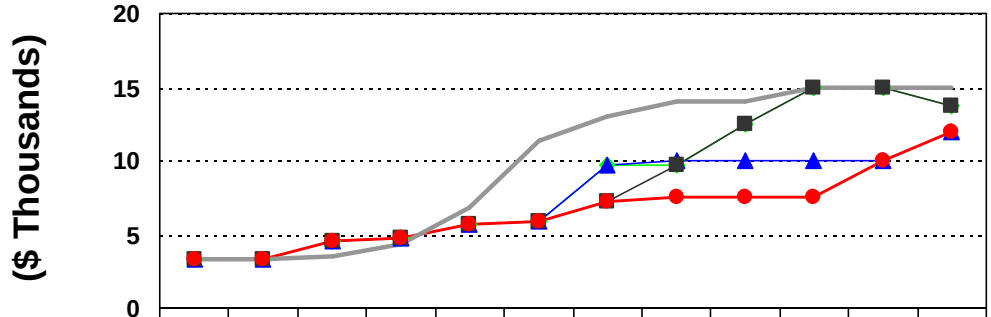
Z. REDUCE WATER FLUCT. - IWW (125638)

Kevin Landwehr, CEMVR

FY06 Project Financial Execution

Navigation and Ecosystem Sustainability Program (NESP)

%Dev = Actual/Sched	
Obligations	-12.8%
Expenditures	-12.8%



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Sched. Obligations	3.3	3.3	4.5	4.7	5.7	5.9	9.7	9.7	12.5	15.0	15.0	13.7
Actual Obligations	3.3	3.3	4.5	4.7	5.7	5.9	9.7	10.0	10.0	10.0	10.0	12.0
Sched. Expenditures	3.3	3.3	4.5	4.7	5.7	5.9	7.2	9.7	12.5	15.0	15.0	13.7
Actual Expenditures	3.3	3.3	4.5	4.7	5.7	5.9	7.2	7.5	7.5	7.5	10.0	12.0
BASELINE	3.4	3.4	3.6	4.3	6.8	11.3	13.0	14.0	14.0	15.0	15.0	15.0

SCHEDULE AND MILESTONES:

Task	SCHED. Start Date	ACT. Start Date	SCHED. Finish Date	ACT. FINISH Date	Comments
Briefing on termination decision to PM Council	5 Jan 06	5 Jan 06	5 Jan 06	5 Jan 06	
Presentation of findings to RRCT	23 Jan 06	23 Jan 06	23 Jan 06	23 Jan 06	
Presentation of findings and termination decision to NECC	21 Feb 06	21 Feb 06	21 Feb 06	21 Feb 06	
Final Documentation	1 Oct 06	1 Oct 06	31 Mar 06	25 Sep 06	Report delayed due to PDT focus on other NESP projects

PRODUCT LIST:

DATE	PRODUCT	DESCRIPTION	WEB
Jan 06	Aquatic Vegetation Survey	Final Report from PSC containing mapping of existing aquatic vegetation within the Dresden, Marseilles, and Starved Rock Pools.	
Sep 06	Termination Decision Document	Brief report summarizing work completed as part of project and reasons for termination.	

CONSTRUCTION START: Project Terminated – No Construction

NON-CORPS STAKEHOLDER INVOLVEMENT:

NAME	AGENCY/ ORGANIZATION	INVOLVEMENT
Jon Duyvejonck	USFWS	PDT Member
Jim Mick	Illinois DNR	Coordination of initial study findings.
Dr. Richard Sparks	National Great Rivers Research and Education Center	Coordination of initial study findings.
Doug Blodgett	TNC	Coordination of initial study findings.
Mike Demissie	ISWS	Coordination of initial study findings.

PUBLIC INVOLVEMENT: None

FY07 IMPLEMENTATION STRATEGY:

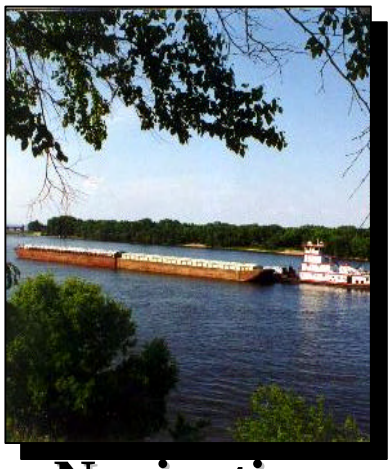
Project has been postponed indefinitely, no work expected in FY07.

UPPER MISSISSIPPI RIVER SYSTEM

NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM (NESP)

DRAFT

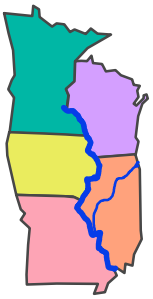
FY07 NESP WORKPLAN



Navigation Efficiency

Ecosystem Restoration

"To seek long-term sustainability of the economic uses and ecological integrity of the Upper Mississippi River System"



Last Update: October 24, 2006

FY07 NESP PROJECTS AND ASSOCIATED PMs and DPMs

Last Updated: 10-24-06

Projects Activities	Lead District	Project Manager (Team Leader)	District Program Manager
PROGRAMMATIC PROJECTS			
A. Program Management	MVR	Whitney, Scott	Whitney, Scott
B. Institutional Arrangements (PED)	MVP	Soileau, Rebecca	DeZellar, Jeff
C. Systemic Public Involvement	MVP	Bluhm, Kevin	DeZellar, Jeff
ECONOMIC RE-EVALUATION			
D. Navigation Adaptive Management	MVS	Astrack, Rich	Astrack, Rich
NAVIGATION EFFICIENCY PROJECTS			
E. Systemic Env. Mitigation	MVR	Cornish, Mark	Whitney, Scott
F. Navigation Appointment Scheduling	MVS	Manguno, Rich	Astrack, Rich
G1. L&D 14 Mooring Cell	MVP	Grundhoffer, Tim	DeZellar, Jeff
G2. L&D 24 Mooring Cell	MVP	Grundhoffer, Tim	DeZellar, Jeff
G3. L&D LGR Mooring Cell	MVP	Grundhoffer, Tim	DeZellar, Jeff
H. Switchboat	MVS	Gordon, David	Astrack, Rich
I1. Lock 22	MVR	Tarpey, Mike	Whitney, Scott
I2. Lock 25	MVS	Hobbs, Steve	Astrack, Rich
I3. Lock La Grange	MVR	Hunemuller, Toby	Whitney, Scott
ECOSYSTEM RESTORATION PROJECTS			
J. UMRS Ecosystem Rest. Plan	MVR	Theiling, Charles	Whitney, Scott
K. Ecosystem Adaptive Management	MVR	Barr, Ken	Whitney, Scott
L. System Cultural Stewardship	MVR	Ross, Jim	Whitney, Scott
M. Forest Management	MVP	Urich, Randy	DeZellar, Jeff
N. Fleeting Plan	MVR	Bollman, Dorene	Whitney, Scott
O. Island Building - Pool 11	MVR	Nickel, Rick	Whitney, Scott
P1. Fish Passage - L&D 26	MVS	Atchley, Tamara	Astrack, Rich
P2. Fish Passage - L&D 22	MVR	Cornish, Mark	Whitney, Scott
Q4. Floodplain Restoration - Emiquon West, IL	MVR	Moore, Amy	Whitney, Scott
R1. Pool Water Level Management - Pool 5	MVP	DeZellar, Jeff	DeZellar, Jeff
R2 Pool Water Level Management - Pool 9	MVP	Jutilla, Scott	DeZellar, Jeff
R3. Pool Water Level Management - Pool 18	MVR	Landwehr, Kevin	Whitney, Scott
S. Backwater Restoration - IWW Peoria Reach	MVR	Plumley, Marshall	Whitney, Scott
U1. Side Channel Restoration - Buffalo Island	MVS	Johnson, Brian	Astrack, Rich
U2. Side Channel Restoration - Scheniman Chute	MVS	Mike Thompson	Astrack, Rich
V1. Wing Dam/Dike Alteration - Herculaneum	MVS	Lamm, Dawn	Astrack, Rich
V2. Wing Dam/Dike Alteration - Pool 2	MVP	Stefanik, Elliot	DeZellar, Jeff
W. Island Shoreline Protection	MVR	Kirkeeng, Thomas	Whitney, Scott
X. Dam Point Control - L&D 25	MVS	Kniep, Michelle	Astrack, Rich
Y. Dam Embankment Lowering - L&D 8	MVP	Stefanik, Elliot	DeZellar, Jeff

DRAFT FY07 NESP BUDGET ALLOCATION ($10M)

Last Updated: 10-24-06

Projects Activities	Labor	Travel	MIPR	PSC	FY07 BUDGET	FY07 ADDL. CAPABILITY
PROGRAMMATIC PROJECTS						
A. Program Management	$450,000	$38,500	$10,000	$1,500	**$500,000**	**$145,000**
B. Institutional Arrangements	$24,000	$1,000	$0	$0	**$25,000**	**$125,000**
C. Systemic Public Involvement	$71,250	$3,750	$0	$0	**$75,000**	**$507,000**
SUBTOTALS	**$545,250**	**$43,250**	**$10,000**	**$1,500**	**$600,000**	**$777,000**
ECONOMIC RE-EVALUATION						
D. Navigation Adaptive Management	$1,150,100	$19,400	$212,500	$618,000	**$2,000,000**	**$300,000**
SUBTOTALS	**$1,150,100**	**$19,400**	**$212,500**	**$618,000**	**$2,000,000**	**$300,000**
NAVIGATION EFFICIENCY PROJECTS						
E. Systemic Env. Mitigation	$153,000	$2,000	$10,000	$135,000	**$300,000**	**$130,000**
F. Navigation Appointment Scheduling	$100,000	$0	$0	$0	**$100,000**	**$0**
G1. L&D 14 Mooring Cells	$55,000	$0	$5,000	$0	**$60,000**	**$15,000**
G2. L&D 24 Mooring Cells	$95,000	$5,000	$0	$0	**$100,000**	**$55,000**
G3. L&D LGR Mooring Cells	$95,000	$5,000	$0	$0	**$100,000**	**$55,000**
H. Switchboat	$58,000	$0	$2,000	$0	**$60,000**	**$350,000**
I1. Lock 22	$886,000	$32,000	$2,000	$360,000	**$1,280,000**	**$4,250,000**
I2. Lock 25	$1,191,000	$18,000	$66,000	$275,000	**$1,550,000**	**$3,331,000**
I3. Lock La Grange	$113,400	$2,600	$24,000	$10,000	**$150,000**	**$687,000**
SUBTOTALS	**$2,746,400**	**$64,600**	**$109,000**	**$780,000**	**$3,700,000**	**$8,873,000**
ECOSYSTEM RESTORATION PROJECTS						
J. UMRS Ecosystem Rest. Plan	$297,000	$3,000	$75,000	$25,000	**$400,000**	**$385,000**
K. Ecosystem Adaptive Management	$572,089	$53,626	$135,820	$108,465	**$870,000**	**$150,000**
L. System Cultural Stewardship	$115,000	$10,000	$5,000	$20,000	**$150,000**	**$275,000**
M. Forest Management	$101,150	$3,850	$5,000	$0	**$110,000**	**$20,000**
N. Fleeting Plan	$61,000	$3,300	$5,000	$700	**$70,000**	**$0**
O. Island Building - Pool 11	$8,000	$0	$2,000	$0	**$10,000**	**$0**
P1. Fish Passage - L&D 26	$222,454	$1,296	$97,200	$4,050	**$325,000**	**$75,000**
P2. Fish Passage - L&D 22	$157,500	$2,500	$85,000	$80,000	**$325,000**	**$896,300**
Q4. Floodplain Restoration - Emiquon West, IL	$97,000	$0	$3,000	$0	**$100,000**	**$60,000**
R1. Pool Water Level Management - Pool 5	$141,403	$2,500	$16,097	$0	**$160,000**	**$0**
R2 Pool Water Level Management - Pool 9	$38,000	$0	$2,000	$0	**$40,000**	**$0**
R3. Pool Water Level Management - Pool 18	$144,000	$0	$5,000	$1,000	**$150,000**	**$0**
S. Backwater Restoration - IWW Peoria Reach	$143,900	$1,100	$5,000	$0	**$150,000**	**$140,000**
U1. Side Channel Restoration - Buffalo Chute	$116,000	$1,000	$24,000	$9,000	**$150,000**	**$0**
U2. Side Channel Restoration - Scheniman Chute	$10,000	$0	$0	$0	**$10,000**	**$0**
V1. Wing Dam/Dike Alteration - Herculaneum	$28,654	$0	$110,846	$30,500	**$170,000**	**$70,000**
V2. Wing Dam/Dike Alteration - Pool 2	$35,000	$0	$0	$0	**$35,000**	**$0**
W. Island Shoreline Protection	$94,000	$1,000	$5,000	$0	**$100,000**	**$50,000**
X. Dam Point Control - L&D 25	$211,500	$3,000	$10,500	$0	**$225,000**	**$175,000**
Y. Dam Embankment Lowering - L&D 8	$118,325	$1,675	$30,000	$0	**$150,000**	**$25,000**
SUBTOTALS	**$2,711,975**	**$87,847**	**$621,463**	**$278,715**	**$3,700,000**	**$2,321,300**
TOTALS	**$7,153,725**	**$215,097**	**$952,963**	**$1,678,215**	**$10,000,000**	**$12,271,300**
FY07 DRAFT	**71.54%**	**2.15%**	**9.53%**	**16.78%**		

DRAFT FY07 WORKPLAN for UMRS Navigation and Ecosystem Sustainability Program (NESP)

$10 Million GI Appropriation

last update 10/24/2006

NESP Project Identifier & Name	PMP Scope, Activities & Scheduled Completion Dates	Primary FY07 Tasks and Products (by quarter)	FY07 Budget Allocations
A. Program Management	FY 2006 program management activities. FY07	Updating PgMP, FY07 Workplan, Continued PED Implementation, Fact Sheets, Communication and Coordination, Program and Project Financial Tracking and Performance, Project Scheduling, etc….	**$500,000**
B. Institutional Arrangements	1)Refine institutional arrangements for integrated management and prepare for implementation within the Corps and FWS. Outputs include: FY07 Jan 07 Mar07 Jun07 2) The Operational Model for the River Council approved by the Corps and FWS, 3) A working agreement between the Corps and FWS on administering the River Council as co-chairs.	QTR 1: Refine River Council Operational Model based on stakeholder comments and through Corps and FWS collaborative effort. QTR 2: Produce a DRAFT working agreement between the Corps and FWS on administering the River Council as Co-chairs QTR 3: Have working agreement between Corps and FWS ready to sign. QTR 4: Documentation and communication with Corps and FWS.	**$25,000**
C. Systemic Public Involvement	Fast Start Initatives- Defined Fast 1 Nov 06 1 Start Plan Implementation Web Site Feb 07 1 Patch- Phase II Web Site needs May 07 1 analysis PMP Final Dec 07 1 Project Support - PI/comm. Mar 07 1 Communications Network Oct 07 1 Oct 07	QTR 1: Web survey report 30 Nov 06 QTR 2: Final PMP, Web Patch 15 Mar 07 QTR 4: Project Support/ Comm network 1 Sep 07	**$75,000**
D. Navigation Adaptive Management	Workshop-grain forecast Dec 06 Demand curves from surveys complete (NETS) Feb 07 Incorporate Grain forecast into Survey Model Feb 07 Transportation rates (TVA) Mar 07 Non-grain forecasts (AE) Mar 07 Economic model runs of recommended plan complete Jun 07 Public meetings Aug 07 Interim Report Sep 07	QTR1: NETS Program–Grain forecasts, demand curves, Survey Model NESP-Trans rates, non-grain, non-traditional NED QTR2: NETS Program–demand curves, grain forecast in Survey Model NESP-Trans rates & non-grain in model, non-trad NED QTR3: Environmental models certified Project cost updated Economic model runs QTR4: Public meetings Interim Report	**$2,000,000**
E. Systemic Environmental Mitigation	Program Management Plan Jan 07 Fisheries (field sampling) Oct-Jun Submersed Aquatic Vegetation Jan 07	QTR 1: Revise Project Management Plan Fall fish trawling field sampling (continuation of FY06) Contract Award - Fisheries Field Work Winter fish trawling field sampling QTR 2: Draft Program Management Plan Contract Award - SAV Sampling QTR 3: Final Program Management Plan Field Sampling - Fisheries and SAV	**$300,000**
F. Navigation Appointment Scheduling		TBD based on evaluation of recently received UMSL Report	**$100,000**

NESP Project Identifier & Name	PMP Scope, Activities & Scheduled Completion Dates		Primary FY07 Tasks and Products (by quarter)	FY07 Budget Allocations
G1. Lock 14 Mooring Cell	Morring Cells:		QTR 1:	
	Upadate DDR LD24 Marker Buoys	Oct-06	Draft DDR for Mooring Locations	
	Distribute DDR for review	Nov-06	QTR: 2	
			Awaiting FY08 Construction Authorization	
	LD 14 Moring Cell:		QTR 3:	
	Final P&S Submittal	Jun-07	Finalize P&S for LD14 and Prepare Bid Documents	
	BCOE/ITR Routed for Signatures	Jun-07		**$60,000**
	P&S/ITR Sign-off	Jul-07	QTR 4:	
	Advertise	Sep-07	Complete LD14 P&S	
	Const. Contract Bid Opening	Nov-07	Advertise	
G2. Lock 24 Mooring Cell	Update DDR with Marker Buoy	Oct-06	QTR 1:	
	Survey	Nov-06	Identify need for boring, surveys and real estate ROW	
	Initiate EA	Nov-06	QTR: 2	
	Initial Technical Review Meeting	Dec-06	Complete P&S to a DTR/FTR level	
	Obtain Boring and Surveys (if	Mar-07	Complete draft EA	
	required)	Mar-07	QTR 3:	
	DTR Submittal	Mar-07	Envir Surveys if required	
	Submit Right of Way Drawings (if	Apr-07	QTR 4:	
	required)	Apr-07	Complete P&S to BCOE level	
	DTR Meeting	Apr-07	Complete EA Public Review	
	Draft EA	May-07		
	FTR Submittal	Jun-07		**$100,000**
	Final ROW dwgs (if required)	Aug-07		
	FTR Meeting	Aug-07		
	Envir Surveys (if required)	Sep-07		
	BCOE Submittal	Oct-07		
	BCOE Meeting	Oct-07		
	Final P&S Submittal	Oct-07		
	BCOE/ITR Routed for Signatures	Dec-07		
	P&S/ITR Sign-off	Dec-07		
	EA Public Review	Feb-08		
	FONSI/SOF Signed			
	Advertise			
	Construction Contract Bid Opening			
G3. Lock LaGrange Mooring Cell	Initiate EA	Oct-06	QTR 1:	
	Initial Technical Review Meeting	Oct-06	Identify need for boring, surveys and real estate ROW	
	Obtain Boring and Surveys (if	Nov-06	QTR: 2	
	required)	Jan-07	Complete P&S to a DTR/FTR level	
	DTR Submittal	Jan-07	Complete draft EA	
	Submit Right of Way Drawings (if	Feb-07	QTR 3:	
	required)	Mar-07	Envir Surveys if required	
	DTR Meeting	Mar-07	QTR 4:	
	Draft EA	Mar-07	Complete P&S to BCOE level	
	FTR Submittal	Apr-07	Complete EA Public Review	
	Final ROW dwgs (if required)	May-07		
	FTR Meeting	Jul-07		**$100,000**
	Envir Surveys (if required)	Jul-07		
	BCOE Submittal	Aug-07		
	BCOE Meeting	Sep-07		
	Final P&S Submittal	Sep-07		
	BCOE/ITR Routed for Signatures	Sep-07		
	P&S/ITR Sign-off	Oct-07		
	EA Public Review	Nov-07		
	FONSI/SOF Signed	Jan-08		
	Advertise			
	Construction Contract Bid Opening			

NESP Project Identifier & Name	PMP Scope, Activities & Scheduled Completion Dates		Primary FY07 Tasks and Products (by quarter)	FY07 Budget Allocations
H. Switchboat	Complete PMP Meeting with Operations Sources Sought Synopsis Complete Legal Review Finalize Position Paper & Legal Opinion Complete Draft DDR Performance Monitoring Plan Complete DDR Complete Cost Estimates Develop Prelim. Contract Documents Contract Documentation - Phase 1 Solicitation for Switchboat Contractors Implement Switchboat Operations - P1 Begin Monitoring Switchboat Complete Contract Documents - Phase 2 Solicitation for Switchboat Contractors Implement Switchboat Operations - P2 Full Switchboat Implementation (10 boats)	Apr 05 May 05 July 06 Sep 06 Nov 06 Mar 07 Mar 07 May 07 Jun 07 Sep 07 Dec 08 Jan 08 Apr 08 Apr 08 May 09 Jun 09 Oct 09 2014	QTR 1: Update PMP ITR / Finalize Position Paper and Legal Opinion QTR 2: Performance Monitoring Plan Complete Draft DDR Initiate ITR Process QTR 3: Assemble Cost Estimates Complete DDR VE Study QTR 4: Develop Contract Documents Suitable for FY08 BCOE	**$60,000**
I1. Lock 22	Start Project EA draft EA public review Incorporate Public Review FONSI signing Prepare Draft DDR DDR - ITR & VE Prepare Final DDR DDR final Approval	5 Feb 05 1 Jan 07 1 Feb 07 1 Apr 07 15 Jul 07 1 Mar 07 1 Jun 07 1 Sep 07 1 Nov 07 31 Jan 07	**QTR 1:** Project Management Hydraulic - Physical Model Testing - Approach Wall Barge Impact testing Hydraulic - F/E Physical Model – Develop SOW & build model Structures - Lock Wall - Monolith w/o culvert - 25% Design (A/E) Structures - Lock Wall - Miter Gate & Valve Monolith - 25% Design (in-house) Structures – Generic Lock Layout NESP - Continue NEPA documentation **QTR 2:** Hydraulic – F/E Physical Model Testing Hydraulic – F/E numeric model testing Structures - Approach Wall – 25% Steel Pile Can Design Structures – Structural analysis of Typ Monolith - in-house labor design Mech - Initiate coordination with OD Elec - Initiate coordination with OD **QTR 3:** • Structures - 50% Typ Lock Wall Design (A/E) • Real Estate – Initiate RE Supplement Plan	**$1,280,000**

NESP Project Identifier & Name	PMP Scope, Activities & Scheduled Completion Dates		Primary FY07 Tasks and Products (by quarter)	FY07 Budget Allocations
I2. Lock 25	initiate PED	5 Feb 05	**QTR 1:** Project Management/Travel Hydraulic - Nav Physical Model - Pool Revisions and Calibration Hydraulic - Nav Numeric Model - Pool Calibration Hydraulic - F/E Physical Model – Develop SOW & build model Structures - Typ Wall Mono Constructability Review Structures – Generic Lock Layout Structures - Existing Guardwall Recommendation Geotech - Seepage Analysis Continued NESP - Continue NEPA documentation **QTR 2:** Hydraulic - Nav Physical Model - Pool Testing Hydraulic - Nav Numeric model - Pool Testing Hydraulic – F/E Physical Model Testing Hydraulic – F/E Numeric Model Testing Structures - Floor Concept & Design Structures - Floor Strut Concept & Design Geotech - Seepage Analysis Continued Mech - Initiate coordination with OD Elec - Initiate coordination with OD NESP - Continue NEPA documentation **QTR 3:** Hydraulic - Physical Model - Barge Impact Testing Hydraulic - Physical Model - Construction Sequencing NESP - Continue NEPA documentation Real Estate – Initiate RE Supplement Plan	**$1,550,000**
	EA draft	1 Mar 07		
	EA public review	1 Jun 07		
	Incorporate Public Review	1 Aug 07		
	FONSI signing	1 Sep 07		
	Prepare Draft DDR	1 Dec 07		
	DDR - ITR & VE	1 Jan 08		
	Prepare Final DDR	1 Apr 08		
	DDR final	1 Jun 08		
	Approval	1 Jul 08		
I3. Lock LaGrange	Revise PMP (Detailed 3 yr PMP)	29 Jan 06	QTR 1: Complete Boundary Survey - Extend ROE's - Prepare & Calibrate Numeric Model - Tail Water - Acquire additional ADCP data (conditions dependant) - procure materials for micromodel, fabricate micromodel - coordinate with ERDC/PM-A regarding Alignment Alternatives Study - EC-S prepare SOW's for: Digital Facilities Mapping, Terrestrial Lidar, Multi-beam Sidescan of Ex. Lock - Coordinate location of physical model. QTR 2: Continue work on micromodel QTR 3: Coordinate with FWS regarding Alignment Alternatives Study; Review and develop additional conceptual 1200-ft lock alignments. QTR 4: Funds Exhausted - TL to continue with monthly duties	**$150,000**
	Finalize PMP	15 Feb 06		
J. UMRS Ecosystem Restoration and Management Plan	Draft final reach plan framework	Oct 06	QTR 1: Complete reach planning framework report, complete pilot reach plans, meet with Science Panel to discuss benefit evalaution methods. QTR 2: Program DSS, compile reach-specific design criteria QTR 3: Conduct geomorphic reach-scale planning QTR 4: Draft reach plans, beta test DSS	**$400,000**
	Project J./Science Panel Meeting	Dec 06		
	Draft final pilot reach plans	Dec 06		
	DSS PM and planning modules	Mar 07		
	Regional design criteria	Mar 07		
	Final pilot reach plans	Mar 07		
	Pool 18 H&H modeling Draft	May 07		
	geo. reach plans	Sep 07		
	Draft NESP DSS	Sep 07		

