



AGENDA

**SOUTHWESTERN ILLINOIS FLOOD PREVENTION DISTRICT COUNCIL
BOARD OF DIRECTORS MEETING
May 18, 2011 7:30 a.m.**

Metro-East Park and Recreation District Office
104 United Drive, Collinsville, Illinois 62234

1. Call to Order
Dan Maher, President
2. Approval of Minutes of April 20, 2010
3. Program Status Report and Budget Update
Les Sterman, Chief Supervisor
4. Approval of Disbursements
5. Overview of 30% Design Submittal
Jay Martin, Project Manager, AMEC
6. Draft Project Financial Plan
Roy Torkelson, ButcherMark Financial Advisors
7. Other Business

Executive Session (if necessary)
8. Adjournment

Next Meeting: June 15, 2011

MINUTES

SOUTHWESTERN ILLINOIS FLOOD PREVENTION DISTRICT COUNCIL BOARD OF DIRECTORS MEETING

April 20, 2011

The regular meeting of the Board of Directors was held at the Metro-East Park and Recreation District Office, 104 United Drive, Collinsville, Illinois at 7:30 a.m. on Wednesday, April 20, 2011.

Members in Attendance

Dan Maher, President (Chair, St. Clair County Flood Prevention District)
John Conrad, Vice-President (Chair, Monroe County Flood Prevention District)
James Pennekamp, Secretary/Treasurer (Chair, Madison County Flood Prevention District)
David Baxmeyer, Monroe County Flood Prevention District
Paul Bergkoetter, St. Clair County Flood Prevention District
Bruce Brinkman, Monroe County Flood Prevention District
Ron Motil, Madison County Flood Prevention District
Alvin Parks, Jr., St. Clair County Flood Prevention District

Members Absent

Tom Long, Madison County Flood Prevention District

Others in Attendance

Mark Kern, St. Clair County Board Chair
Alan Dunstan, Madison County Board Chair
Delbert Wittenauer, Monroe County Board Chair
Les Sterman, SW Illinois FPD Council
Kathy Andria, American Bottoms Conservancy
Ron Auld, Volkert Assoc.
Randy Bolle, Prairie DuPont Levee District
Ed Cockrell, St. Clair County Board
Darryl Elbe, Hoelscher Engineering
Maggie Hales, East-West Gateway Council of Governments
Scott Harding, SCI Engineering
Mark Harms, SCI Engineering
Pam Hobbs, Geotechnology
Kevin Hutchinson, Mayor, Columbia Illinois
Joe Kellett, U.S. Army Corps of Engineers
Kevin Koenigstein, Monroe County Treasurer
Linda Lehr, Monroe County
Terry Leifer, Monroe County Commissioner
Jay Martin, AMEC Earth & Environmental
Patrick McKeegan, Leadership Council Southwestern Illinois
Jack Norman, American Bottoms Conservancy
Jon Omvig, AMEC
James Page, Wood River Drainage and Levee District

Joe Parente, Madison County
Bob Shipley, Metro-East Sanitary District
John Shively, Shively Geotechnical
Mike Sullivan, Prairie DuPont Levee District
Gary Toribio, URS
Dan Turner, Volkert Assoc.
Chuck Unger, The Bank of Edwardsville

Call to order

President Dan Maher called the meeting to order.

Approval of minutes of March 16, 2011

Mr. Maher announced that there were two sets of minutes to approve from March 16. The first is for the regular Board meeting and the second from the Board design workshop immediately following the regular meeting. A motion was made by Ron Motil, seconded by David Baxmeyer, to approve the minutes of both March 16, 2011 meetings. The motion was approved, all members voting aye.

Program Status Report and Budget Update

Mr. Maher asked Mr. Sterman to provide a status report for the project.

Mr. Sterman said that much of the last month has been taken up with the process that he outlined last month to review of the progress drawings that AMEC submitted to us on March 1, the same drawings that the Board reviewed last month. We expect the final 30% design submittal to be made during the week of May 9. The process to get from the set of progress drawings to the submittal of the 30% drawings includes several steps: overview meetings with partners/stakeholders to review and refine the design, meetings with the Corps of Engineers and all of the area levee districts, a full Board briefing, overview meetings with detailed review sessions for each levee district with both the Corps and the staff of each district, a value engineering workshop held on March 28-31 with a panel of independent reviewers led by our project management oversight consultant, Doug Campion, and preparation of cost estimates following the refinement of the progress design resulting from the above activities.

There is still more work to do to get to the 30% design and a comprehensive implementation plan -- refining the financing model and financing plan based on current market conditions and our project schedule to determine our financial capacity to build a project in accordance with the preliminary design, and bringing together the design, cost estimate and financial plan to develop a draft project schedule and construction sequence. This will all be coming together over the next few weeks.

Based on the discussions about the March 1 submittal by AMEC, there will likely be some significant changes in the 30% design. Every effort is being made to reduce the extent of some of the high cost elements of the project, such as cutoff walls and to further refine the analysis based on additional analysis.

Some of the cost savings that might result from refined analysis may be offset by an increased cost contingency, since there has been general agreement that AMEC's previous assumption about cost contingencies was probably too optimistic.

Our goal remains the same, which is to get the project done for the money that is dedicated to the project through the sales tax or through existing sources at the levee districts.

The effort to make the design more cost-effective will continue into the next stage of the design process. The use of more sophisticated underseepage modeling will likely allow some further reductions in scope and cost.

On April 7-15 the Corps of Engineers conducted a value engineering exercise on their design concept proposals for the Wood River and Prairie DuPont/Fish Lake levee systems. While the Corps' design addresses the authorized (500-year) level of protection, the design concepts are similar, so there may be some additional ideas that emerge to make the design for our project more cost-effective. Mr. Sterman indicated that he attended parts of the session at the Corps.

The good news about all of this is that several sets of experts have now independently reviewed the project design and we can feel satisfied that we now know just about everything there is to know in order to come up with the most cost-effective design.

Mr. Sterman indicated that in his view, the biggest risks to the project are a variety of external factors such as regulatory hurdles, cooperation of affected property owners, and the weather.

The first rebate from the U.S. Treasury for interest payments on the Build America and Economic Recovery Zone bonds was received last week and wired to the bond trustee.

During a recent conference call with staff from Sen. Durbin's and Sen. Cochran's offices, I and Dennis Wilmsmeyer provided some feedback on their ideas to mitigate the economic impact of mandatory flood insurance. I followed up with a memo to them (copy attached) about our legislative priorities. Neither of us believed that their proposals were all that useful to us; we need to delay the maps, since most of the worst economic effects of those maps cannot be mitigated.

We continue to await the federal court's ruling on FEMA's motion to dismiss our lawsuit.

The Council's website www.floodpreventiondistrict.org has been live for about three weeks. I have successfully posted new material on the site and will continue to maintain it with minimal assistance.

The bottom line is that we're coming along about as expected. We are meeting all our schedules and milestones. One of our biggest challenges is to work out the future role of the Corps of Engineers in the project. It is apparent now that the state of the federal budget, combined with a cumbersome and time-consuming project development and funding process, will limit the Corps' financial participation in the project. However, their regulatory role will indeed be critical to our success, and we hope that the Corps may still undertake a limited portion of project for which they can access funding over the next few years. Further, the Corps will need to certify two

reaches of levee, the Chain of Rocks levee and the Mel Price Lock and Dam area. Joe Kellett is here today so feel free to ask him questions about these subjects.

Mr. Pennekamp asked about the question that came up last month about FEMA moving away from its “all-or-nothing” policy on the mapping of deaccredited levees. The Board had asked to get some clarification on the practical impact of this ruling. He asked if we had received that clarification. Mr. Sterman said that he had not gotten any further information. The subject came up in our conference call with staff from Sen. Durbin’s and Cochran’s offices and they seemed surprised by our concern. Mr. Sterman said that he had been working with Patrick McKeehan in his role with the Levee Issues Alliance to get a letter from the group to our congressional delegation. Mr. McKeehan indicated that the letter had not gone out yet.