NESP Project Identifier & Name	PMP Scope, Activities & Scheduled Completion Dates	Primary FY07 Tasks and Products (by quarter)	FY07 Budget Allocations
Ka Ecosystem Adaptive Management - Administration	Management activities in support of Ecosystem Adaptive Management component	Preparation for and participation with River Council, Resource Management Teams, stakeholders Tracking of financial execution, reporting on activities	**$200,000**
Kb. Ecosystem Adaptive Management - Monitoring and Modelling	Develop and test adaptive management options for ongoing system/project monitoring, modeling, and evaluation MVS – 100 Mile Island fish identification, completion of final report	QTR 1: fish identification QRT 2: fish identification / sample analysis QRT 3: statistical analysis QRT 4: submission of final report	**$20,000**
Kc. Ecosystem Adaptive Management - Science Panel	Continue interaction with PDTs; provide input to information management plan; design and test adaptive management approaches for 1 or 2 system-wide objectives; work with EMP HREP on sequencing;	QTR 1: finalize floodplain reach objectives; complete final draft Ecosystem Goods and Services Report QRT 2:Workshop in support of Pool 5 planning QRT 3: lead/ participate in National Ecosystem Restoration Conference QRT 4: finalize project sequencing criteria	**$650,000**
L. System Cultural Stewardship	Update PMP Feb 07 Completion of MVR EA Mapping Feb 07 of Critical Site Apr 07 Completion of MVP Analyses Apr 07 Completion of Draft MVP EA Aug 07 Partner Meeting Aug 07	QTR 1: Update PMP Prepare SOWs Complete Draft MVR EA Review and Prepare Final QTR 2: Initiate MVP NHPA Consultation for Protection EA Award Contracts QTR 3: Review and Coordinate Draft Products Finalize NHPA Consultation for MVP Protection Plan QTR 4: Update PMP Complete MVP Draft EA Review and Coordinate Final Products Cultural Stewardship Partner Meeting	**$150,000**
M. Forest Management	Update PMP 03 Nov 06 Rev SP cmmnts 01 Nov 06 Dev QMP & VE rpt 08 Dec 06 Writing Team mtg / plan revs 02 Nov 06 NECC/ECC rev 15 Nov 06 Regional PDT mtg / partner rev 28 Nov 06 Writing Team Mtg / plan revs 17 Jan 07 Phase 2 plan edit 16 Mar 07 Public info notice / rev 04 May 07 Finalize plan 30 Jun 07 PIR & partner coord for Reno Proj 28 Sep 07	QTR 1: Science Panel Review Comments QMP for review of plan VE Report QTR 2: Final DRAFT Systemic Forest Mgmt Plan QTR 4: Final Systemic Forest Mgmt Plan PIR for Reno Bottoms Project	**$110,000**

NESP Project Identifier & Name	PMP Scope, Activities & Scheduled Completion Dates		Primary FY07 Tasks and Products (by quarter)	FY07 Budget Allocations
N. Fleeting Plan	Update PMP	31 Oct 06	QTR 1: Update PMP Finalize Mailing List Draft Expectations Table Draft Report Outline Initiate data collection activities Populate GIS database QTR 2: Continue data collection activities Create Website Finalize Expectations Table Finalize Report Outline Initiate small group partner meetings QTR 3: Continue small group partner meetings Complete Current Conditions Inventory Update Website Draft of Written portion of Barge Fleeting Plan QTR 4: Draft Map(s) of Pool ??? Review of Barge Fleeting Plan Update Website Public Comments of Barge Fleeting Plan	**$70,000**
	Mailing List	31 Oct 06		
	GIS database	31 Dec 06		
	Expectations Table	15 Jan 07		
	Website	31 Jan 07		
	Partner Meetings	15 Apr 07		
	Current Conditions Inventory	31 May 07		
	Draft Written Barge Fleeting Plan	30 Jun 07		
	Draft Pool ??? Map(s)	31 July 07		
	Review of Draft Barge Fleeting Plan	31 Aug 07		
O. Island Building - Pool 11			Response to Science Panel comments and Study Team Recommendation as to how to proceed or discontinue.	**$10,000**
P1. Fish Passage - L&D 26	Program Management	FY07	QTR 1: Science Panel Workshop (19-20 OCT) Draft FY06 Monitoring Report Hydroacoustics and Tailwater Sampling Pre-Construction Monitoring Alternative investigation Telemetry contract award and monitoring QTR 2: Hydroacoustics and Tailwater Sampling Pre-Construction Monitoring Alternative investigation Telemetry monitoring Hydraulic modeling QTR 3: Hydroacoustics and Tailwater Sampling Pre-Construction Monitoring Alternative investigation, PIR development Telemetry monitoring QTR 4: PIR development Telemetry monitoring	**$325,000**
	Science Panel Workshop	1st qtr		
	Project Monitoring	FY07		

NESP Project Identifier & Name	PMP Scope, Activities & Scheduled Completion Dates	Primary FY07 Tasks and Products (by quarter)	FY07 Budget Allocations
P2. Fish Passage - L&D 22	PDT draft Project Implementation Report Feb 06 Aug 06 Risk and Uncertainty Reduction Studies	QTR 1: Physical and numeric modeling studies Science panel workshop Draft FY06 Monitoring Report Hydroacoustics and Fish Sampling of Tailwaters Engineer managerial review Draft Sections of Environmental & Engineering Sections of PIR Contract award - Telemetry contract QTR 2: Revised Project Management Plan Hydroacoustics and Fish Sampling of Tailwaters Telemetry monitoring of Fish in Tailwaters Contract award - hydraulic environement quantification contract, ITR team contracts Complete PDT draft of the PIR QTR 3: Hydroacoustics and Fish Sampling of Tailwaters QTR 4: Initiate Plans & Specs	**$325,000**
Q2. Floodplain Restoration - Root River, MN	Discontinued until Program Authorized		
Q3. Floodplain Restoration - Pierce County, WI	Discontinued until Program Authorized		
Q4. Floodplain Restoration - Emiquon West	Updated PMP 1 Nov 06 Approved Planning Charette HTRW 1 Dec 06 Report Cultural 1 July 07 Report 1 July 07	Q1- Update PMP; Complete Planning Charette; Q2- Pursue Planning Process and Analysis; Q3- Feature Specific Analysis, including Cultural and HTRW Work; Q4- No work without additional funding	**$100,000**
R1. Pool Water Level Management: Pool 5	Evaluate monitoring reports 1 Jun 07 Update H/H and env 1 Jul 07 Analysis of benefits & costs 1 Jul 07 Agency partner coordination (including FWS) 1 Aug 07 Draft Proj. Implementation Report 1 Sep 07 Initiate ITR process 20 Sep 07	QTR 1: Mussel monitoring report 30 Nov 06 QTR 2: Vegetation response report 15 Mar 07 QTR 4: Draft PIR 1 Sep 07 Draft FONSI 1 Sep 07 Public Meetings (2) 15 Sep 07	**$160,000**
R2. Pool Water Level Management: Pool 9	Update H/H and env 1 Jul 07 Analysis of benefits & costs 1 Jul 07 Agency partner coordination (including FWS) 1 Aug 07 Draft Proj. Implementation Report 1 Sep 07 Initiate ITR process	QTR 4: Draft PIR 1 Sep 07 Draft FONSI 1 Sep 07	**$40,000**
R3. Pool Water Level Management: Pool 18	Project Management Plan 01 Feb 05 Project Information Report 01 Jun 06 Implementation Plan 01 Dec 06 Monitoring Plan 01 Jun 06 Construction E&D 01 Feb 07 Construction 01 May 07	QTR 1: Complete Draft PIR and EA QTR 2: ITR Public Meetings QTR 3: Finalize PIR QTR 4: 2nd Year WQ Monitoring	**$150,000**

NESP Project Identifier & Name	PMP Scope, Activities & Scheduled Completion Dates		Primary FY07 Tasks and Products (by quarter)	FY07 Budget Allocations
S. Backwater Restoration (Dredging) - Middle Peoria Pool Backwaters	PDT/Stakeholder Site Visit Update PMP Continue HH Model Development Real Estate Bed of River Research Planning Workshop	Nov 06 Nov 06 May 07 Feb 07 Feb 07	QTR 1: PDT/Stakeholder Site Visit PMP Update QTR 2: Real Estate Bed of River Research Planning Workshop QTR 3: HH Model Complete	**$150,000**
U1. Side Channel Restoration - Buffalo Island	Initiate Feasibility Study Initiate Pre-Construction Monitoring Complete Alternatives Analysis Complete Draft Report Complete Engineering & Design+I39 Complete Construction Complete Monitoring Complete Project & Final Report	Jan 05 Jun 05 Mar 06 Mar 07 Apr 07 Sep 08 Sep 11 Apr 12	QTR 1: Award Year 2 WQ and monitoring contract QTR 2: Conclude Year 2 Monitoring, prepare RE plan begin Plans & Specs QTR 3: Draft EA and PDA QTR 4: ITR, MVD/HQ review ITR Review Begin Plans & Specs	**$150,000**
U2. Side Channel Restoration - Scheniman Chute	Contingent on WRDA Authorization by Jan 2007		Revise existing Decision documentation to allow submittal for ASA(CW) approval under New NESP authority.	**$10,000**
V1. Wing Dam/Dike Alteration - Herculaneum	Initiate Feasibility Study Initiate Pre-Construction Monitoring Complete Alternatives Analysis Complete Draft Report Feasibility Study Approved Complete Engineering & Design Complete Construction Complete Monitoring Complete Project & Final Report	Feb 05 Jul 05 Jan 06 Jan 07 Apr 07 Sep 07 Sep 08 Sep 11 Apr 12	QTR 1: Continue Year 2 Monitoring Sediment (boring) Samples of Potential HTRW QTR 2: Continue Year 2 Monitoring Draft EA & PDA QTR 3: Conclude Year 2 Monitoring Begin Plans & Specs QTR 4: ITR Review Continue/Complete Plans & Specs	**$170,000**
V2. Wing Dam/Dike Alteration - Pool 2	Perform PreConst. Surv. (sdchnnl) Develop Plans and Specs Write NESP Letter Report	1 Mar. 07 1 May 07 30 Sept 07	QTR 1&2: Complete PreConstruction Surveys QTR 3: Complete Plans and Specs QTR 4: Complete NESP Letter Report	**$35,000**
W. Island Shoreline Protection	MVP, MVR Initial Site Selection Alternative Analysis - MVS Cultural Coordination - MVS Draft PIR (MVS) Initiate Fieldwork (MVR, MVP) Initiate P&S (MVS)	Nov 06 Nov 06 Dec 06 Feb 07 Mar 07 Jun 07	QTR 1: MVR, MVP Select 1 Site along with site visit MVS - Final Design / Alternative Analysis QTR 2: MVR, MVP - Initiate Cultural Coordination MVS - Draft PIR QTR 3: MVR, MVP - Initiate Fieldwork QTR 4: MVS - Initiate P&S	**$100,000**
X. Dam Point Control - L&D 25	Initiate Feasibility Study Complete Alternatives Analysis Complete Draft Report Feasibility Study Approved Complete Engineering and Design Complete Project	26 Jan 05 31 Oct 06 30 Nov 07 30 Sep 08 30 Sep 09 30 Sep 11	QTR 1: Feasibility Scoping Meeting, Complete HEC-RAS existing conditions QTR 2: Initiate Alternatives Evaluation, HEC-EFM Existing Conditions Model Complete QTR 3: Complete initial alternatives evaluation (ecosystem)	**$225,000**

NESP Project Identifier & Name	PMP Scope, Activities & Scheduled Completion Dates		Primary FY07 Tasks and Products (by quarter)	FY07 Budget Allocations
Ya. Dam Embankment Lowering - L&D 8 Project Study Activities	Cont. Feas. Analys. and Planning Develop Project Alternatives Develop Draft DPR/EA	1 Oct 06 31 Mar 07 30 Sept 07	QTR 1: Cont. Feasibility Planning (DPR 30/9/07) QTR 2: Develop List of Alternatives QTR 4: Develop Draft DPR	**$125,000**
Yb. Project Monitoring Activities	Idnetify FY07 Monitoring Needs Initiate FY07 Monitoring Program	1 Dec 06 30 Sept 07	QTR 1: List of FY07 Monitoring Needs QTR 2,3,4: FY07 Monitoring Summary Data/Reports	**$25,000**
Z. Reduce Water Level Fluctuation - IWW	Discontinued Indefinately, watershed issues need to be addressed for this project to be effectual.			**$0**
			TOTALS	**$10,000,000**

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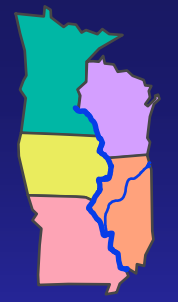
NESP WEB ANALYSIS



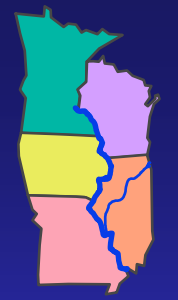
NECC Meeting,
November 14, 2006

Kevin Bluhm, Systemic PI Team Leader

Upper Mississippi River System
Navigation and Ecosystem Sustainability Program (NESP)

US Army Corps of Engineers®

BACKGROUND- Key Assumptions



- NESP Website is currently seen as a “front page” for the previous Navigation Study website.
- Currently used primarily for finished work – completed reports, etc.
- Corps of Engineers personnel primarily input data
- Corps personnel and external stakeholders currently appear to be the primary users of the data.
- The Commander’s Agreement identified an initiative for an Upper Mississippi River System website for integrated management as a future objective.
  - NESP Website will be an integral part of that objective.
  - Opportunity here to move beyond a single program (NESP) focus to one that addresses integrated management of the UMRS and to take advantage of the state-of-the-art in web site design.

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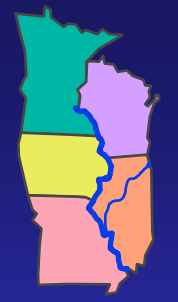
INTERVIEW DESIGN



- Purpose of survey: To use the answers to help the team develop a systemic roll-out plan on how website needs will be met in the future.
- To take the current NESP website and make it fit the needs of the long term future, it was determined that interviews would be conducted with a group of current website users (both internal to the Corps and external) to identify their views of those needs.
  - 15 Key staff/stakeholders were selected to be interviewed
  - Interviews asked questions about specific web related views and observations
  - A 30 minute questionnaire was designed to pinpoint needs

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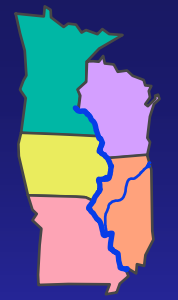
INTERVIEW CONTENT



- (1) General/Introductory: questions were general “thought provokers”.
- (2) Audience/Use: questions to get a baseline understanding
- (3) Content:_questions looked at the content of the current website
- (4) Operations/Navigability: questions looked at the usability of the website
- (5) plus “general wrap-up questions and additional thoughts/comments response

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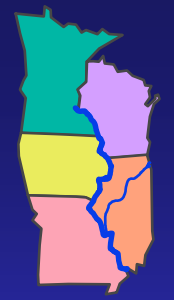
RESULTS – Stats on Interviewees



- Current website use:
  - 15 persons interviewed – 10 Corps; 5 External
  - Only 2 (Corps) used the website often (at least once a week); 1 for minutes & schedules; 1 to post info
  - 4 (Corps) almost never used it
  - 4 (External) used it occasionally (2-3 times/month) for minutes or schedules
  - 1 (Corps) occasionally to get project status info
  - 2 (Corps) used it occasionally for reference
  - 2 (External) used it occasionally to see what's new
  - 6 (1 Corps; 5 External) used it seldom (less than once a month)
- Many interviewees stated that they used the website much more frequently when the Nav Study was in progress; now that it's concluded, they have much less occasion to use it.

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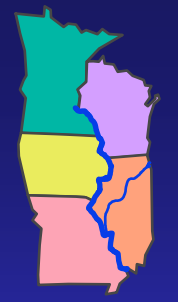
RESULTS - Current Site



- Corps and partners current primary users
- Used for project status and reference material
- Repository of archival data
- Not well used
- Limited current information
- General public use is declining

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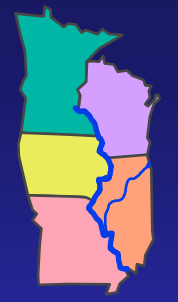
RESULTS - Content



- The first questions addressed satisfaction levels with the quality and timeliness of information currently on the website. The overall rating on a 1-10 scale
  - Accuracy and completeness – adequate or above
  - Timeliness/currency - adequate or low

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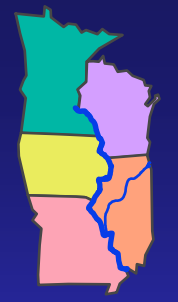
RESULTS - Future Website



- General public should be primary or among primary users
- Campaign needed to help expand awareness and use
- Up-to-date calendar feature
- Link feature
- Geographically locate projects

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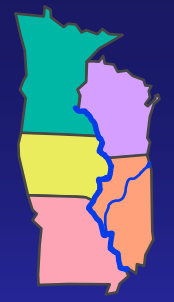
RESULTS - con't



- What one thing would change if time & money were no object?
  - Timeliness/currency of info
  - Easy, interactive access
  - Visual appeal
  - Widespread use

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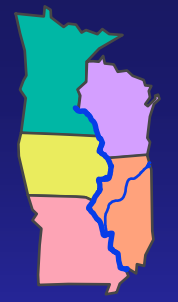
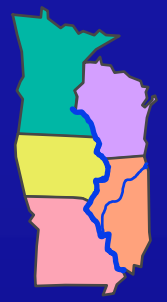
RESULTS - Themes



- Information must be current
- General public should be primary users
- Website requires more information
- Website should be more visually appealing

Input to Corps of Engineers



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UMRS NESP Website

http://www2.mvr.usace.army.mil/nesp/

NESP Website Analysis & Interviews
Conducted August 2006

BACKGROUND –

- NESP Website is currently seen as a "front page" for the previous Navigation Study website.
- Currently used primarily for finished work – completed reports, etc.
- Corps of Engineers personnel primarily input data
- Corps personnel and external stakeholders currently appear to be the primary users of the data.
- The Commander's Agreement identified an initiative for an Upper Mississippi River System website for integrated management as a future objective.
- NESP Website will be an integral part of that objective.
- Opportunity here to move beyond a single program (NESP) focus to one that addresses integrated management of the UMRS and to take advantage of the state-of-the-art in web site design.

* PI Team obtained proposals and interviewed two independent contractors who exhibited considerable experience and expertise in this area.
* Contract was awarded to The Management Associates, Jackie Wilson, Sioux Falls, SD
* Contractor and PI Team met to discuss objectives and goals of interview process; determine topics to be covered and questions to be used; and established criteria for the end product/deliverables from this effort.

INTERVIEW DESIGN:

To take the current NESP website and make it fit the needs of the long term future, it was determined that interviews would be conducted with a group of current website users (both internal to the Corps and external) to identify their views of those needs.

- interviewed in-house staff and stakeholders/partners who have been involved in NESP activities and who have an interest in communication regarding NESP and the UMRS; interviewed 10 COE staff (7 NESP TL's & Prog Mgrs, MVR PA, & 2 website coordinators); plus 5 stakeholders who are also members of the NESP Communications Panel
- interview questions were developed under the assumption that interviewees would be familiar with the existing website and have fairly specific uses/features in mind for its future development.
- interviews conducted within a 30 minute timeframe (with additional time allotted in case discussions were longer)

INTERVIEW CONTENT: (4 main topics)

(1) General/Introductory: questions were broad, general questions basically designed as "conversation starters" and "thought provokers".
(2) Audience/Use: questions intended to develop a baseline understanding of current and potential website users and use(s).
(3) Content: questions looked at the content of the current website – does it cover appropriate subjects, is the information timely, is the information helpful/useful -- and also explored additional topics/subject areas that the interviewees think should be added.
(4) Operations/Navigability: questions looked at the usability of the website, looking at user friendliness as well as existing and desired website operation/navigation features.
(5) plus "general wrap-up questions and additional thoughts/comments response

Each section had 5-6 questions, with some follow-up questions to be used depending on how the discussions were going and if time allowed.

PROCESS:

Spitzack sent email message to all the above-mentioned invited participants
Interview dates were set and participants scheduled their desired day and time
Interviews conducted from 21-25 Aug 06
Data analyzed and report with interview results and recommendations submitted by 30 Sep 06.

Purpose of survey: To use the answers to help the team develop a systemic roll-out plan on how website needs will be met in the future.

Current website use:

15 persons interviewed – 10 Corps; 5 External

- Only 2 (Corps) used the website often (at least once a week); 1 for minutes & schedules; 1 to post info
- 4 (Corps) almost never used it
- 4 (External) used it occasionally (2-3 times/month) for minutes or schedules
- 1 (Corps) occasionally to get project status info
- 2 (Corps) used it occasionally for reference
- 2 (External) used it occasionally to see what's new
- 6 (1 Corps; 5 External) used it seldom (less than once a month)

Many interviewees stated that they used the website much more frequently when the Nav Study was in progress; now that it's concluded, they have much less occasion to use it.

Current website:

- Corps and partners current primary users
- Used for project status and reference material
- Repository of archival data
- Not well used

Nearly all feel that key stakeholders (internal Corps personnel and partners) are the primary current users and that they typically use it for project status and reference material. They agree that the website is an excellent repository of archival data. They also agree that the site is limited in terms of current information. Most felt that the general public uses it to some degree, but believe this use primarily occurred when the Nav Study was ongoing.

Website content:

- Accuracy and completeness – adequate or above
- Timeliness/currency - adequate or low

The first questions addressed satisfaction levels with the quality and timeliness of information currently on the website. The overall rating on a 1-10 scale, with 5 being "Adequate, but in need of moderate improvements", was a 4.8. The quality of the content, in terms of both accuracy and completeness, was rated adequate (generally meets my needs and expectations) or above (almost always meets my needs and expectations) by all who rated. The timeliness or currency of the content, however, seemed to be the area of most dissatisfaction. Only two interviewees rated it as adequate and eleven rated is as low (rarely meets my needs or expectations). Two had no rating. Details of the ratings are at Tab G.

Future website desires:

- General public should be primary or among primary users
- Campaign needed to help expand awareness and use
- Up-to-date calendar feature
- Link feature
- Geographically locate projects

The definition of "general public was quite varied and covered a broad range from people who are specifically involved in a project, to school children, colleges and universities, AE consultants, barge companies, potential contractors, fishermen, bird watchers, recreational craft owners, local communities, Congressmen, etc.

Several of the interviewees pointed out the fact that this breadth and diversity obviously present many challenges in that not only would this myriad of potential users have a myriad of needs (e.g., from a 2 or 3 sentence summary on the entire Mississippi River to in-depth information on one or more projects), but they would also, undoubtedly, have a myriad of personal computer skills and computer capabilities which would, naturally, affect downloading, video, graphics, etc. This thinking, of course, will need to be kept in the forefront throughout future design efforts.

Beyond the general public, there is less agreement on future users. More than one-half of the Corps interviewees discussed additional users both internal to the Corps and among other stakeholders. Two indicated they think there are new study teams that are not aware of the website's existence and three mentioned probable increased use by regional stakeholders if they had the capability to use it to keep track of meetings, schedules, etc. (i.e., an up-to-date calendar feature). Conversely, none of the interviewees external to the Corps discussed any additional users beyond the general public. (This, of course, does not mean they do not think there are other users, but simply suggests they, at best, would be a lower priority.) Further, three interviewees actually indicated with varying degrees of emphasis that a website should only be used by external people. (Responses relating to Current and Additional Users can be found at Tab E.)

Because of the range that exists in the perception of additional or future users, the ideas suggested for additional uses were also broad. (A list of additional use-related ideas is at Tab F.)

Most interviewees provided ideas that would appeal to the general public which correlates to the apparent agreement on the general public being the primary user. A few focused primarily on internal Corps use (e.g., tie into ProjectWise, provide decision support tools, etc.). Others

discussed sharing project data, etc., with partners.

While all the recommendations received concerning the website uses may be valid potential uses, **the fact that they are so varied suggests that more clarification or definition needs to be made concerning the website audience and also its purpose** — should it be an internal tool, an information sharing tool among partners, a marketing tool, an education tool, etc.?

Ideas concerning link-type features were the most abundant. Most interviewees recommended one or more links. Establishing links to various destinations was mentioned in one form or another by nearly all the interviewees, which suggests a high level of agreement and a high level of priority.

The capability to geographically locate projects (whether via a simple text listing or a highly interactive map or something in between) was also mentioned by several interviewees, although in somewhat different contexts – e.g., to see what is happening by pool, to key in on a specific project, to find information on a specific location, to find out the status of something, etc. Because it was mentioned by several people, it would also appear to be an area worth investigating further.

What one thing would change if time & money were no object?

- Timeliness/currency of info
- Easy, interactive access
- Visual appeal
- Widespread use

Recognizing that not all recommended changes will be made, interviewees were asked two "wrap up" questions to basically help prioritize their priorities. They were asked to identify the one thing they would change if time and money were no object. And, recognizing that time and money are, in reality, always constraints, interviewees were also asked to identify 2 or 3 things that could/should be a high priority within those limitations. The responses are at Tabs N and O, respectively.

Rather than cite a specific subject or one elaborate feature as their top priority, nearly all interviewees made more sweeping statements. Interestingly, however, the responses all again fell into four groups – Timeliness/currency of information; Easy, interactive access; Visual appeal; and Widespread use. These responses reflect a pattern that almost directly parallels the first four ideas on the prioritization matrix (Tab R). They are also consistent with the primary themes throughout the interviews and, ultimately, provide an even greater sense of overall prioritization agreement in these areas.

Timely/current information was, by far, the most frequently identified item in the second "wrap up" question also. The fact that this is a high priority issue is further supported by comments many interviewees made when asked what they felt the "worst" feature of the current site is – over one half made comments concerning a lack of timely/current information. (Tab P)

The timeliness/currency of information should be among the top, if not the top, item for consideration in developing the new website. This is true whether this involves some of the ideas suggested, like assigning one specific person or developing a formal protocol, or whether it involves something entirely different.

The overall priority of other ideas is somewhat less clear since they were mentioned by fewer interviewees. It is recommended that a list of these ideas be sent to the interviewees to review and prioritize – perhaps in terms of both their own needs and/or in terms of their perception of the needs of others. They could also be asked to provide copies of the list to colleagues, subordinates, or team members who would also be asked to prioritize. Similar efforts could be done via email, bulk mail, etc. In essence, the purpose would be 3-fold – to get a sense of priorities on these ideas, continue the involvement of the participants, and start to publicize and generate interest in the unfolding website.

Four common themes:

- Information must be current
- General public should be primary users
- Website requires more information
- Website should be more visually appealing

Four common themes seemed to prevail throughout the interviews. Probably the most prevalent is the idea that the information, must be current and must be maintained to remain current (specifically calendar related information but also "real time" information on project status, etc.). The second most prevalent idea is that the general public should be the primary users (or at least among the primary users). It appears, however, that the interviewees believe the website requires more information (and more current information) to really be used by that audience at this time. Along these same lines are the ideas that the website should be more visually appealing, that information needs to be easy to find and easy to access (not buried, just 2 "clicks" away), and the fact that the future website should be much more dynamic.

The recommendations resulting from the interviews are summarized below:

1) *It is recommended that decisions be made - via management directive, group consensus, or something in between – or, if already made, more clearly communicated concerning 1) the intended website audience(s) 2) the intended website purpose(s) and 3) whether the site will be a repository for information or a reference to it.*

2) *It is recommended that those responsible for the current site evaluate usage data (from this report and other available sources) to compare it with their intentions and assumptions concerning target audience(s), use(s), etc. If there are discrepancies, efforts need to be made to understand them so they can be avoided in future design efforts.*

3) *It is recommended that a simple geographic approach concerning content be taken in the*

short-term while an interactive map approach is evaluated in more detail. (See collaborative approach recommendation 5c below.)

4) *It is recommended that the content ideas (Tab H) that can easily be done (those for which current, up-to-date information is available and easy to add) be pursued in the near term. Determine who has information readily available and include it, but track it to ensure it is used enough to warrant its maintenance.*

5) *It is recommended that the collaborative "Help Us Grow" approach that was started with these interviews be continued to the greatest extent possible throughout the effort to help generate interest, solicit feedback/input, etc. Along these lines, it is further recommended that:*

a) the results, or at least a summary of the results, of these initial interviews be provided to those who participated and their comments solicited;

b) the idea to clearly separate old Navigation Study content from new content be verified by other interviewees/users and pursued in the near term if the majority agrees;

c*) a calendar feature be pursued, with interviewees (and, ideally, their peers, colleagues, etc., as well) being polled to determine more specifics and to find general consensus on calendar needs and features;*

d) the links features be pursued, with interviewees (and, again ideally, their peers, colleagues, etc.), determining any additional links, the appropriate prioritization, and other details of the effort;

e*) an interactive map feature be pursued, with partners, stakeholders, etc., providing input into how it should operate and what it should contain. In the interim, however, a simpler geographic approach to content, perhaps simple text listings, should suffice and is recommended;*

f) *the remaining ideas (Tabs F, H, J, and K) be "run by" the other interviewees (and perhaps their teams/colleagues as well) to comment on, determine breadth of appeal, and/or probable frequency of use, and further prioritize before decisions are made about adding them;*

g) as an incremental website development plan is designed, some method(s) of user involvement be built into each major phase of the plan before that major phase is finished.

6) It is recommended that the editorial feature not be pursued at this point. However, it should not be totally dismissed but, instead, put in the category of "future possibilities" and looked at again as further website development evolves.

7) It is recommended that a plan be developed to publicize the site and new, incremental "happenings" associated with it. The actual publicizing efforts, however, should not begin until some actions have been taken to make the site more current and, possibly, more appealing.

There is no absolute sequencing of actions that should be taken in following these recommendations. However, there are several that should be done before others and several that could be done simultaneously. The development of an incremental website development plan (Recommendation 5g) should be the first, or at least among the first, actions to be taken so that a clear path is established, time and resources can be planned, etc. Plans to publicize the site and new, incremental "happenings" (Recommendation 7) should be included in the development plan. The decision(s) concerning audience/content/purpose (Recommendation 1) should be made early on, as should the ideas to send out the interview results and solicit agreement on separating old information from new information (Recommendations 5a and 5b, respectively.) Similarly, the recommendations to evaluate usage data and set up a geographic approach (Recommendations 2 and 3) should also be early activities. Evaluation of usage data, however, should be a continual effort to ensure the website is reaching its targeted audience. The addition of the content ideas (Recommendation 4) could then be done using the geographic approach.

The recommendation concerning the calendar feature (5c) should also be pursued as soon as possible since it is an avenue to bring users to the website for fairly frequent use and could then be used to also introduce/expose these users to other new features. This should not be pursued, however, until decisions have been made that will enable this feature to be kept current — e.g., assigning a responsible individual, developing a protocol, etc.

The links feature, the interactive map, and the additional content ideas (Recommendations 5d, 5e, 5f) are areas that will undoubtedly take more time and that should involve more collaboration. They could be pursued sequentially or simultaneously, depending on time, resources, input from interviewees and other users, etc. These are areas, however, that should not be static — i.e., once they are set up, there will be new links to add, old links to remove, new projects, etc., to add to the map, etc. So they should not be viewed as 'one time' actions.

The editorial features (Recommendation 6) should be revisited as further website development evolves.

UMRS Navigation and Ecosystem Sustainability Program

Ecosystem Restoration and Management Planning (Reach Planning)

Presentation to the NECC

11/14/06 – La Crosse, WI

ECOSYSTEM RESTORATION COMPONENT	$3,700,000
J. Ecosystem Restoration Plan	$400,000
K. Ecosystem Adaptive Management	$870,000
L. Sytemic Cultural Stewardship	$150,000
M. Forest Management	$110,000
N. Fleeting Plan	$70,000
O. Pool 11 Islands	$10,000
P1. Fish Passage - L&D 26	$325,000
P2. Fish Passage - L&D 26	$325,000
Q2. Flooplain Restoration - Root River, MN	$0
Q3. Flooplain Restoration - Pierce County, WI	$0
Q4. Flooplain Restoration - Emiquon West, IL	$100,000
R1. Pool Water Level Management - Pool 5	$160,000
R2. Pool Water Level Management - Pool 9	$40,000
R3. Pool Water Level Management - Pool 18	$150,000
S. Backwater Restoration - IWW Peoria Reach	$150,000
U1. Side Channel Restoration - Buffalo Island	$150,000
U2. Side Channel Restoration - Scheniman Chute	$10,000
V1. Wing-Dam Dike Alteration - Herculaneum	$170,000
V2. Wing-Dam Dike Alteration - L&D 2	$35,000
W. Island Shoreline protection	$100,000
X. Dam Point Control - L&D 25	$225,000
Y. Dam Embankment Lowering - L&D 8	$150,000

NESP Ecosystem Restoration and Management Plan

US Army Corps of Engineers

Primary Initiatives

- Proving ground (sandbox) for:
  - Planning Process
  - Reach Implementation Plan
  - Monitoring Plan

Project Extent

- Pool 5
- Pool 18
- Harlow Reach (RM 128-164)

US Army Corps of Engineers

Building Blocks

- Corps Planning Process
- EMP Experience
- Navigation Study
- Adaptive Management Theory & Practice

Planning Process

Establish Planning Team

↓

Assess Information Needs

↓

Develop Baseline Monitoring Plan

↓

Describe Existing Ecosystem Conditions = Inventory Conditions (Step 2)

↓

Forecast Ecosystem Condition = Forecast Conditions (Step 2)

↓

Inventory and Review Ecosystem Objectives = ID Problem & Opportunity (Step 1)

↓

Identify Potential Restoration Measures

↓

Develop Project Sequencing Alternatives = Formulate Alternative Plans (Step 3)

↓

Develop Project and Reach Monitoring Alternatives

↓

Evaluate Project and Reach Alternatives = Evaluate Alternative Plans (Step 4)

↓

Compare Project and Reach Alternatives = Compare Alternative Plans (Step 5)

↓

Select Project and Reach Alternatives = Select Plan (Step 6)

US Army Corps of Engineers

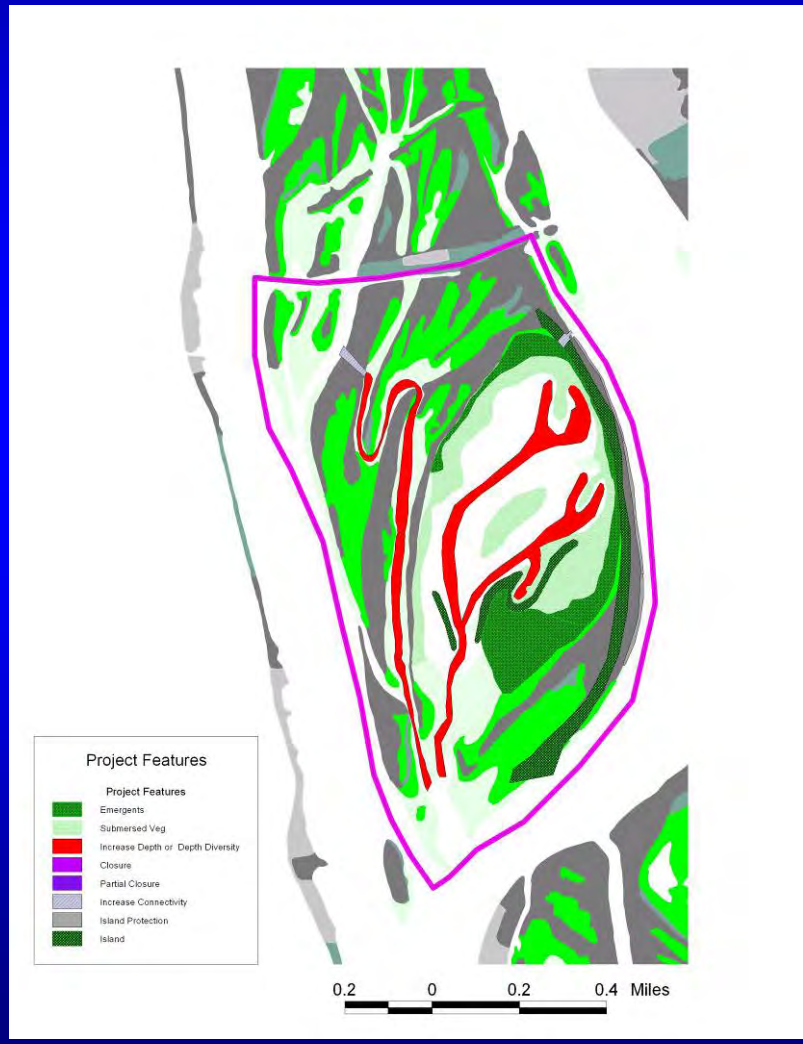
Planning Scales

- Site/Project
- Sub-Area
- Pool
- Geomorphic Reach

US Army Corps of Engineers

Site/Project Scale

- Traditional planning guidance
- 35/65% design
- Traditional benefits evaluation/cost analysis
- Site specific monitoring/performance evaluation



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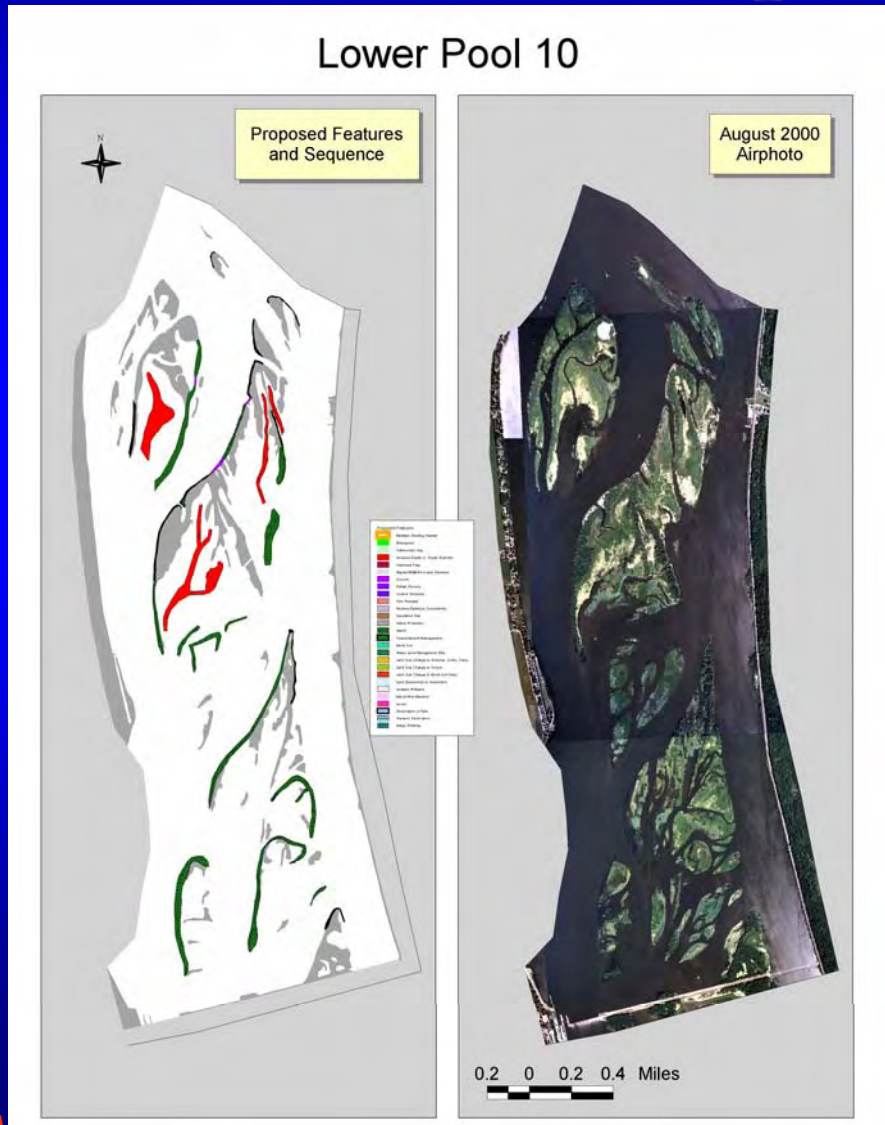
Sub Area Scale

- Reach Planning Framework
- <35% design
- Non-Quantitative Evaluation – Restoration Priority (H, M, L)
- Coordinated or Reach Monitoring



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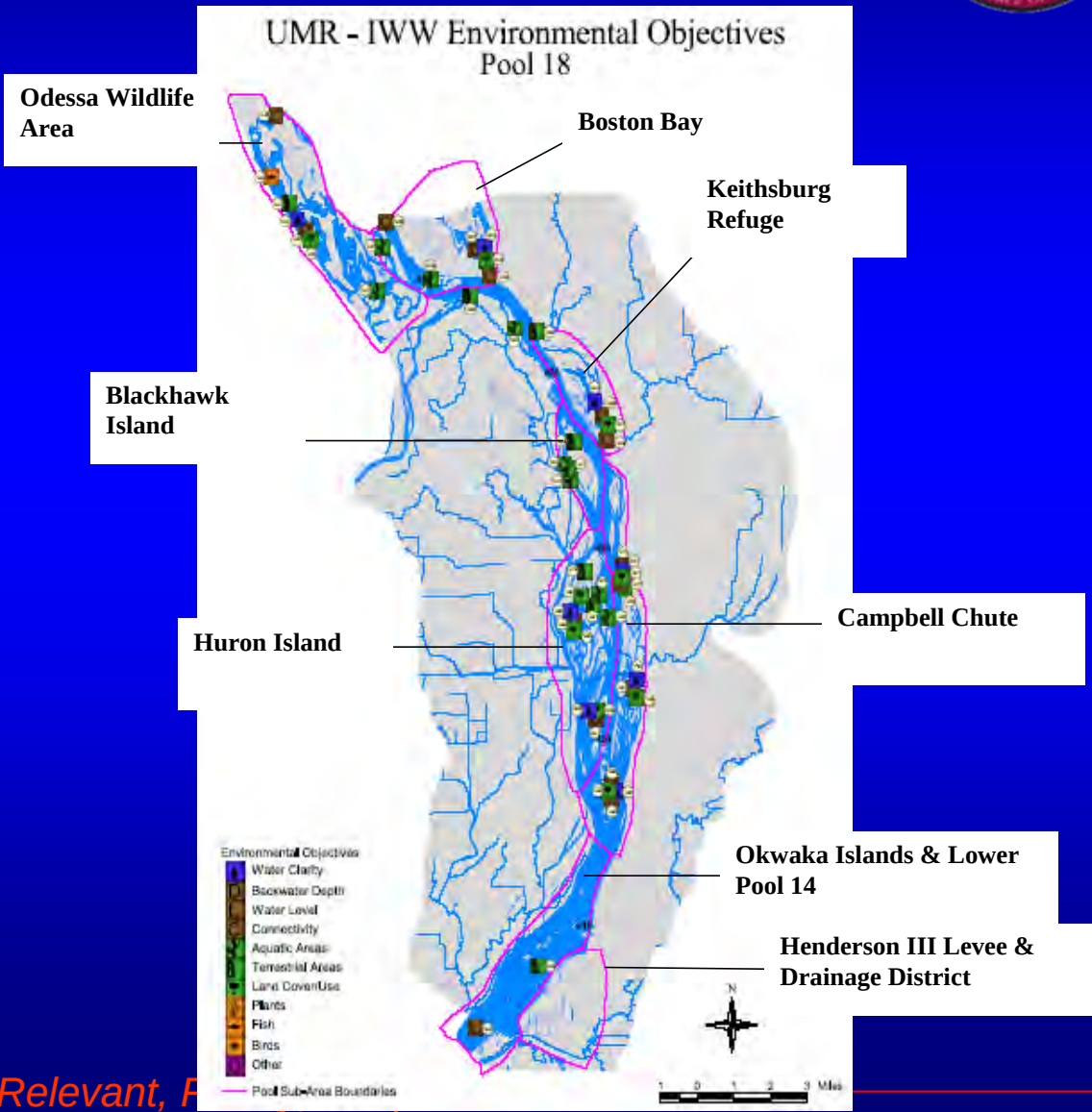
Pool Scale

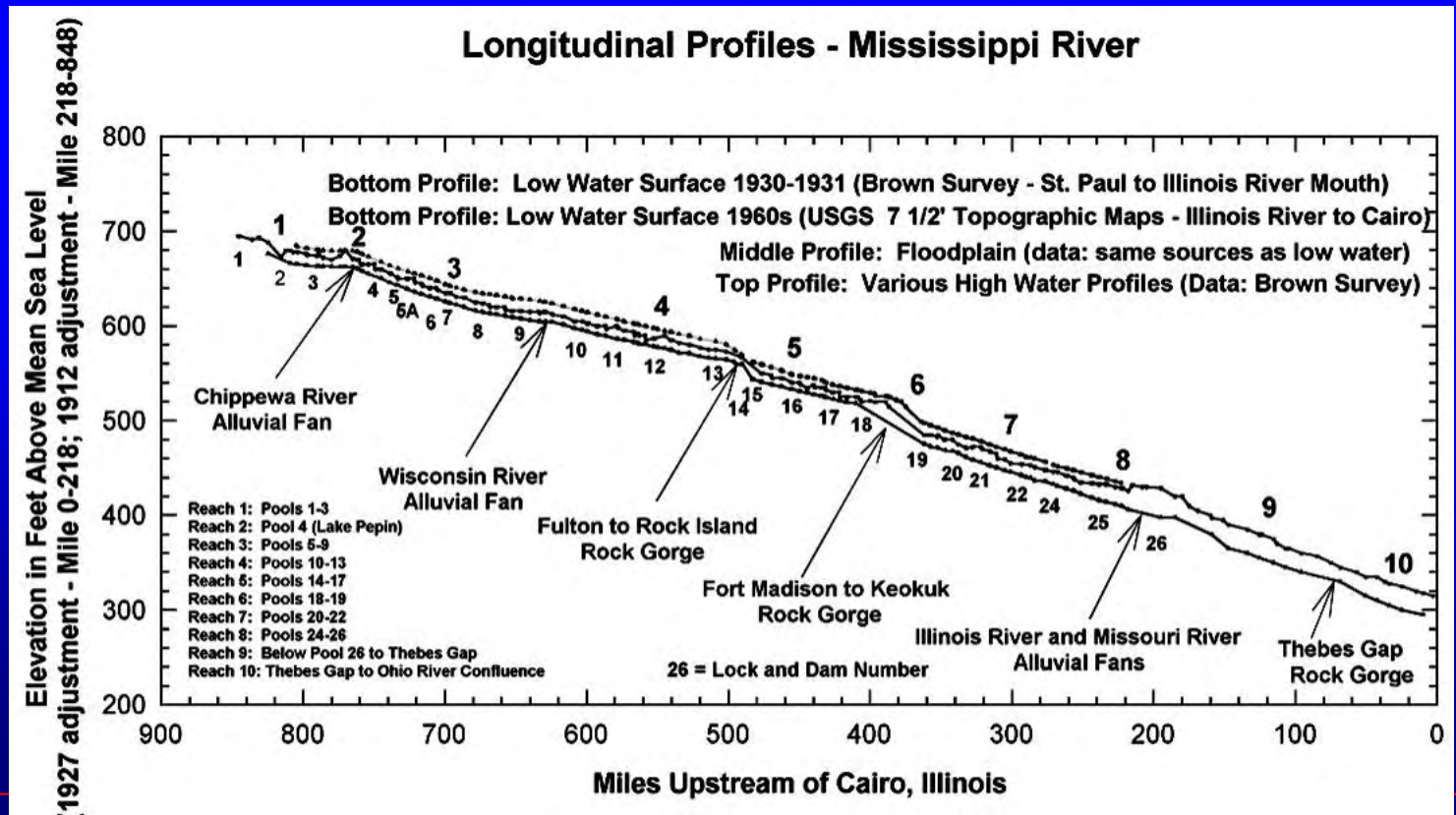
- Reach Planning Framework
- <35% design
- Non-Quantitative Evaluation – Restoration Priority (H, M, L)
- System or Reach Monitoring