Motion made by Mr. Pennekamp, second by Mr. Bergkoetter to accept the monthly progress report.

The motion was approved by voice vote, all members present voting aye.

Mr. Maher asked Mr. Sterman to provide a budget update.

The disbursements from last month were described in the memo to the Board sent out with your packet. Most of the disbursements went back to Madison and St. Clair counties to reimburse them for prior expenditures on the project. Design and construction activities are ramping up so we had some bills to AMEC that were paid.

We now have a second full year of sales tax receipts. In 2010, sales tax collections totaled a little over \$11 million or about 6.7% higher than in 2009. December’s receipts were about 3.8% higher than in 2009, so the positive trend in receipts has not been quite as strong as in the earlier months of the year. Nevertheless, there seems to be a nice recovery in retail sales from levels seen at the depths of the recent recession.

Motion made by Mr. Baxmeyer, second by Mr. Pennekamp to approve the disbursements for February, 2011. At Mr. Maher’s request, Mr. Pennekamp called the roll and the following votes were made on the motion:

- Mr. Baxmeyer - Aye
- Mr. Bergkoetter – Aye
- Mr. Brinkman – Aye
- Mr. Conrad - Aye
- Mr. Motil – Aye
- Mr. Parks - Aye
- Mr. Maher – Aye
- Mr. Pennekamp – Aye

The motion was approved unanimously with eight members present voting aye.

Progress Report on Design/Construction

Mr. Maher introduced Jay Martin, who presented a PowerPoint® presentation (copy attached) and described the progress on the project. He recounted the series of meetings that were held with the Corps and the levee districts and AMEC's participation in the Council's value engineering workshop. AMEC also met with several contractors to get a better handle on constructability and costs of certain critical items.

Mr. Martin described the action items coming out of all of the meetings last month on the progress set of drawings. There was an additional meeting with the Corps regarding the Section 404 permit. The Corps also agreed to provide a description of actions needed to get a permit for alteration of the federal levees.

Mr. Martin indicated that AMEC had developed a list of priority items from the progress drawings that needed to be reviewed in order to finalize the 30% design. He described several of those items to the Board. The objective of this process is to reduce the cost or extent of proposed improvements to the levee systems.

Additional field activities also took place including at the ConocoPhillips site in Cahokia where we finally addressed the site access issue. Relief well cleaning and testing had also started. Mr. Martin provided a summary of the sites tested to-date. Details were provided in the PowerPoint® presentation. Mr. Sterman asked for some clarification of the figures in the tables.

Mr. Pennekamp asked if the results of the well-testing were surprising given the assumptions made previously. Mr. Martin indicated that the results were slightly worse than expected.

Alan Dunstan asked whether some of the relief wells would have to be replaced anyway and how many the Corps was already replacing. Joe Kellett indicated that some were being replaced in the Wood River area, but he didn't have the number immediately available. Mr. Dunstan asked if any relief wells were found to be a hazard and needed immediate replacement. Mr. Maher asked if there was such thing as rehabbing a relief well. Mr. Martin said that the only reason that we might rehab a well is if it is "sanding," i.e. filling with sand. If the "yield" of the well is not adequate, then a rehab is not practical.

Mr. Kellett indicated that a number of relief wells had been cleaned over the years, but because of environmental controls some of the approaches (e.g. using Clorox to kill microbes that clog well screens) to cleaning were no longer allowed.

Jim Page asked if the Corps was sharing data with the Council and Mr. Sterman replied that they were. Mr. Page also asked if the Council was accounting for all the work being done by the Corps and if the work was being coordinated. Mr. Kellett responded affirmatively. Mr. Sterman responded that we are doing our best to align the 100-year and 500-year fixes, but that we and the Corps are working at different paces and our objectives were somewhat different so that despite our best efforts it may not always work out.

Mr. Martin described the aquifer testing that was taking place. The purpose of aquifer testing is to determine the horizontal permeability of the soil under the levees. There is nothing as yet to report on the results of this testing.

Review of Value Engineering Workshop Findings

Mr. Sterman stated that a value engineering workshop was conducted from March 28-31 in the Council's offices. The workshop was led by Doug Campion, our project management oversight consultant.

The VE review team was a multidisciplinary group consisting of seasoned professionals in geotechnical engineering, environmental analysis, project management, construction, and hydrology & hydraulics. In addition, two staff members from the Corps of Engineers participated as part of the panel.

Mr. Campion is out of the country, so John Shively of Shively Geotechnical Services, who was a member of the review panel, will make a brief presentation on the panel's findings.

Mr. Shively made a brief presentation summarizing the findings of the value engineering panel. The panel consisted of staff from Shively Geotechnical Services; Thouvenot, Wade & Moerchen; Shannon & Wilson; and two representatives of the Corps of Engineers. The panel was led by Doug Campion, the Council's project management oversight consultant.

The panel's first recommendation was to do additional modeling and analysis to reduce the scope of any cutoff walls, perhaps replacing them with a hybrid solution of berms and relief wells. Water berms might also be considered.

A second recommendation was to reduce the patchwork of relief wells and berms and work toward a more uniform hybrid solution involving berms, relief wells and water berms. Mr. Shively described the benefits of water berms.

The team noted that borrow areas for fill material should more carefully considered in cost estimates and plans.

Corps specs and procedures should be followed wherever possible to ease any Corps permitting for alterations to the levee system.

Regarding cost estimates, a greater contingency should be considered, given the uncertainty in the design at this stage of the project.

Delbert Wittenauer asked whether we would consider dredging to provide fill material for berms. Mr. Martin replied that we will consider dredging where it is cost effective. Mr. Kellett described a number of the considerations involved in using dredge material including environmental constraints.

AMEC Task Order 4 (60% Design)

Mr. Maher asked Mr. Sterman to explain this item. Mr. Sterman noted that at the May 21, 2010 meeting, the Board selected a team of consultants led by AMEC Earth & Environmental to provide program administration, design, and construction management services to the Council for the levee improvement project.

Because the scope and cost of significant elements of the design and construction management work could not be determined until additional data were collected and early design tasks completed, we executed a master services agreement with AMEC that sets forth the basic terms and conditions of our contractual relationship and then a series of sub-agreements or task orders that are executed as scope and costs become clear.

Two task orders are ongoing: Task Order 1 for Program Administration and Task Order 3 for Preliminary Construction Activities. Task Order 2 for production of 30% construction drawings will be completed on April 30 with the submission of final documents. It's now time to execute the next task order, which is for the completion of the 60% design level construction drawings. I am therefore asking for authorization to execute Task Order 4 for the next stage of design. AMEC has prepared a detailed scope of work, which was included in the memo sent to the Board. They have estimated the cost at \$2,599,000 for this work order.

AMEC proposes to subcontract about 38% of the work to local subcontractors as shown in Table 1 in the memo. Subcontracts have not yet been negotiated.

The proposed Work Order 4 is the next logical step in the design process and it could result in construction drawings for some elements of the project such as cutoff walls being effectively complete by the end of the year. Construction drawings for other elements will be very well defined and put us in a position to enter construction next year.

A motion was made by Mr. Baxmeyer and seconded by Mr. Parks to authorize the Chief Supervisor to execute Work Order 4 for Design Services with AMEC Earth & Environmental at a cost not to exceed \$2,599,000 to be complete on December 16, 2011. Mr. Maher asked Mr. Pennekamp to call the roll and the following votes were made on the motion:

Mr. Baxmeyer - Aye
Mr. Bergkoetter – Aye
Mr. Brinkman – Aye
Mr. Conrad - Aye
Mr. Maher – Aye
Mr. Motil – Aye
Mr. Parks - Aye
Mr. Pennekamp – Aye

The motion was approved unanimously with all eight members present voting aye.