Geomorphic Reach Scale

US Army Corps of Engineers

- Reach Planning Framework
- <35% design
- Non-Quantitative Evaluation – Restoration Priority (H, M, L)
- System or Reach Monitoring



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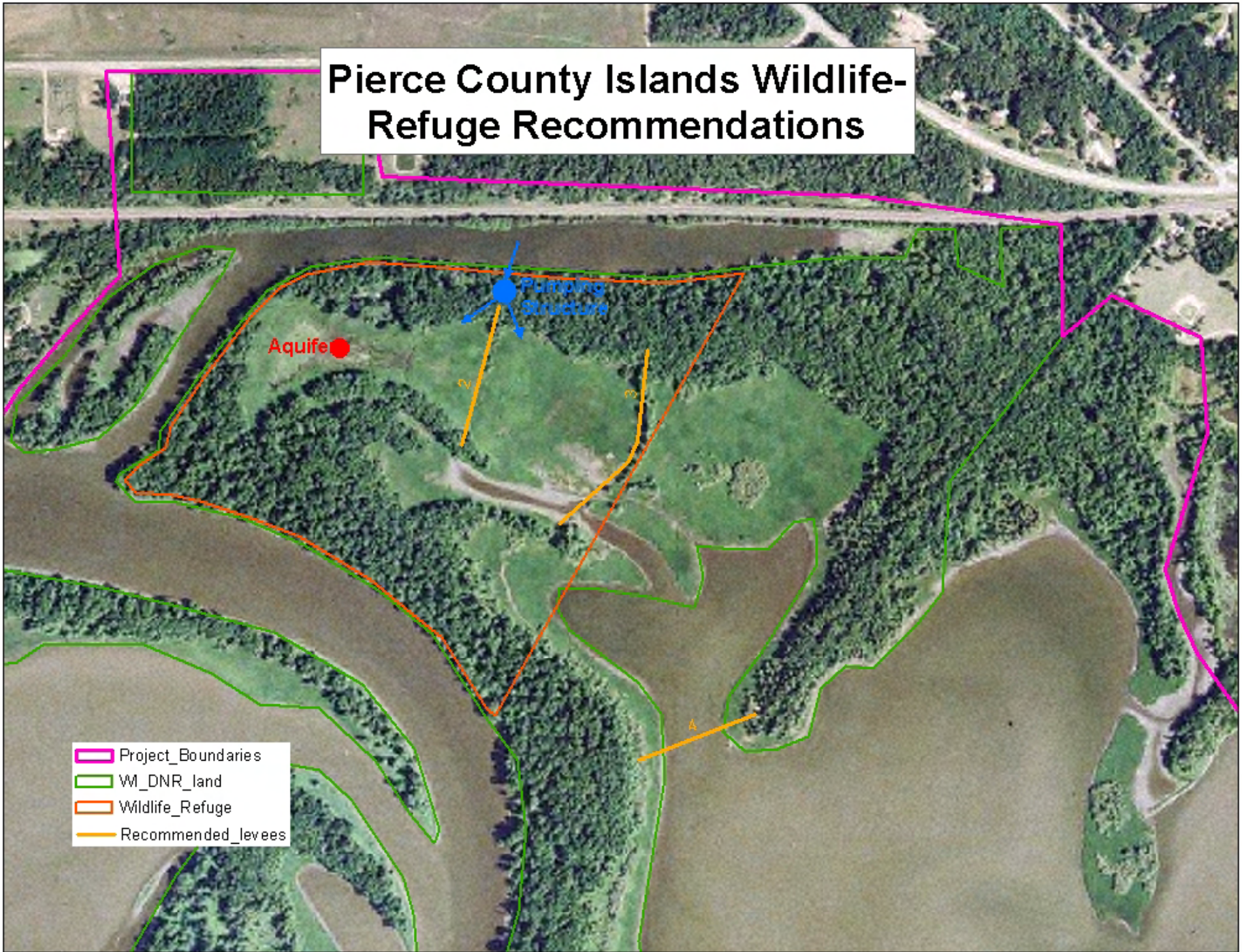
Pierce County Islands Wildlife-Refuge Recommendations
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Aquifer
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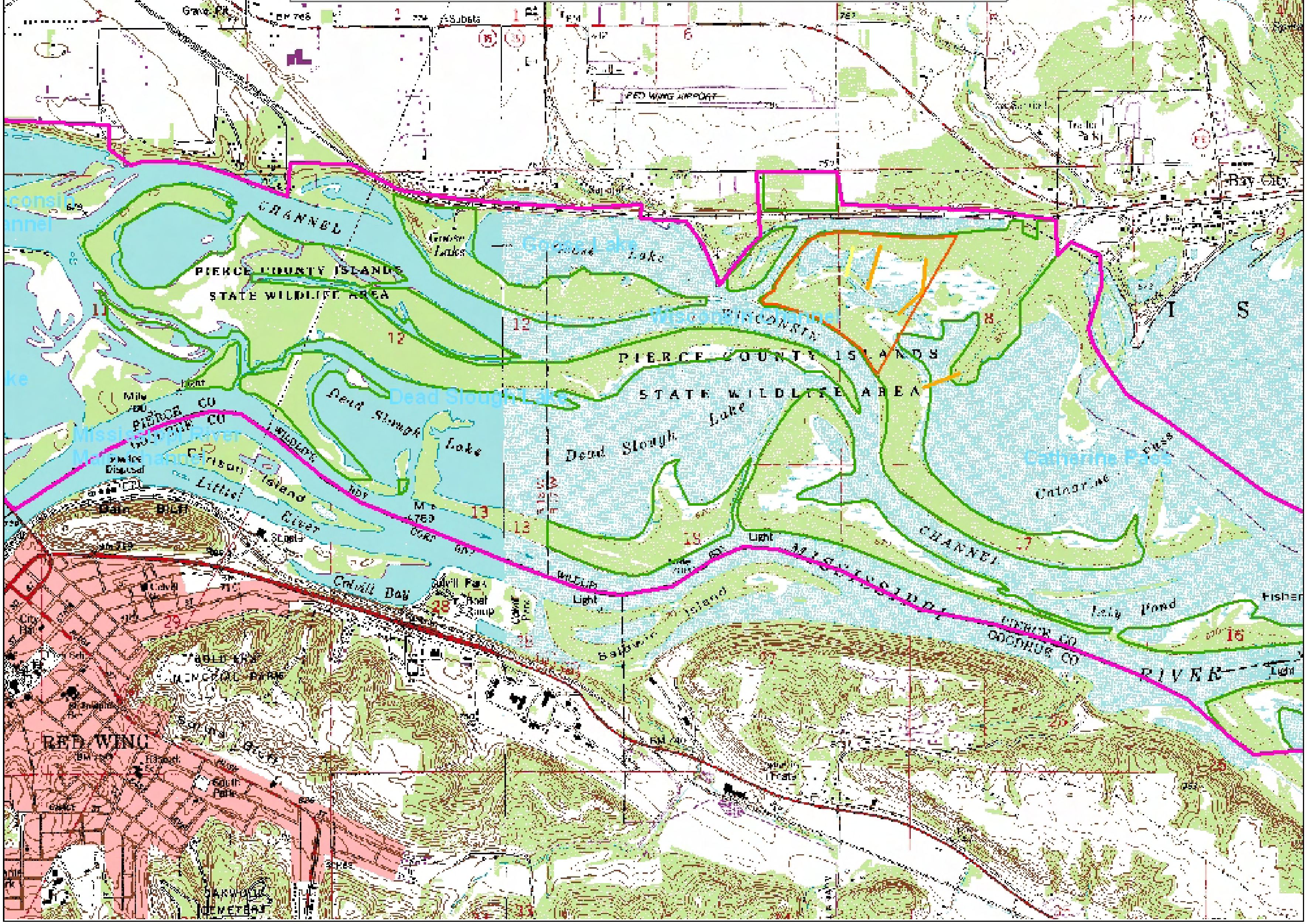
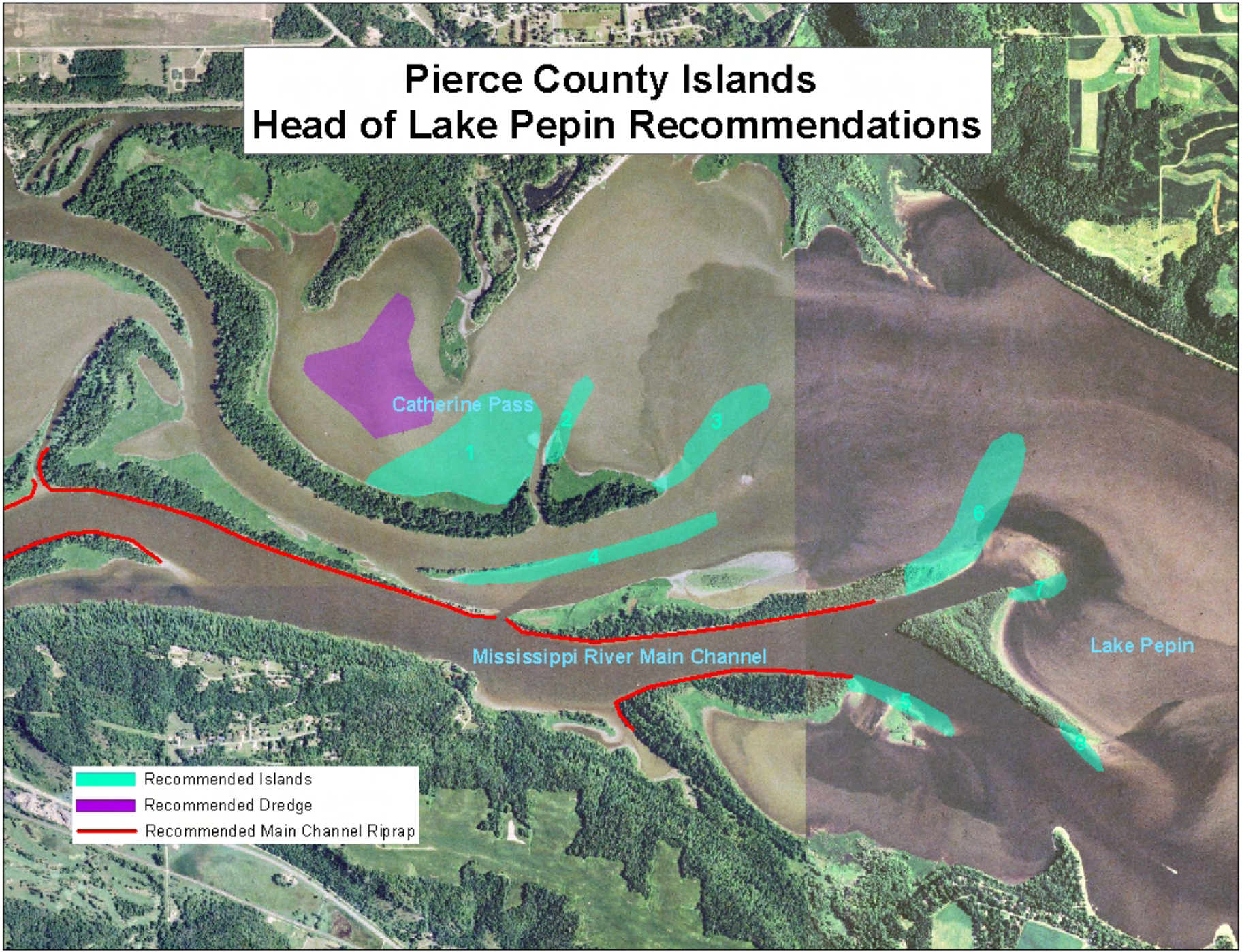
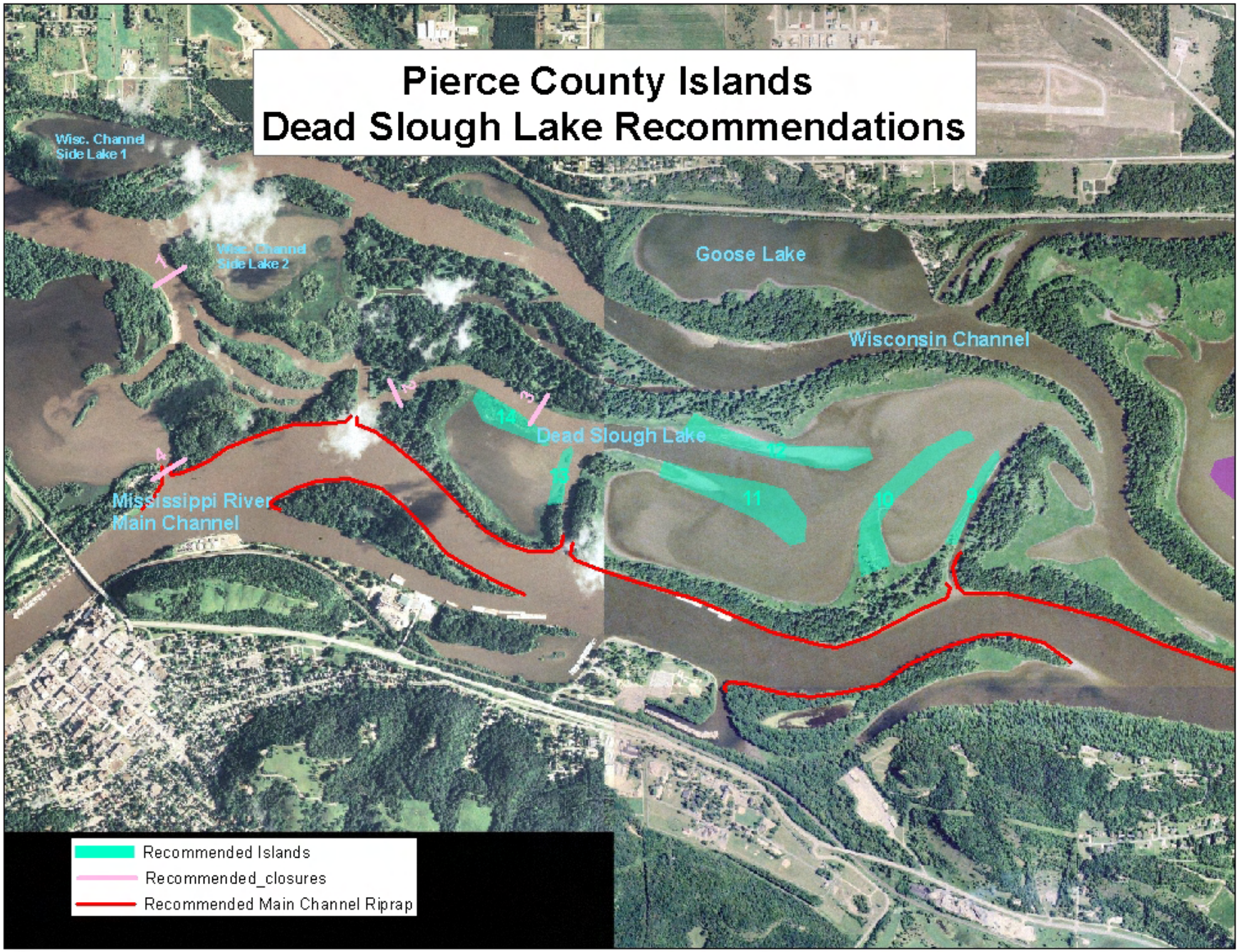
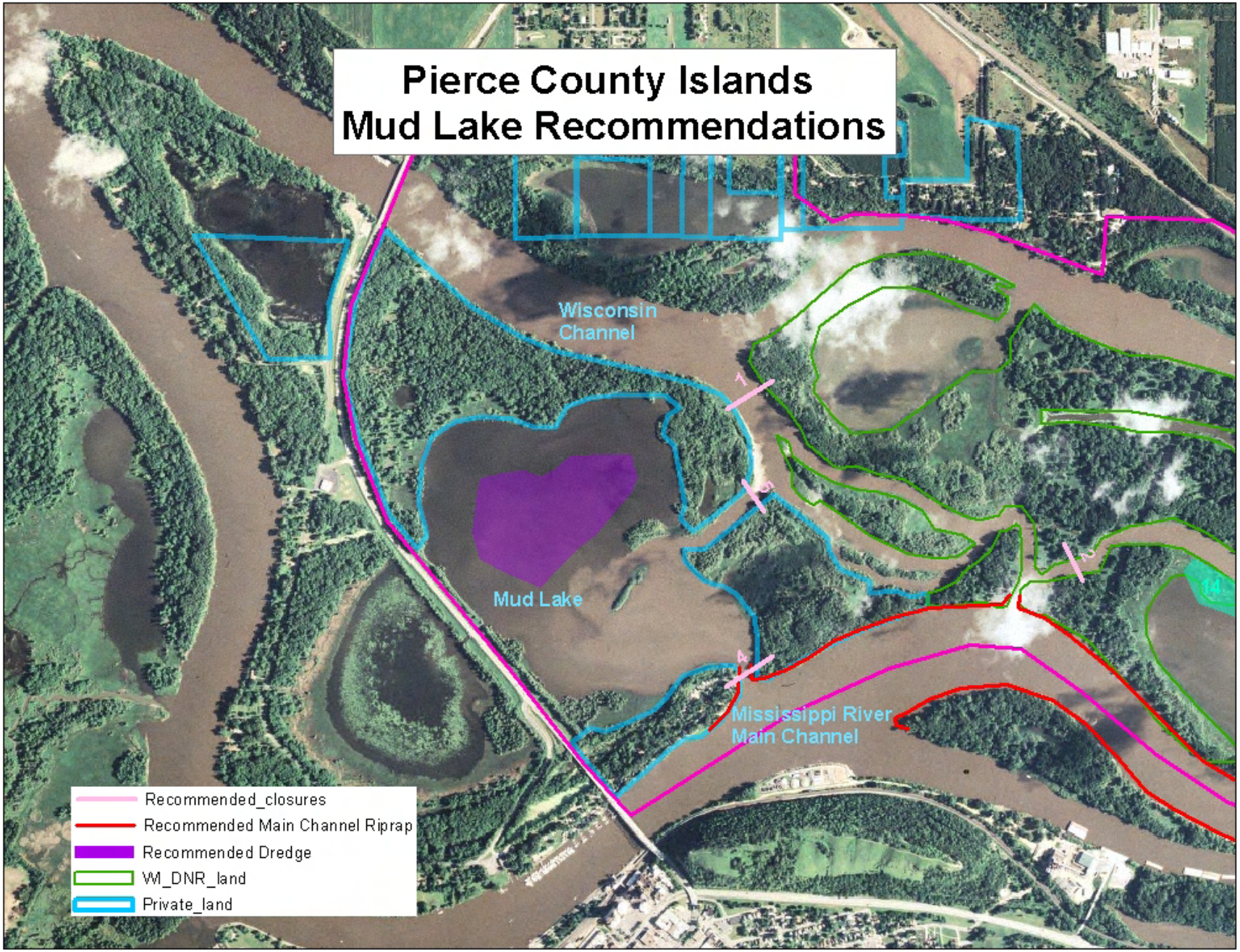
Wildlife_Refuge
Recommended_levees

Pierce County Islands Wildlife Area




Pierce County Islands
Head of Lake Pepin Recommendations
Catherine Pass
1
2
3
4
5
6
7
8
Mississippi River Main Channel
Lake Pepin
Recommended Islands
Recommended Dredge
Recommended Main Channel Riprap


Pierce County Islands
Dead Slough Lake Recommendations
Wisc. Channel Side Lake 1
Wisc. Channel Side Lake 2
Goose Lake
Wisconsin Channel
Dead Slough Lake
Mississippi River Main Channel
1
2
3
4
9
10
11
12
13
14
Recommended Islands
Recommended_closures
Recommended Main Channel Riprap


Pierce County Islands
Mud Lake Recommendations
Wisconsin Channel
Mud Lake
Mississippi River Main Channel
Recommended_closures
Recommended Main Channel Riprap
Recommended Dredge
WI_DNR_land
Private_land

Towboat Propeller Study

Summary of Findings
As of September 2006

The number and species of fish potentially entrained through an operating towboat propeller are being evaluated as part of the Upper Mississippi - Illinois River Navigation Improvement study. These data will be used to estimate seasonal, propeller-induced mortality rates of juvenile and adult fish under different navigation traffic scenarios. In cooperation with the American River Transportation Company, a subsidiary of Archer-Daniels-Midland Corp., the current study is being conducted with a 5,400 HP towboat (MV *American Beauty*) with Kort nozzles pushing 15 loaded barges upstream. A similar study using only 3 unloaded barges was conducted in 2002-2003 using a 3,000 HP towboat (MV *Cooperative Venture*) with open wheels. Entrained fish are being collected with a specially designed net deployed from the stern of the vessel that filters the propeller wash while withstanding turbulent forces (Figure 1).

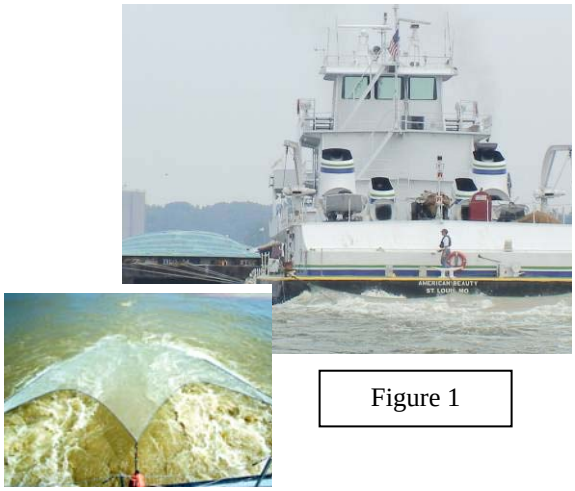


Figure 1

During 2006, spring and summer sampling has been completed in the Upper Mississippi River between Lock and Dams 26 to 14 and the Illinois River between Alton and Marseilles Pools. A total of 215 river miles were sampled during this time period. Gizzard shad and freshwater drum are the dominant species being entrained by towboat propellers. Higher propeller mortality is evident with the Kort nozzle compared to open wheels. Mortality for these two species directly attributed to the propeller is less than 2%, but up to 23% have exhibited some type of net-related damage (e.g., heads stuck in webbing, eye damage, frayed fins) (Figure 2). The majority of shad and drum entrained through propellers are not being killed or injured, at least in terms of instantaneous mortality.

Figure 2

Other species struck by the propeller have also been captured including buffalo, paddlefish, shovelnose sturgeon, and bighead carp (Figure 3). These species are rarely encountered, but when they are, multiple individuals are usually collected in a single trawl sample. Their size makes them particularly vulnerable to propeller strikes.

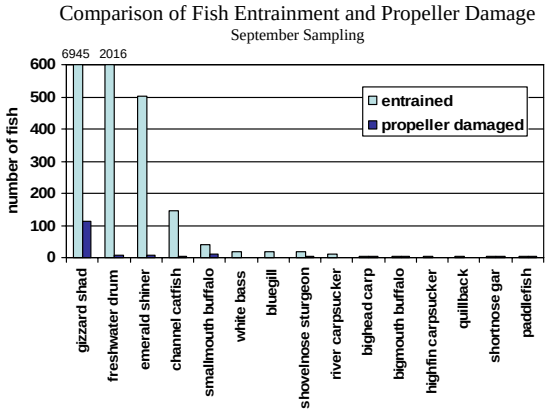
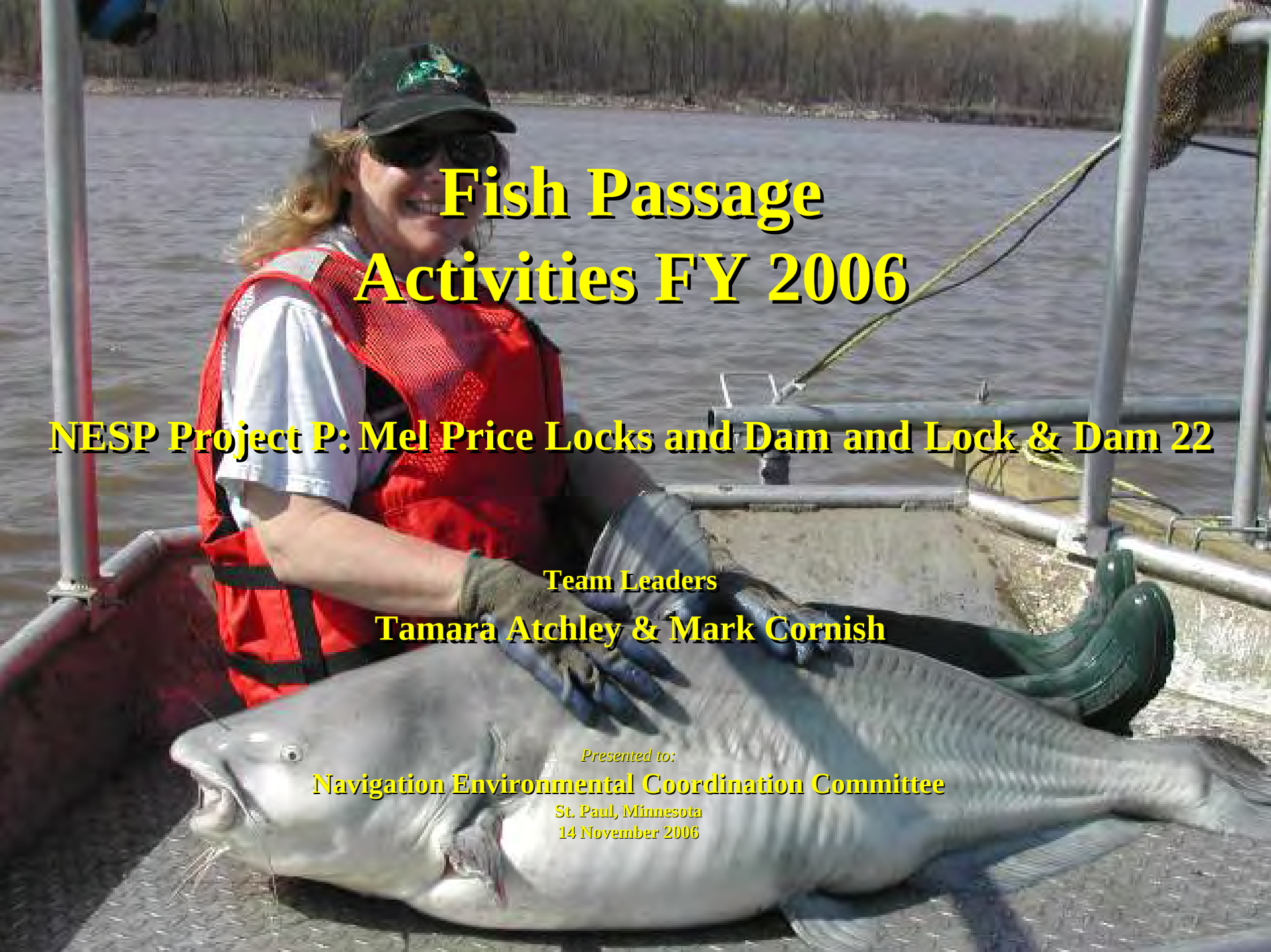


Figure 3

Sampling will continue for autumn and winter seasons, and will be expanded into the Middle Mississippi River. Population models will be developed for susceptible species to evaluate the magnitude of propeller-related mortality on recruitment and abundance.



Fish Passage Activities FY 2006

NESP Project P: Mel Price Locks and Dam and Lock & Dam 22

Team Leaders

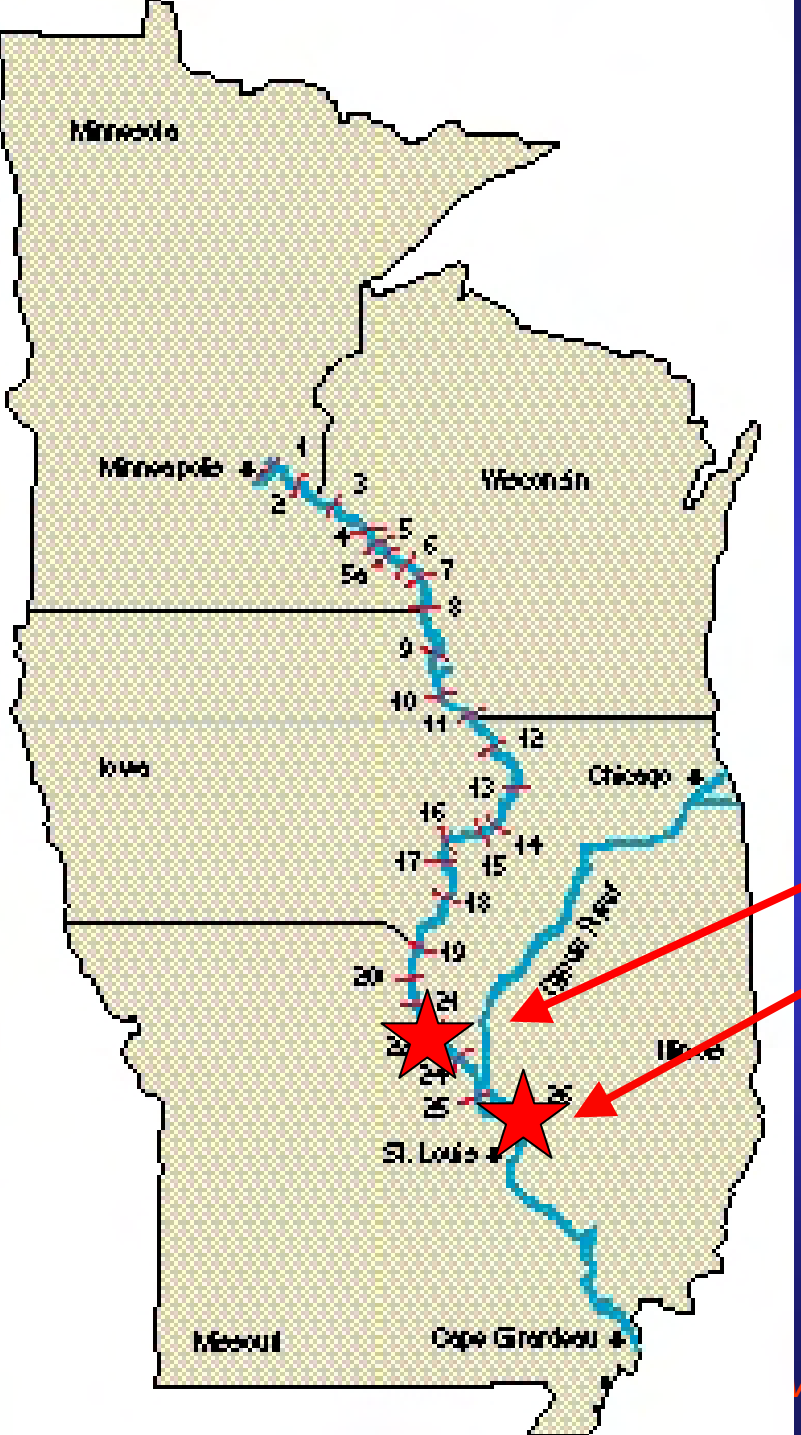
Tamara Atchley & Mark Cornish

Presented to:

Navigation Environmental Coordination Committee

St. Paul, Minnesota

14 November 2006



Projects Started In 2005

- Lock & Dam 22
- Mel Price Locks & Dam

Project Goals

Goal – Increase the opportunity for fish passage through the dam, thereby increasing access to upstream habitats which should result in an increase in the size and distribution of native migratory fish populations

Goal – Monitor, evaluate, learn, and adapt future fish passage projects using lessons learned from these initial projects

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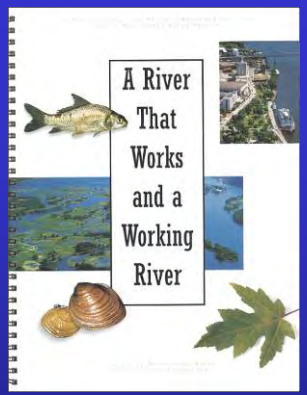
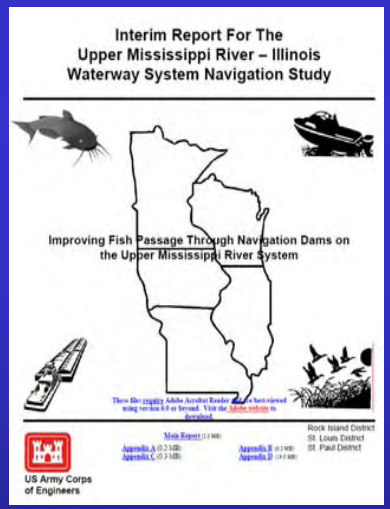
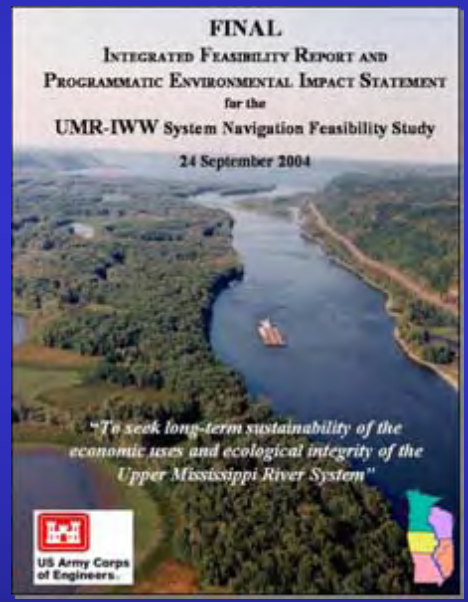
Status





ENV Report 54



Feasibility report With PEIS

Project Implementation Report (PIR)

With

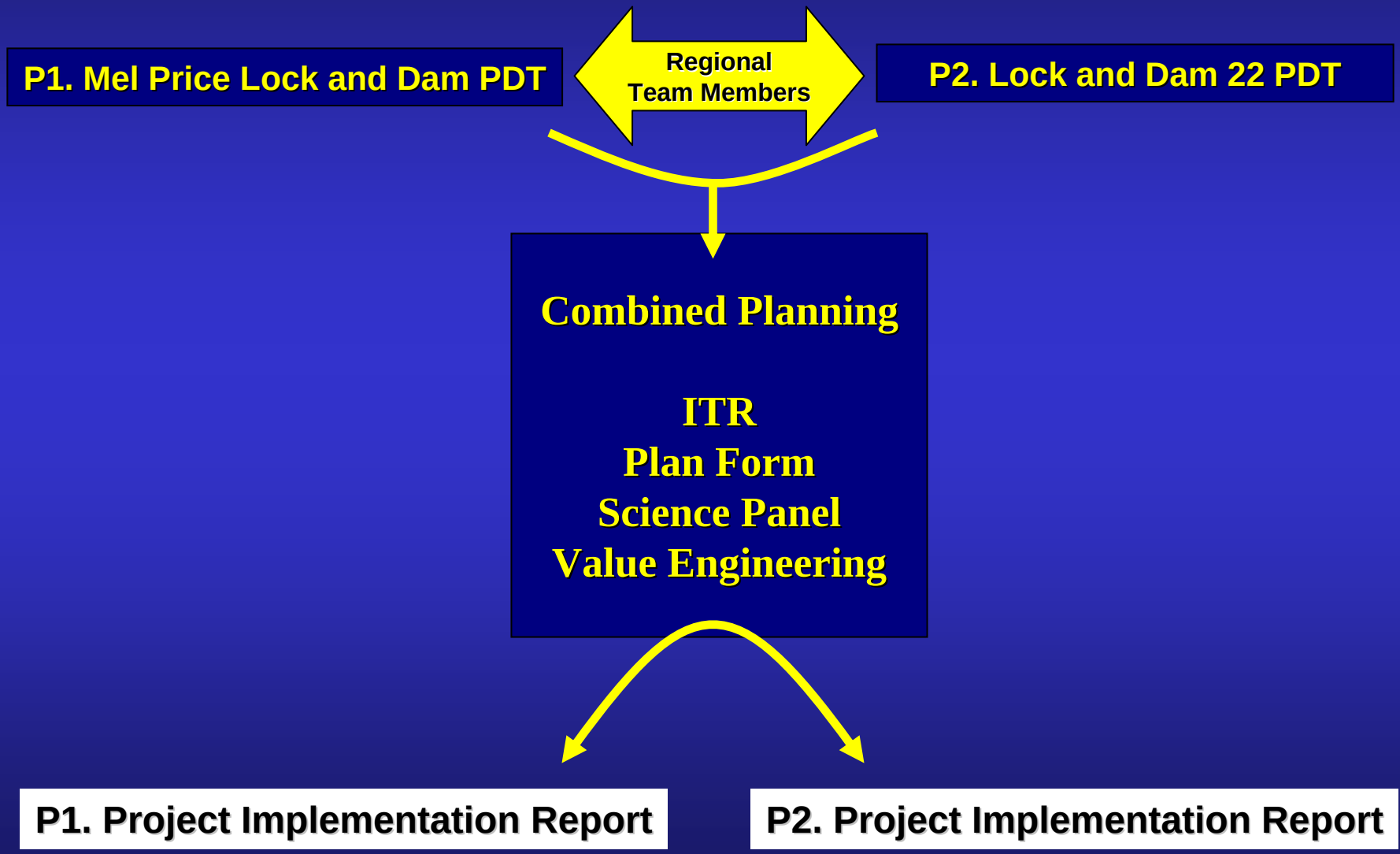
Supplemental

Environmental

Assessment (SEA)

Mel Price, Lock and Dam 22

Project Delivery Team (PDT) Structure



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Risk and Uncertainty Reduction Plan

Pre construction studies

Gain information needed for project planning and design

Construction monitoring

Determine if physical performance measures are met

Project performance monitoring

Determine if project objectives are met

Risk and Uncertainty Reduction Study Schedule for fish passage projects (conceptual)

Monitoring Activity	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Goal 1										
Study 1.1 – Geotech Recon	X									
Study 1.2 - Fish aggregations in tailwater	X	X	X	X	X	X	X	X		
Study 1.3 – Hydraulic conditions at aggregation area		X								
Goal 2										
Study 2.1 – Fish movement thru gate openings & lock		X	X	X	X	X	X			
Study 2.1 – Carp capture (if needed)					X	X	X	X	X	X
Goal 3										
Study 3.1 – Telemetry		X	X	X	X	X	X	X	X	X
Goal 4										
Study 4.1 - Configuration of the downstream opening				X	X					
Goal 5										
Study 5.1 - 2-D hydraulic model	X	X				X				
Study 5.2 - Physical Model (if needed)			X							
Study 5.3 - Water quality monitoring				X	X					
Study 5.4 - as-built survey - bathymetry					X	X		X		X
Study 5.5 - ADCP surveys of fishway					X	X		X		X
Study 5.6 – Structural survey of fishway toe					X	X		X		X

Construction represented by green

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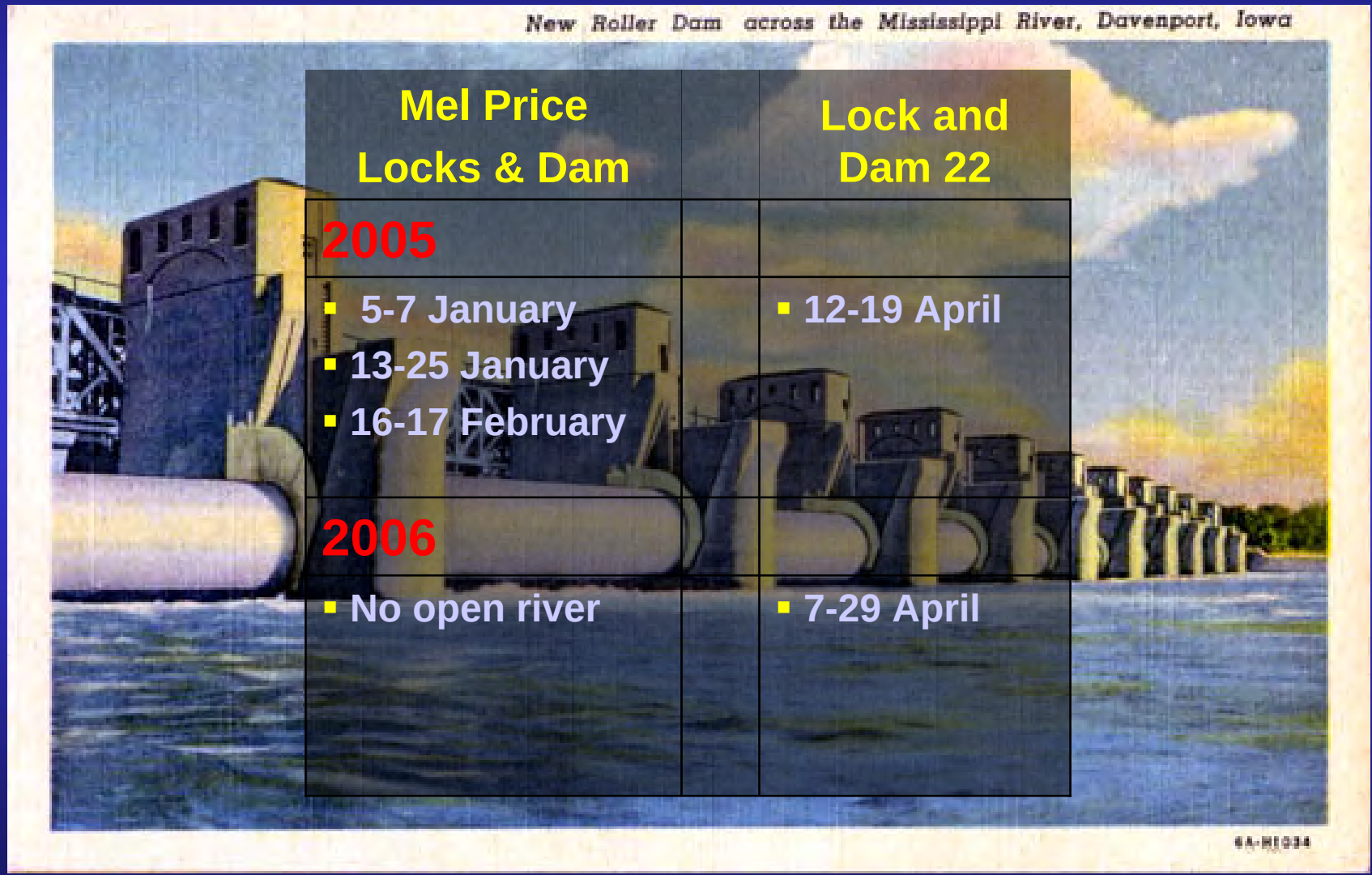
Open River Existing Conditions

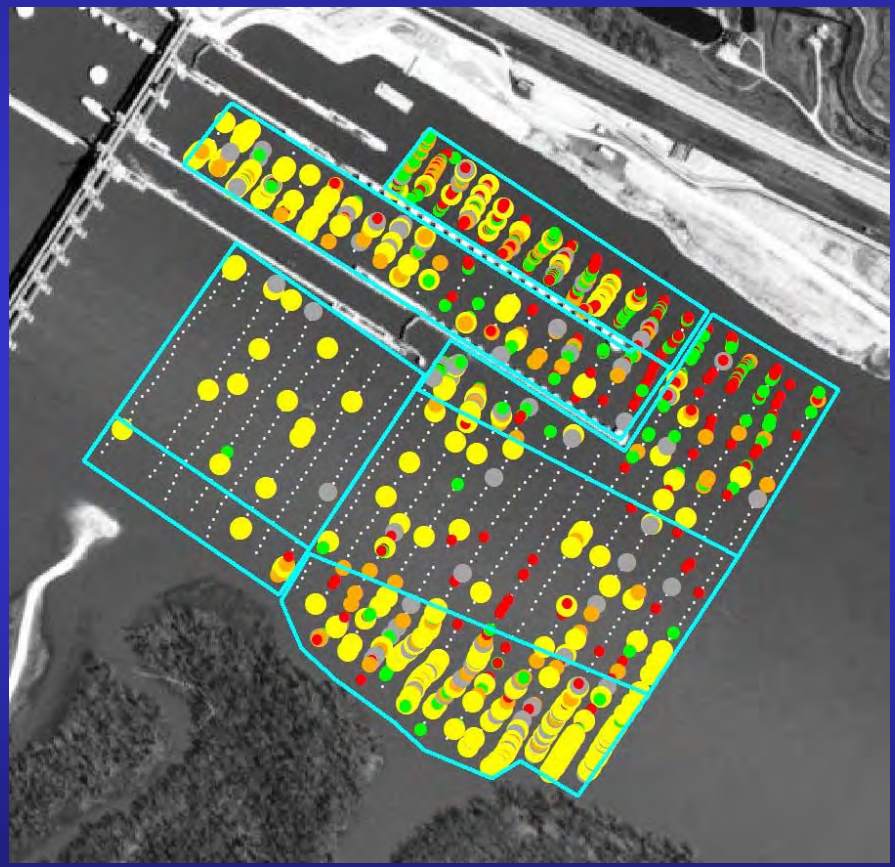


Mel Price Locks & Dam	Lock and Dam 22
2005	
▪ 5-7 January ▪ 13-25 January ▪ 16-17 February	▪ 12-19 April
2006	
▪ No open river	▪ 7-29 April