Agreement with the Department of the Army for Rehabilitation and Reconstruction Study for Prairie DuPont and Fish Lake Levee Systems

Mr. Sterman said that work to-date by the Corps of Engineers has mostly been on addressing design deficiencies, mainly concerning underseepage. However, the Corps also has the ability to fund a separate category of levee improvements known as rehabilitation and reconstruction. Such improvements are done under a separate program and require a different feasibility study (as distinct from the “limited reevaluation report” that is the principal project development document for design deficiency projects). Rehabilitation and reconstruction projects typically involve pump stations, gravity drains and closure structures.

The Corps is proposing to undertake a feasibility study for rehabilitation and reconstruction of the Prairie DuPont and Fish Lake levee systems. The cost-share for the study is 50% and the entire cost of the study is estimated at \$900,000. In order to proceed with this project, we must first enter into an agreement with the Corps to provide the necessary cost-share. A copy of the proposed agreement is attached. It is similar to existing agreements with the Wood River and MESD districts.

Much of the work required for the feasibility study is already being done by the Council's design consultants. Once the agreement is signed, our work may be eligible as work-in-kind to be counted toward the cost-share requirement. While I believe it is certainly in our interest to execute this agreement, it may never be needed. The rehabilitation and reconstruction aspects of our project are not going to be substantial in PdP/FL, and if we maintain our schedule, it is likely that this work will be done long before any federal funding is forthcoming. If that turns out to be the case, it may not be in the Council's interest to provide any cash cost-share for the feasibility study. However, those are decisions that can be made in the future. This agreement will preserve our flexibility to make appropriate choices in the future. Mr. Kellett agreed with this assessment and suggested that there is a possibility that we could someday get federal reimbursement for this work – perhaps in 30 years. Mr. Sterman said that this was a faint hope.

Mr. Motil asked if the agreement was reviewed by our attorney. Mr. Sterman said that he did not run this by our attorney since it is a standard Corps agreement, the same as was signed in MESD and Wood River. Any changes that we would choose to make would need to run through the entire Corps chain of command, taking months, if not longer, and the likelihood that they would agree to changes is minimal.

Motion made by Mr. Parks, seconded by Mr. Bergkoetter to authorize the Chief Supervisor to execute the feasibility cost-share agreement for the Prairie DuPont/Fish Lake levee systems with the Department of the Army. The Board will separately approve any expenditure under this agreement.

At Mr. Maher's request, Mr. Pennekamp called the roll and the following votes were made on the motion:

Mr. Baxmeyer - Aye
Mr. Bergkoetter – Aye
Mr. Brinkman – Aye
Mr. Conrad - Aye
Mr. Motil – Aye
Mr. Parks - Aye
Mr. Maher – Aye
Mr. Pennekamp – Aye

The motion was approved unanimously with eight members present voting aye.

Other Business

There was no other business.

Adjournment

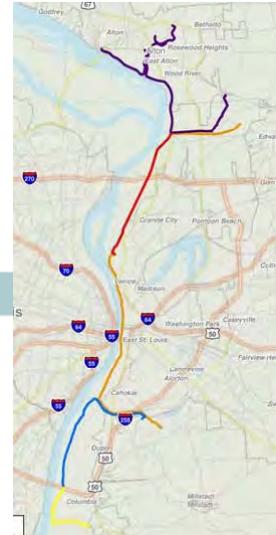
Motion made by Mr. Parks, seconded by Mr. Baxmeyer to adjourn the meeting. The motion was approved unanimously by voice vote, all voting aye.

Respectfully submitted,

James Pennekamp,
Secretary/Treasurer, Board of Directors



**Progress Report
April 20, 2011
SW IL Levee System
By Jay Martin**



Update on Activities



- Design Activities
- Field Activities
- Budget

Meetings



- USACE briefing March 10 (action items)
 - Three follow up meeting with each of the levee teams
 - WR March 24
 - MESD March 15
 - PdP/FL March 16
 - Levee District briefing March 11
 - Three follow up meetings with each of the levee districts
 - WR March 24
 - MESD March 29
 - PdP/FL March 17
- Council briefing - March 16
- VE participation - Council commissioned - March 28 – 31
- 404 permitting meeting with USACE – March 31
- VE participation - Corps organized – April 12 – 15
- Two meetings with cut-off wall contractors