Mel Price Locks and Dam
Illinois
600’ Lock
Flow
1200’ Lock
Missouri

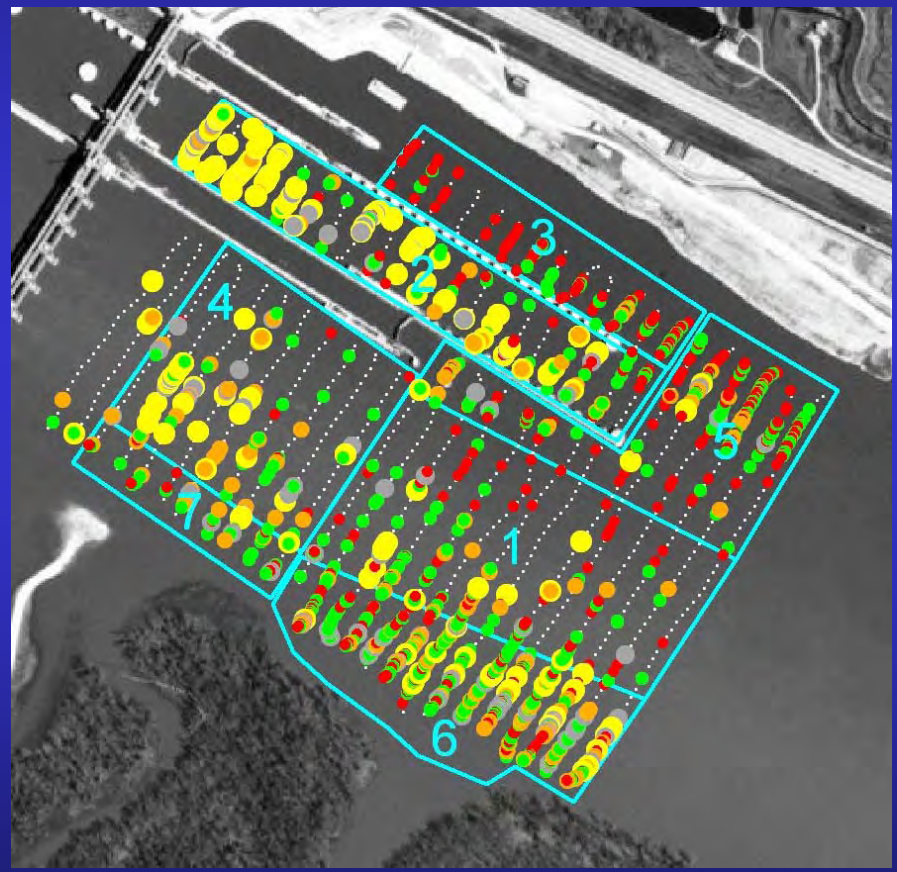
2005 Mel Price Hydroacoustic Monitoring

5 May



Population Estimate = 241,267

1 November



Population Estimate = 216,050

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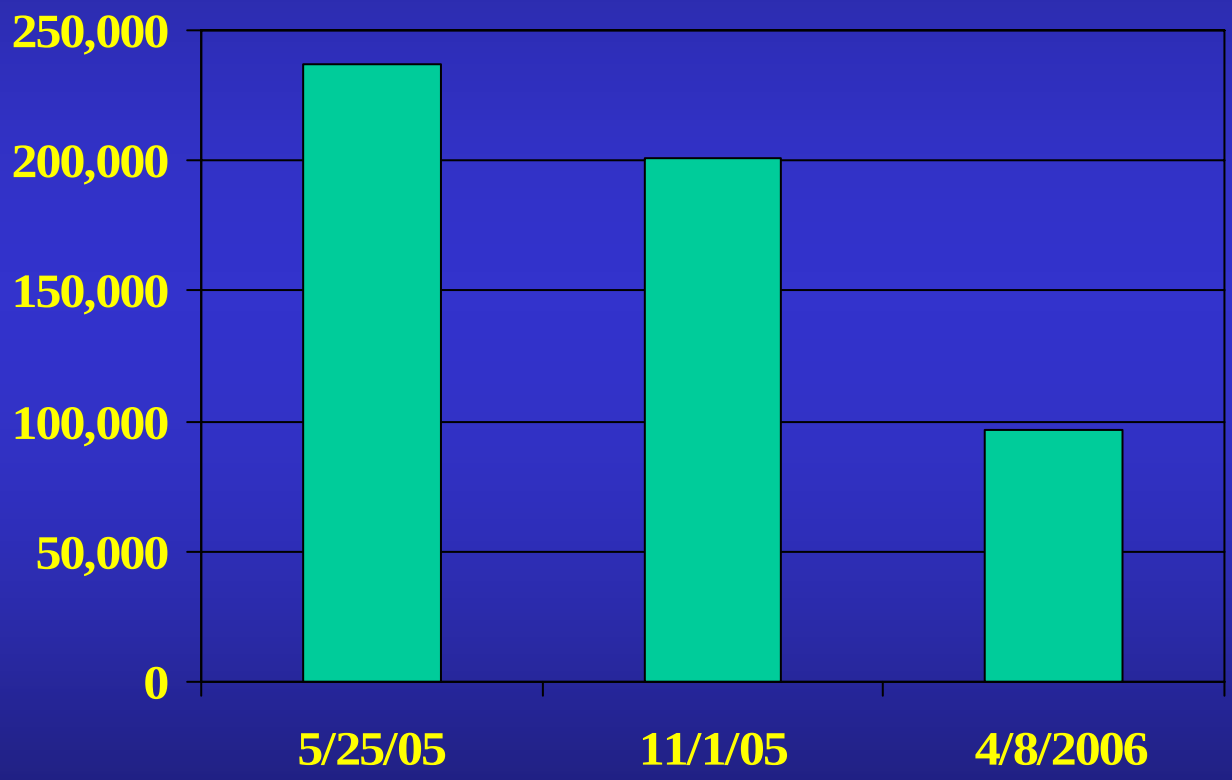
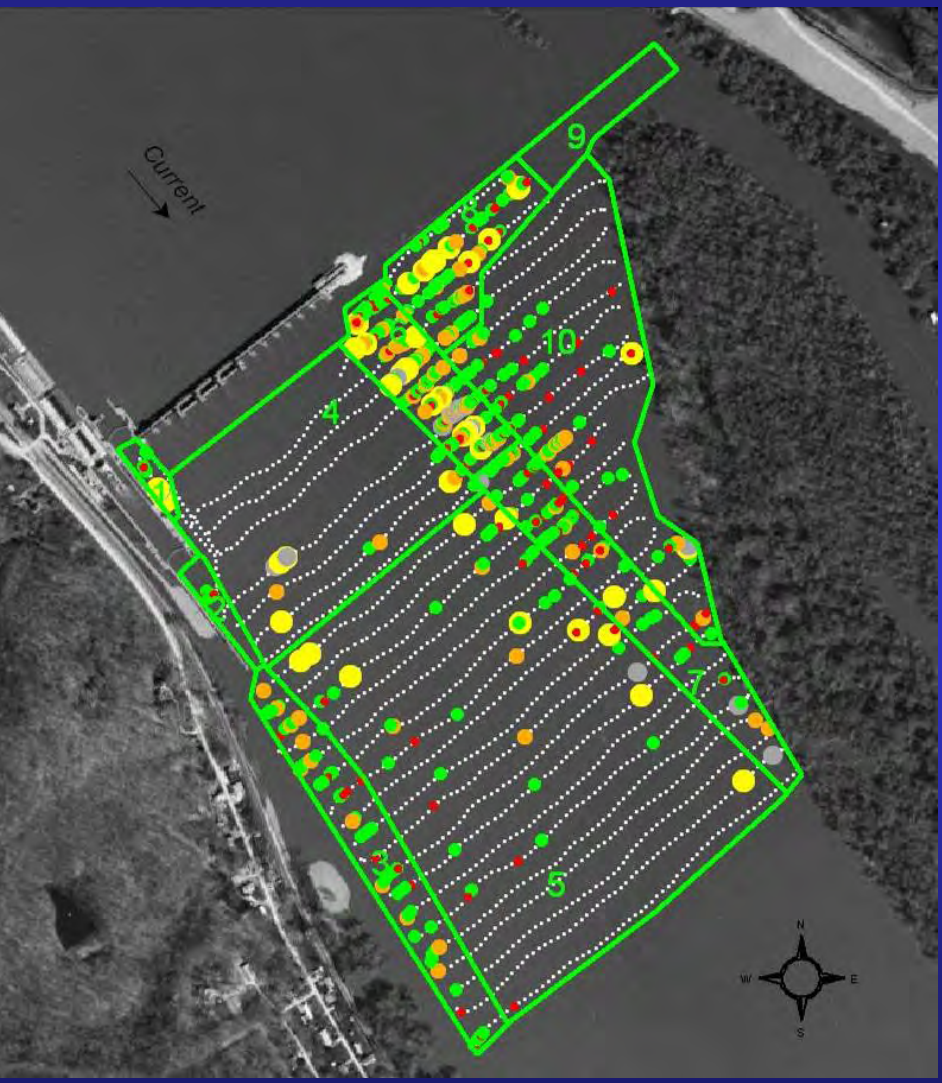
Mel Price Population Est.



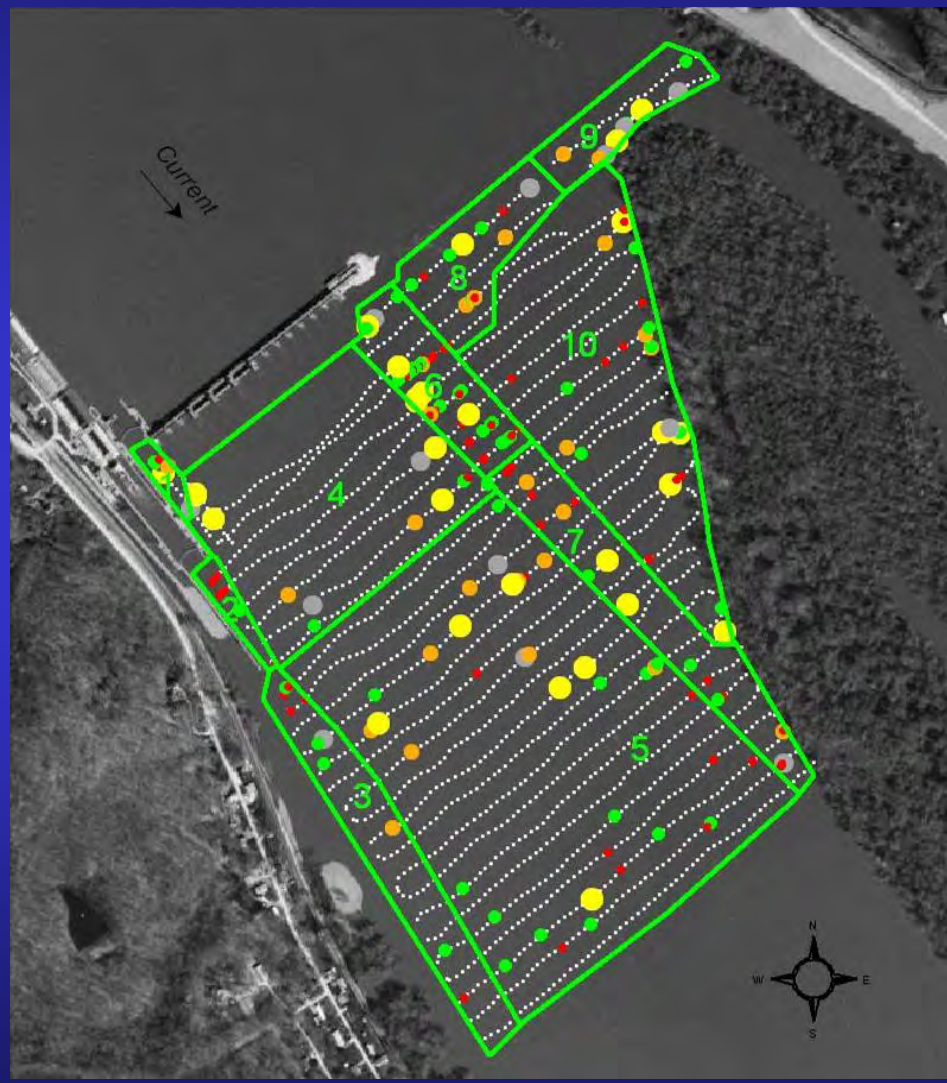
2006 L&D 22 Hydroacoustic Monitoring

7 April



Population Estimate = 85,578

9 May



Population Estimate = 21,265

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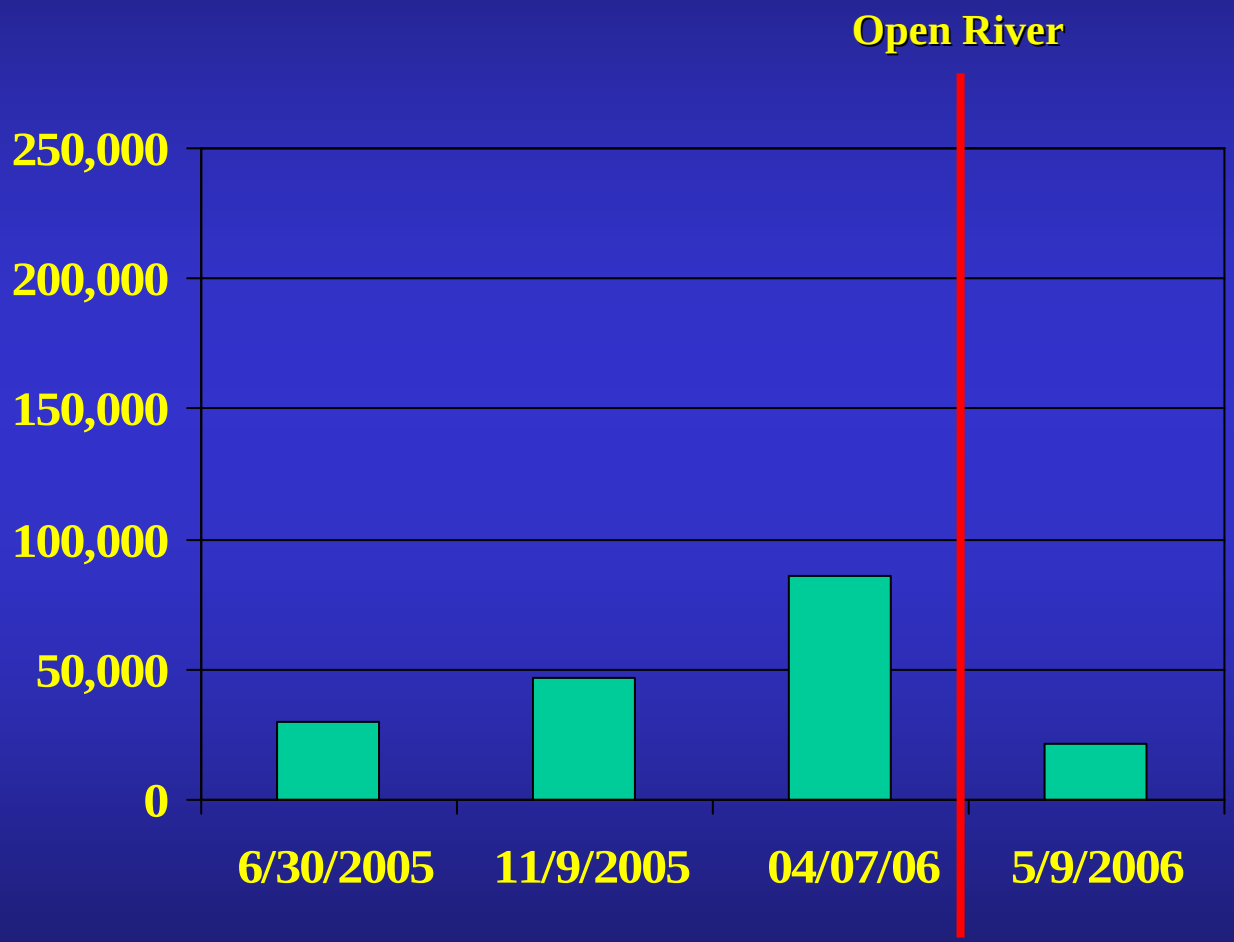
L&D 22 Population Est.



2006 Telemetry

Lock & Dam 22

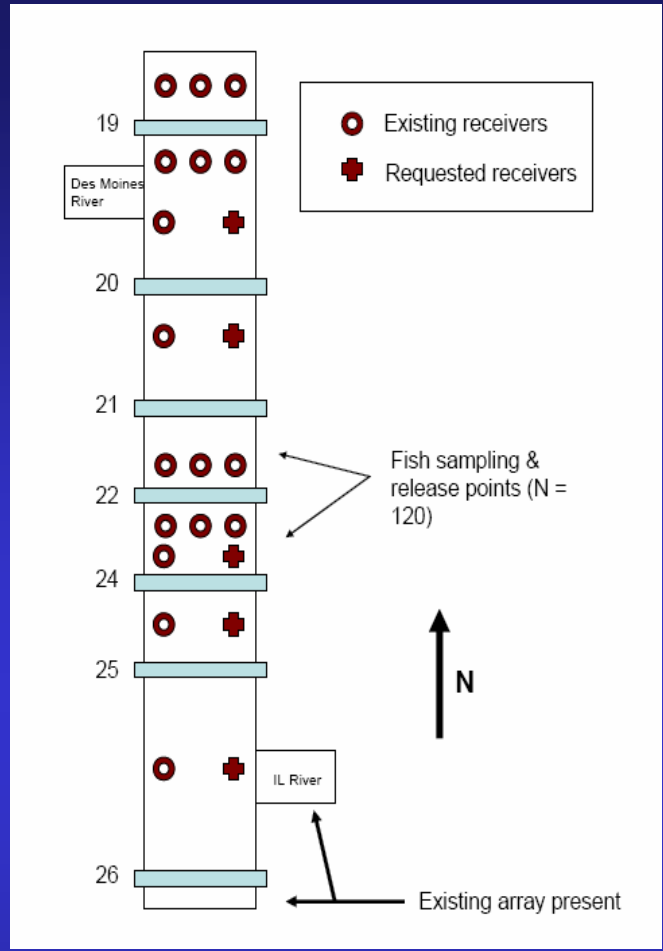
120 tagged fish at L&D 22 in 2006

Mel Price Locks and Dam

Acquired equipment for FY07 initiation of study

Species

paddlefish
shovelnose sturgeon
white bass
silver carp
skipjack herring*



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Features

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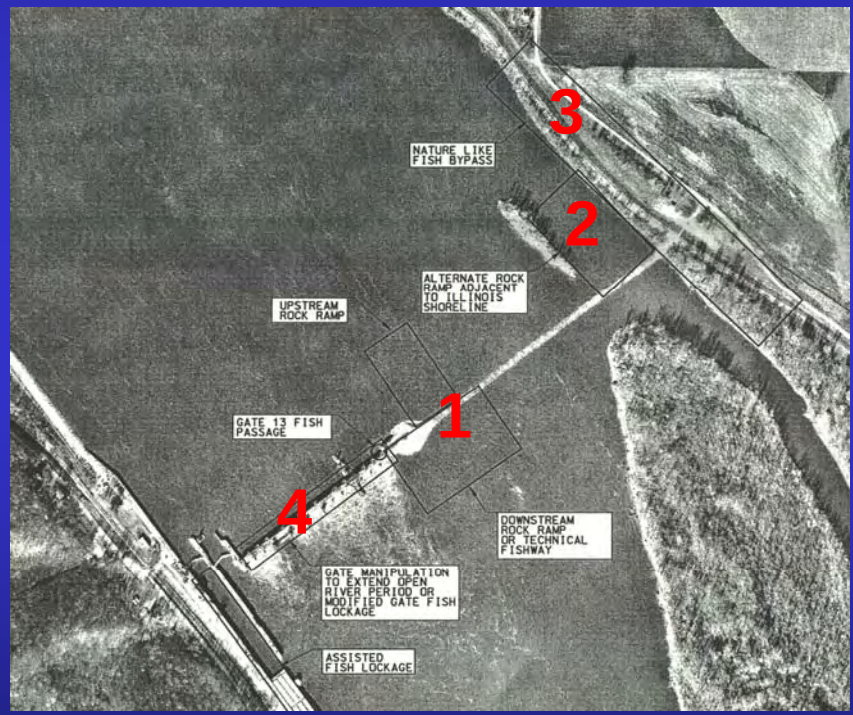
Alternatives

- **Alternative 1**: Rock Ramp Adjacent to Storage Yard (several sub-alternatives)
- **Alternative 2**: Rock Ramp Adjacent to Illinois Shoreline
- **Alternative 3**: Nature Like Fish Bypass Channel
- **Alternative 4**: Gate Manipulation to Extend Open River (Non-structural)



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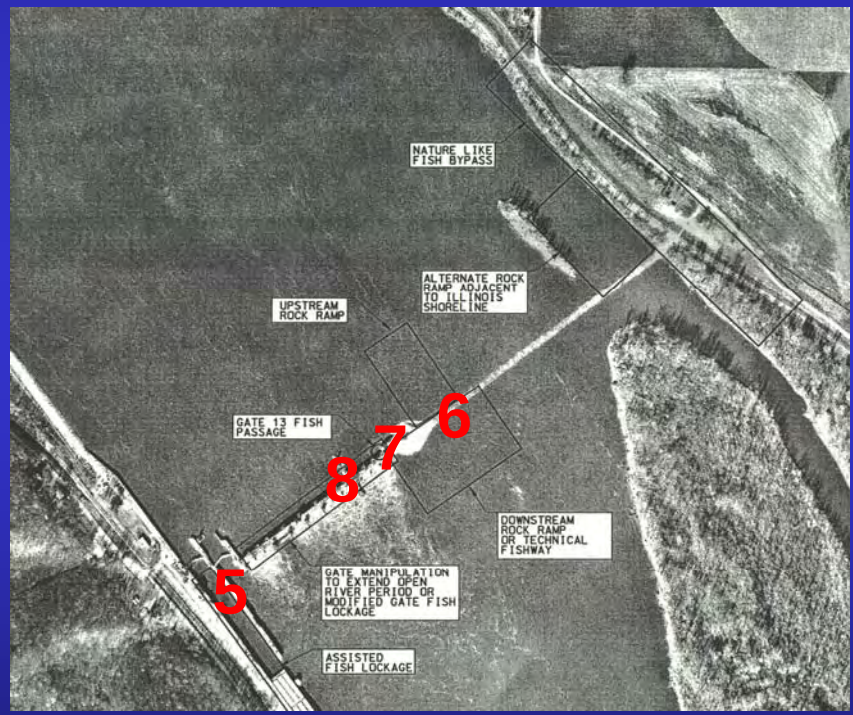
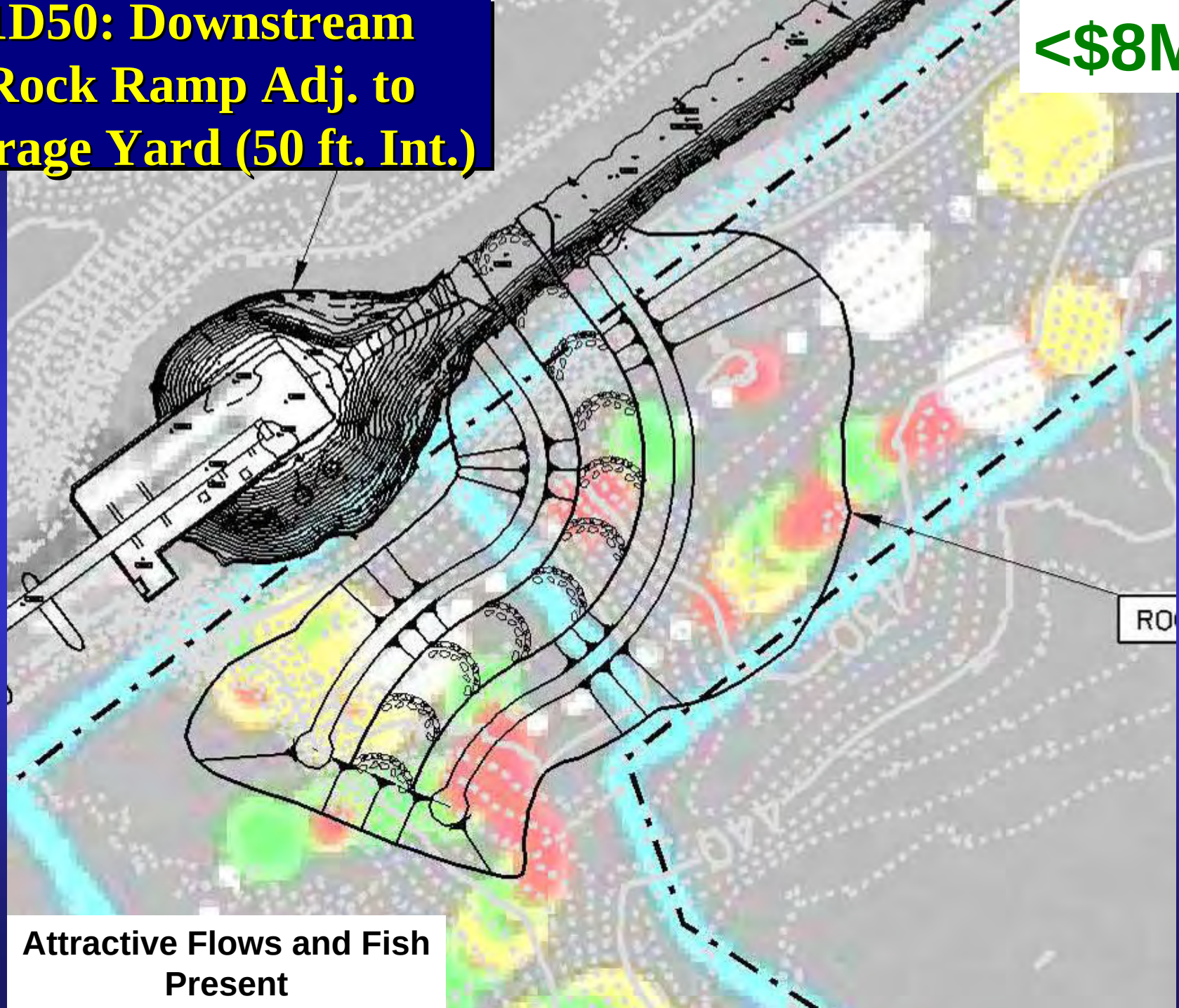
Alternatives (Continued)

- **Alternative 5**: Assisted Fish Lockage (Non-structural)
- **Alternative 6**: Technical Fishway
- **Alternative 7**: Gate 13 Fish Passage
- **Alternative 8**: Modified Gate Fish Lockage (Non-structural)



1D50: Downstream Rock Ramp Adj. to Storage Yard (50 ft. Int.)

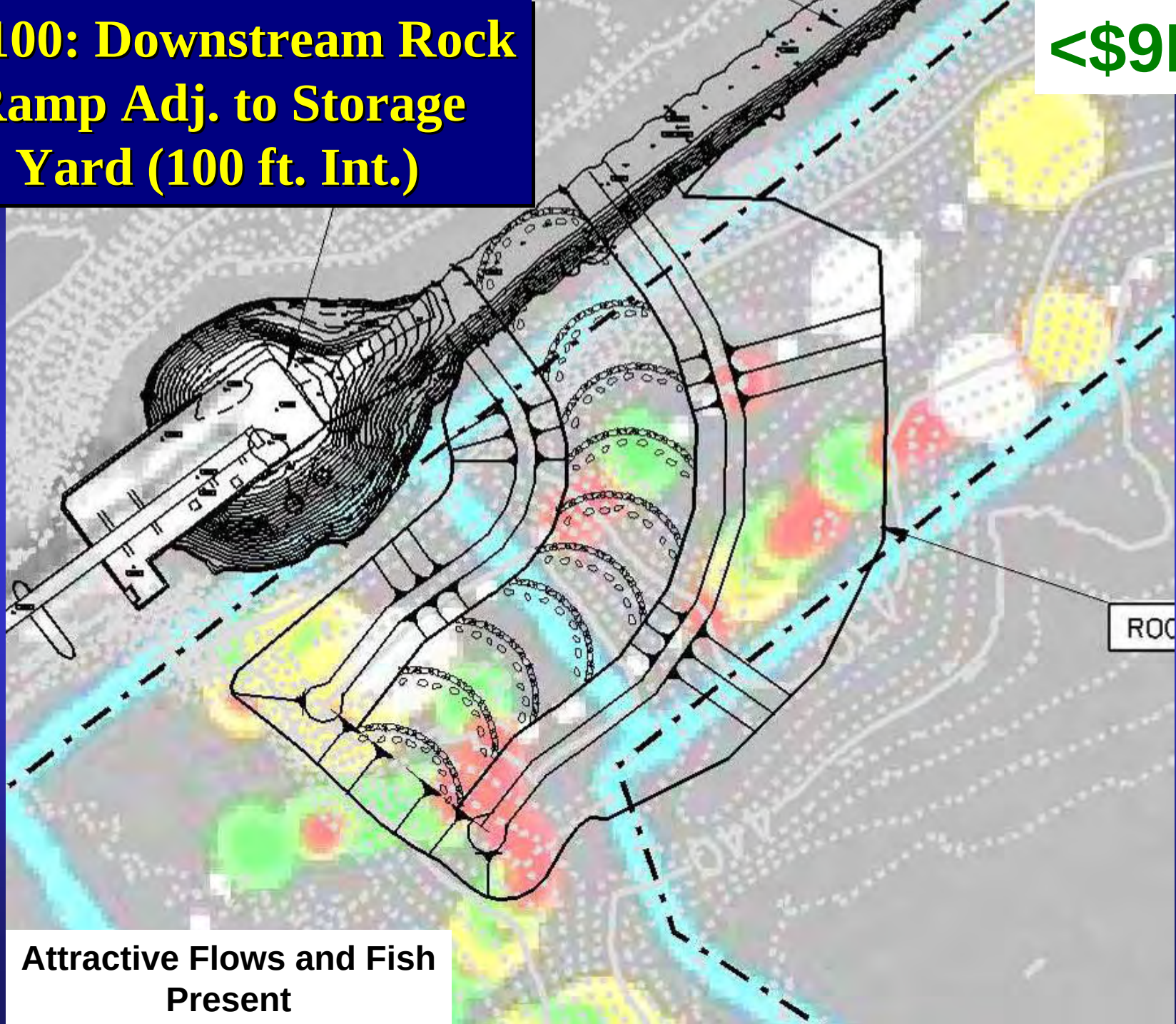
<$8M



Attractive Flows and Fish Present

1D100: Downstream Rock Ramp Adj. to Storage Yard (100 ft. Int.)

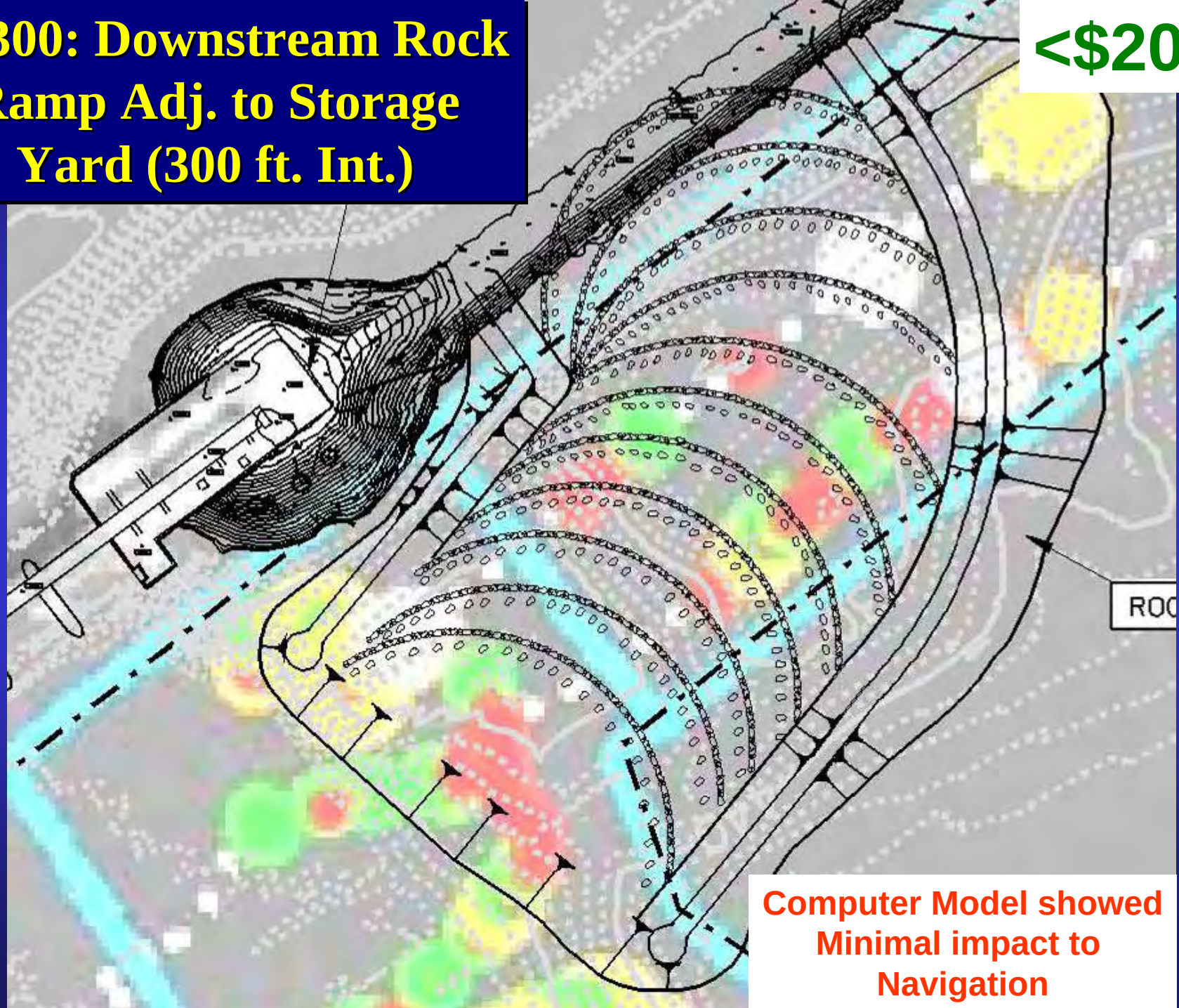
<$9M



Attractive Flows and Fish Present

1D300: Downstream Rock Ramp Adj. to Storage Yard (300 ft. Int.)

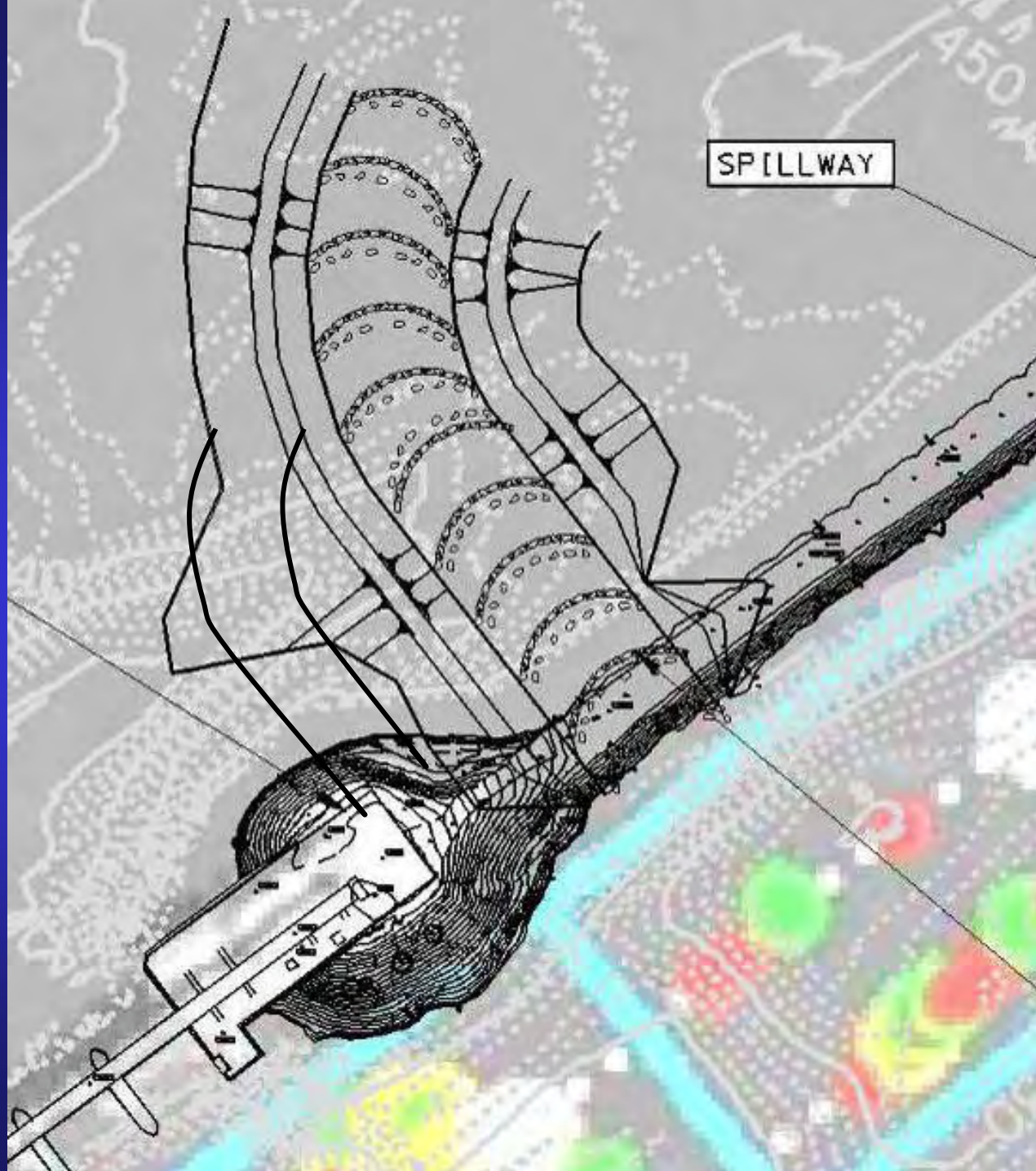
<$20M



Computer Model showed Minimal impact to Navigation

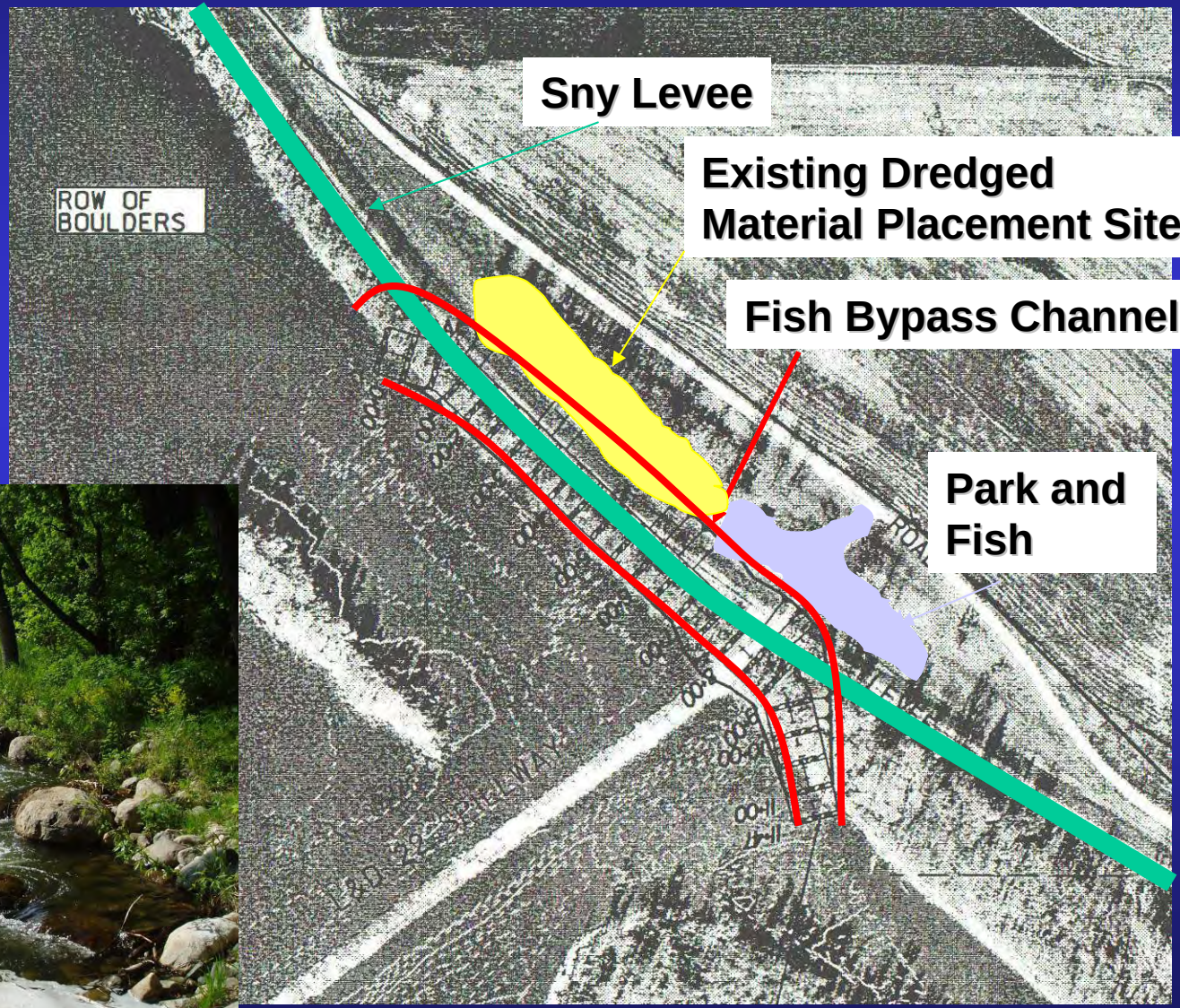
Alternative 1U100:

Upstream Rock Ramp Near Storage Yard



Alternative 2: Upstream Structure by IL Shoreline

Alternative 3: Nature Like Bypass Channel



Alternative 4:
Gate Manipulation

- 2 Ft Drawdown to extend open river
- On average, extends open river duration 9 days.
- High and low water years do not gain extra duration.
- May cause outdraft problems.
- Other dams in the system would be a better fit.

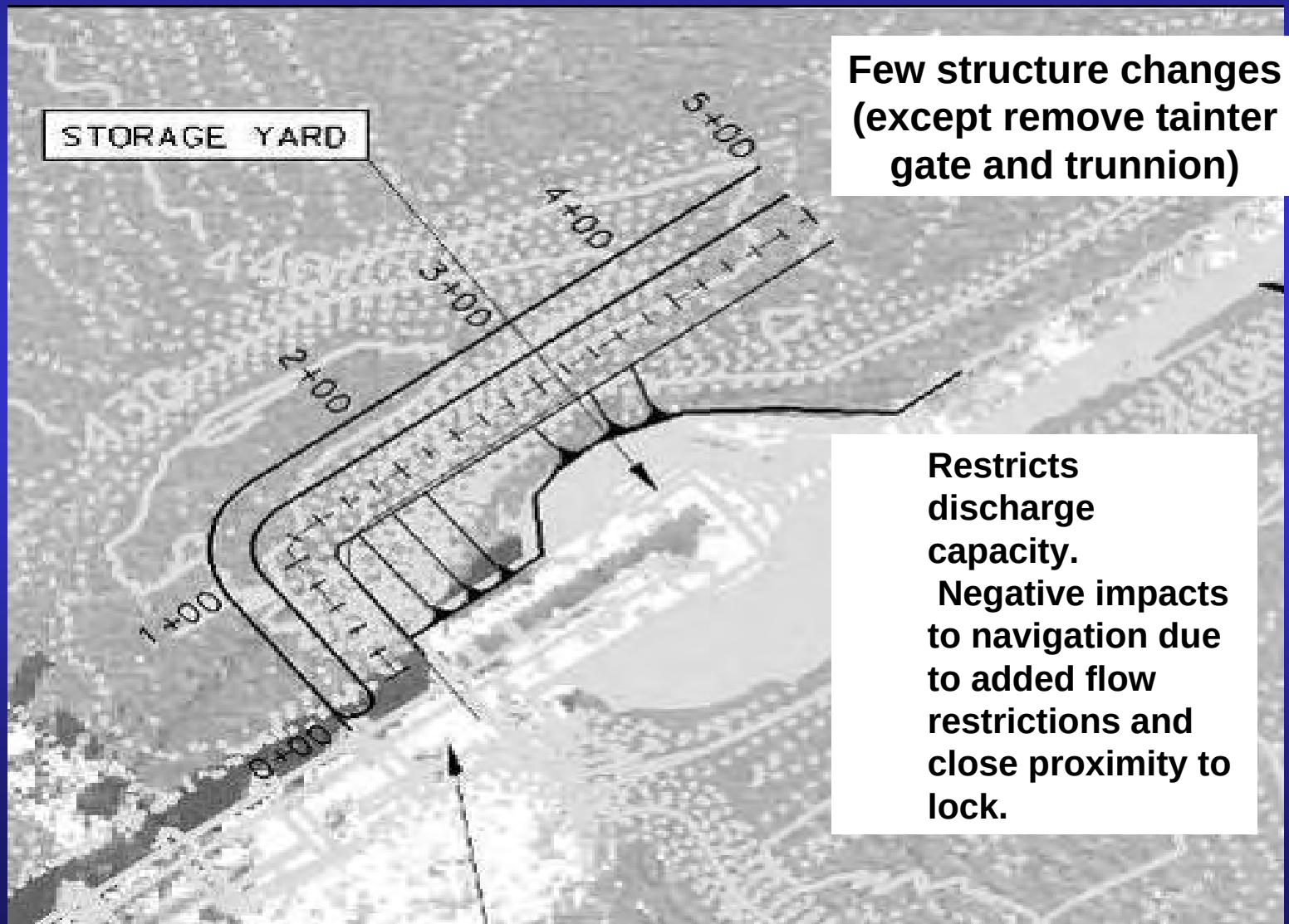
Alternative 5: Assisted Fish Lockage

<$500K/year

Alternative 6: Dual Slot Fishway

<$2M

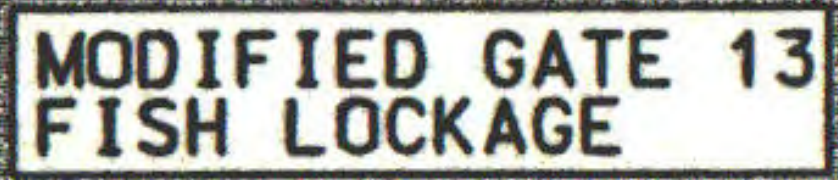
Alternative 7:
Gate 13 Fish Passage



Few structure changes (except remove tainter gate and trunnion)

Restricts discharge capacity.
Negative impacts to navigation due to added flow restrictions and close proximity to lock.

Alternative 8: Modified Gate Fish Passage



- **Upstream issues** – Outdraft (even subtle gate manipulations have caused problems getting tows near the wall)
- **Downstream issues** - Backlash (perpendicular flows which pin exiting barges to the lower guidewall)
- **Geotechnical issues** - Scour
- **Biological issues** - Water velocity > 6 ft/sec

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Alternative Evaluation Navigation Impacts (Hydraulic Modeling)

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Numeric Models

- **Objectives:**
  - Screen alternatives to avoid impacts to navigation (existing and proposed lock conditions)
  - Avoid causing upstream stage increases
- **Geometry**
  - Base (existing) condition
  - Fishway
  - Proposed lock
  - Proposed lock and fishway
- **Discharge**
  - 10,000; 85,000; 110,000; 162,000; and 302,000 cfs
- **20 model runs for pool and 20 model runs for tailwater**

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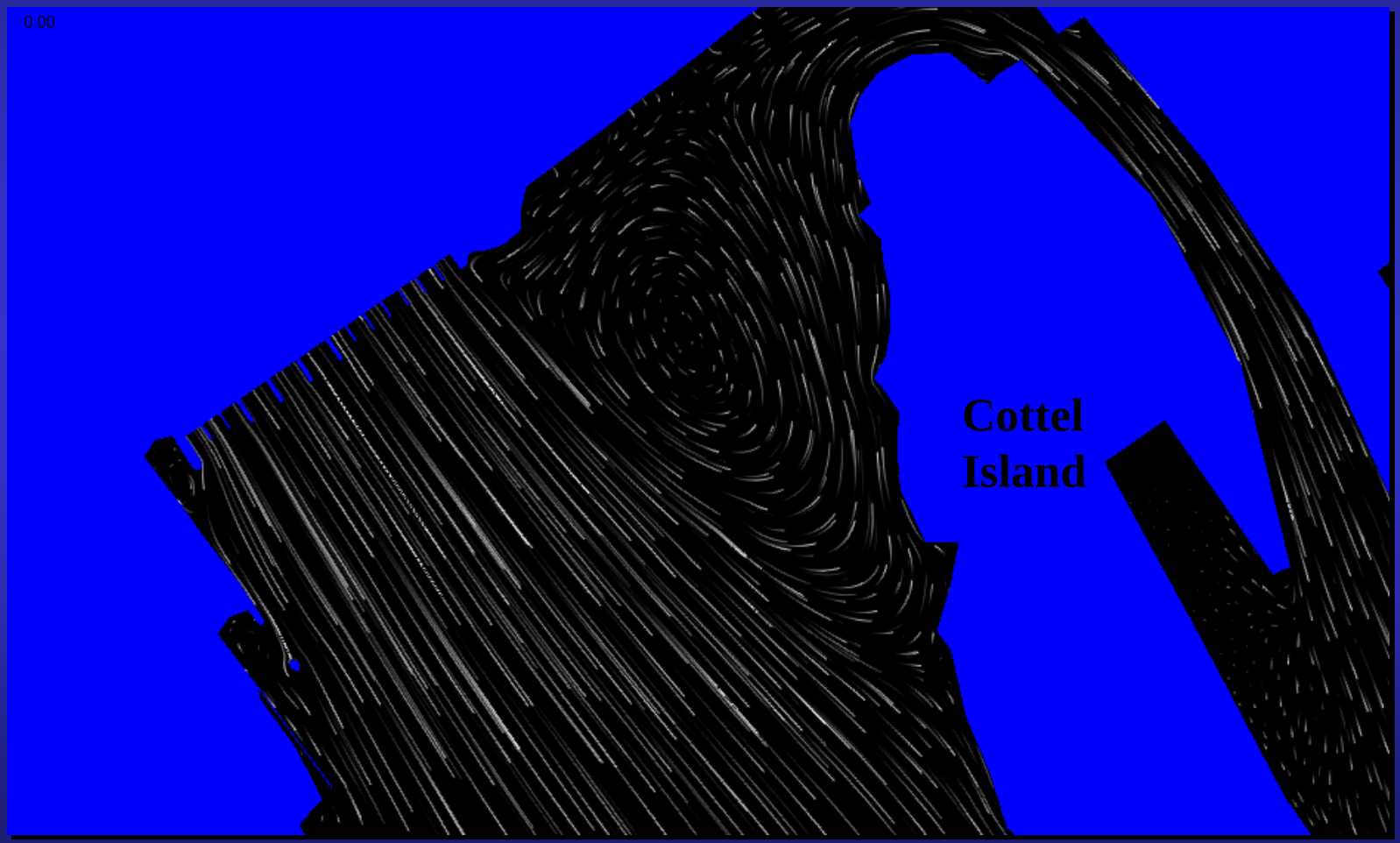
Ecohydraulic Indicators



Tailwater Model: Velocity Comparison

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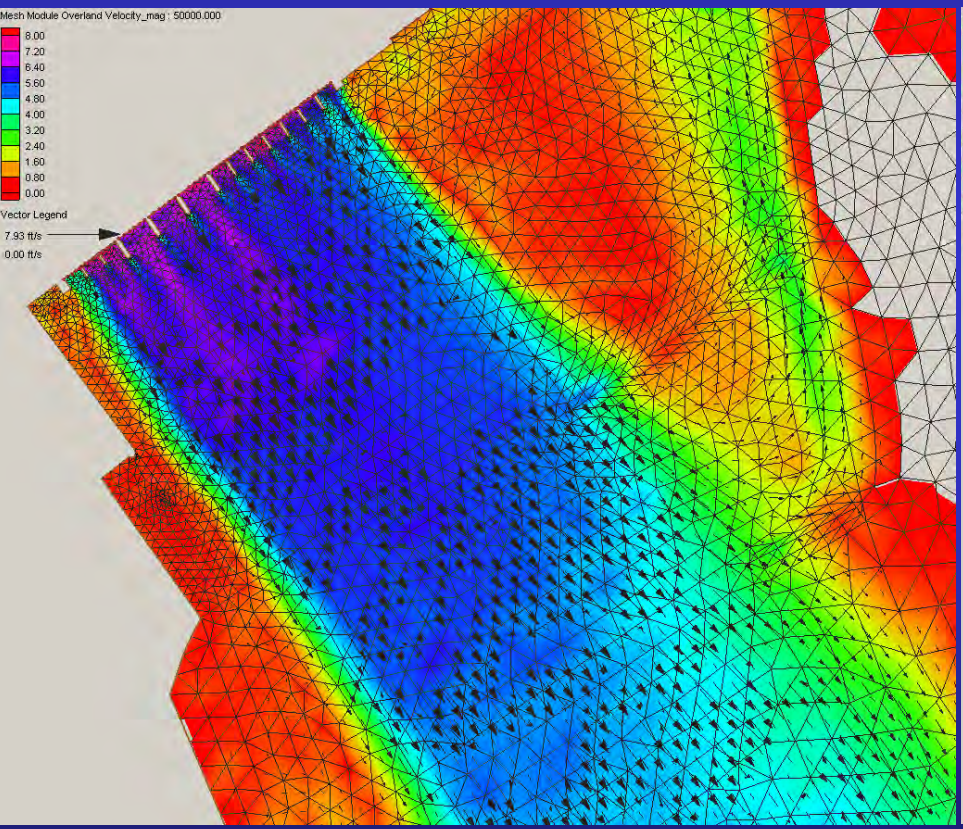
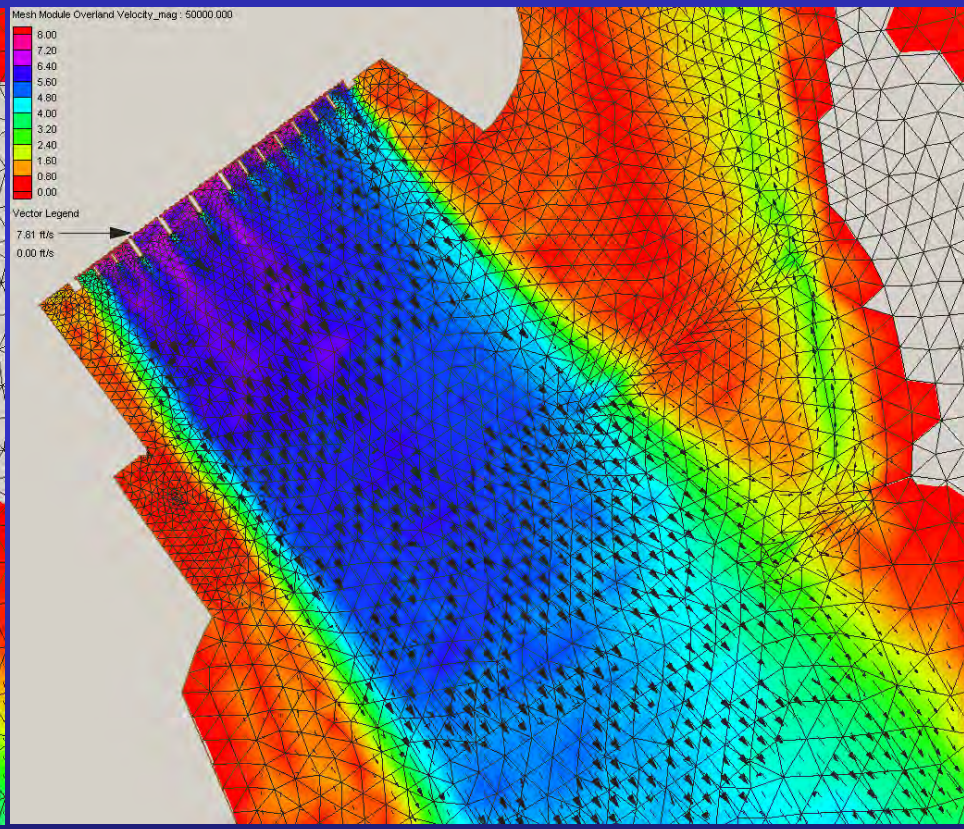
Base



With Fishway



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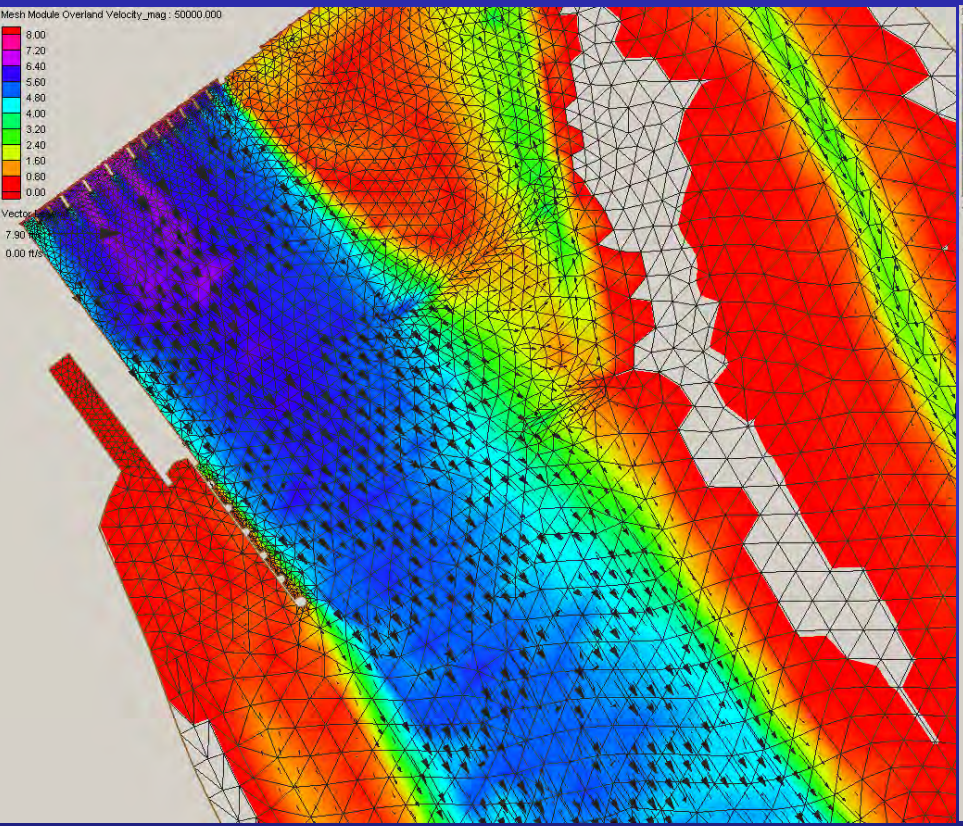
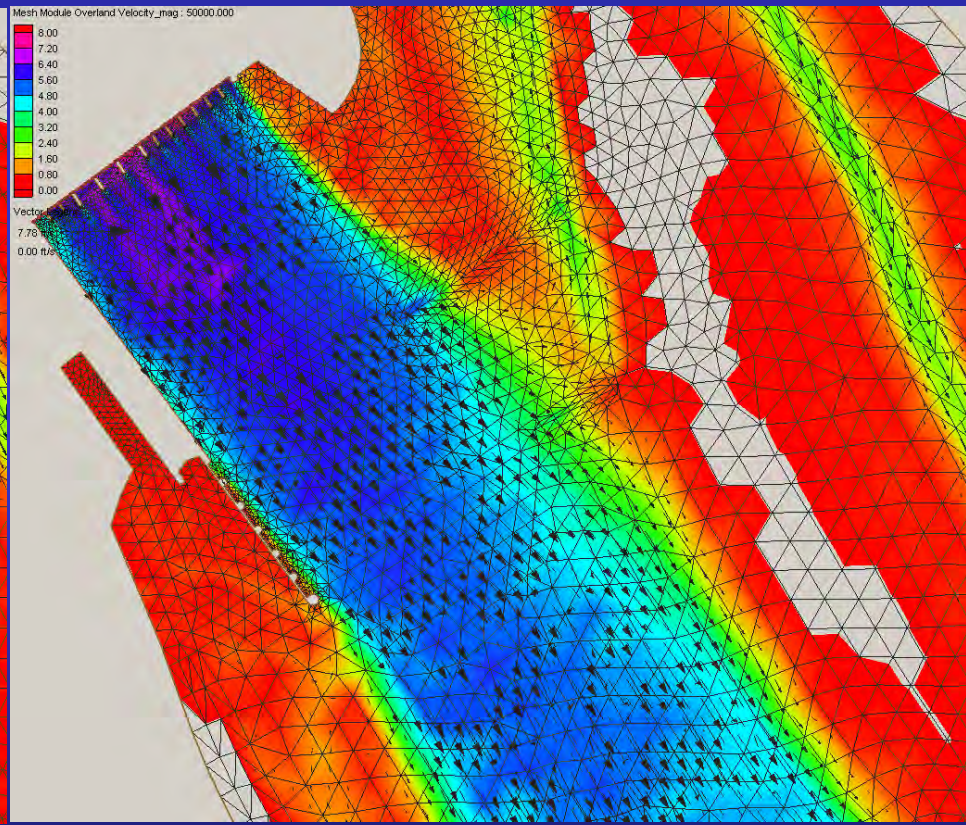
Tailwater Model: Velocity Comparison

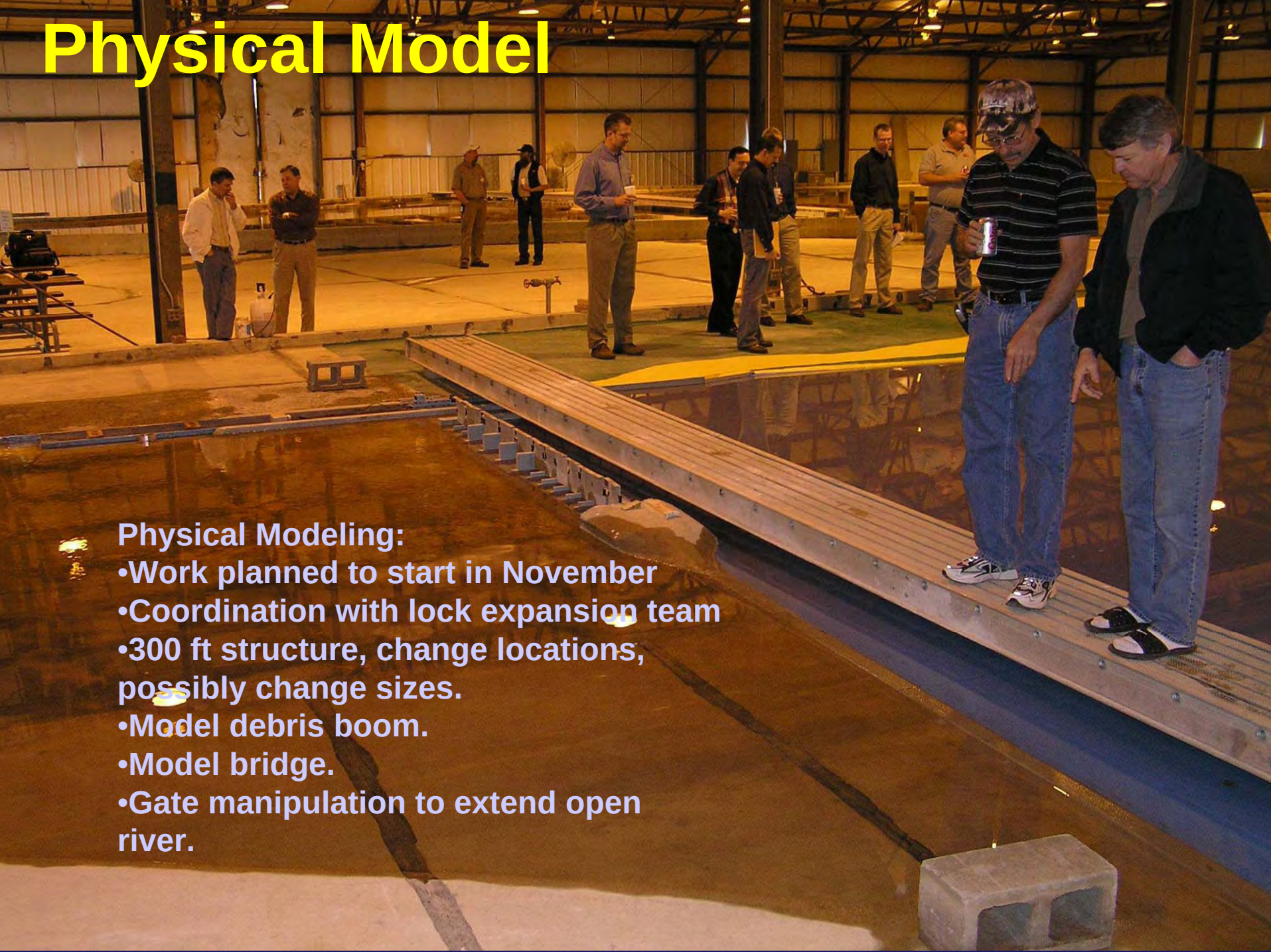
With Proposed Lock



With Lock & Fishway



Physical Model



Physical Modeling:

- Work planned to start in November
- Coordination with lock expansion team
- 300 ft structure, change locations, possibly change sizes.
- Model debris boom.
- Model bridge.
- Gate manipulation to extend open river.

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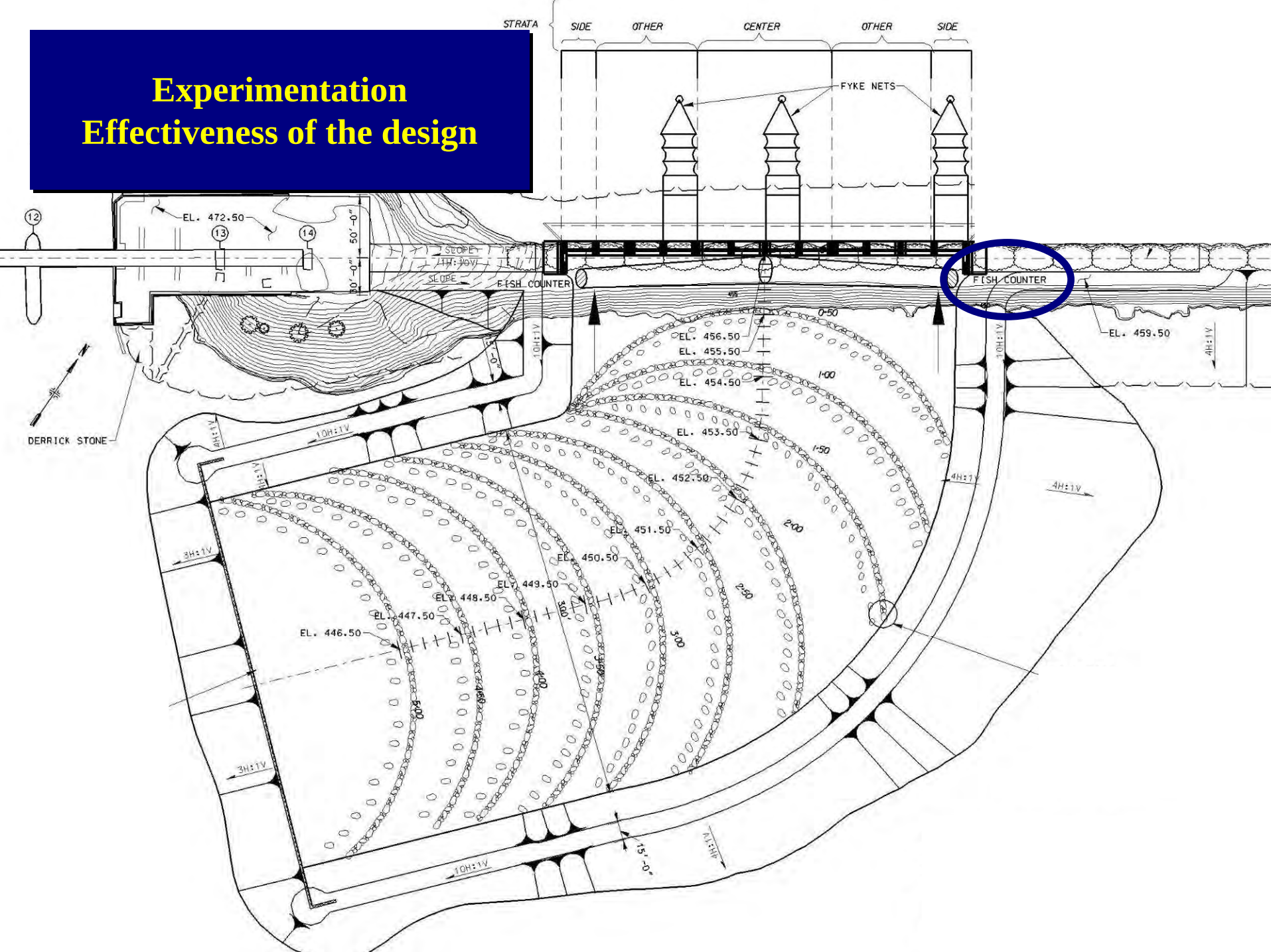
Design Flexibility for Experimentation

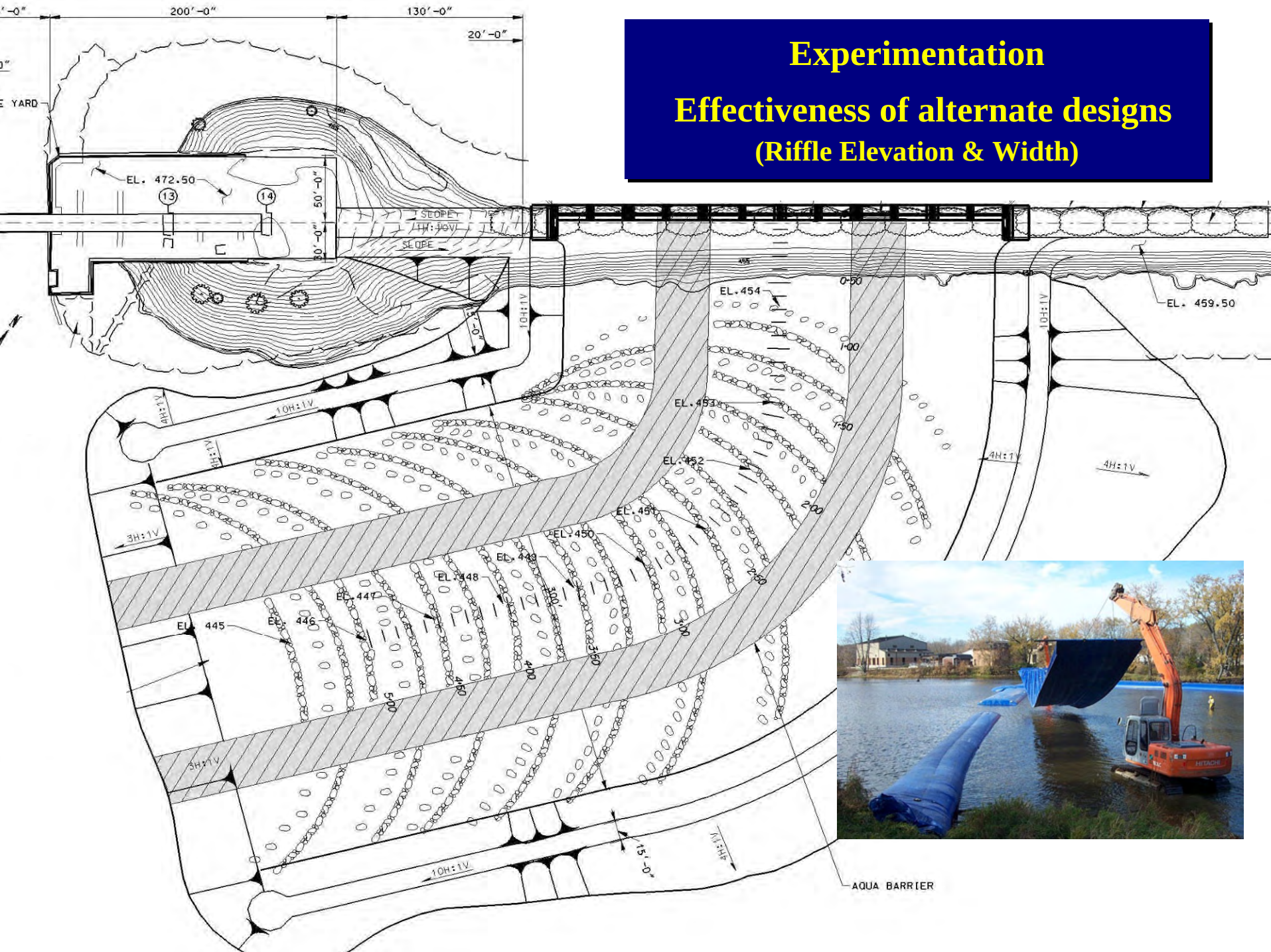
Experimentation
Effectiveness of the design



Experimentation

Effectiveness of alternate designs

(Riffle Elevation & Width)



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