3

Evaluation and revisions



- Internal team meeting to prioritize short-term targets to further evaluate, March 3.
- Developed list of priority areas and schedule

- Complete analysis on selected reaches
- Update drawings to reflect results
- Develop cost estimate

4

Value Engineering Considerations



Wood River Value Engineering/Design Optimization Items

Item	Description	Potential Benefits
1	Reduce berm slopes from 2% to max 1.33% or to actual berm shape (levee-wide)	Reduce volume of berm material required
2	Examine feasibility of moving cutoff wall to riverside toe of the levee. Stations 21+00 to 32+00 and 54+55 to 118+00	Reduce square footage of cutoff reducing cost.
3	LWR - Use 2D finite element modeling to examine alternatives to reduce or eliminate berms and relief wells at stations 213+00 to 222+50. (South of water treatment plant).	Reduce berm, culvert and relief well abandonment costs. Reduce potential wetlands impacts.
4	LWR - Use 2D modeling and assume that planned USACE relief wells are installed to reduce/eliminate berms. Sta. 195+00 to 207+00	Reduce berm sizes. Avoid abandoning wells. Avoid realigning and raising power lines.
5 5a 5b	LWR - Multi-phase approach to a high cost area. Deep Cutoff wall, Sta. 132+00 to 187+00. Use 2D modeling to reduce or eliminate wall. Examine possibility of moving cutoff wall to toe of levee.	Potential significant cost savings by reducing wall size.
6	LWR - Use 2D modeling to reduce/eliminate berms and relief wells 548+00 to 569+00.	Reduce berm sizes. Potentially avoid installing new relief wells.
7	LWR - Re-examine flooding elevations, hydrology and hydraulics, and potentially use 2D modeling to reduce or eliminate clay cap from about 565+00 to 630+00.	Reduce or eliminate clay cap. Avoid some wetlands impacts.
8	LWR - Use 2D modeling to reduce/eliminate berm and new relief wells, stations 569+00 to 577+00.	Reduce berm size. Avoid construction limits/limits of disturbance impacting neighboring residences.
9	LWR - Use 2D modeling to eliminate/reduce large berm and 72" culvert, Sta. 595+00	Reduce berm and culvert cost Avoid or reduce wetlands impact.
10	LWR - Use 2D analysis to reduce/eliminate cost of ditch fill and new 72-inch culvert. Sta 594+00 to 608+00	Reduce cost of expensive culvert.

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Value Engineering Considerations



MESD Value Engineer/Design Optimization Items

Item	Description	Potential Benefits
1	Revised unit cost for Deep Cutoff Walls may be set to \$32/sf (Reference Line 6 of Cost Est.)	Reduce overall cost of cutoff walls in MESD by \$1.8M
2	Reduce berm slopes from 2% to max. 1.33% or to actual berm shape	Reduce volume of berm material required
3	Deep cutoff wall 781-791; evaluate with SEEP/W to see if gradients necessitate cutoff wall	Reduction in quantity of cutoff wall by 100,000 SF
4	Replace Deep cutoff wall between Stations 1209-1219 with a Berm/RW hybrid solution	Reduction in quantity of cutoff wall by 140,000 SF
5	Use 2D modeling to reduce the berm widths/depths at Dead Creek; Sta. 1291+40, 1298+09, 1304+55	Reduce volume of berm material required Reduce acreage of wetland impacts Reduce acreage of land acquisition Reduce or eliminate cost for relocation of Dead Creek Maintain water storage areas
6	Use 2D modeling to reduce the berm widths/depths between Sta. 1320 and 1349	Reduce volume of berm material required Reduce acreage of land acquisition Maintain water storage areas
7	Use 2D modeling to reduce the berm widths/depths between Sta. 1219 and 1239	Eliminate/reduce need to put blue water ditch in a box culvert Reduce volume of berm material required Reduce acreage of land acquisition Maintain water storage areas
8	Use 2D modeling to reduce the berm widths/depths between Sta. 1268 and 1344	Reduce volume of berm material required Reduce acreage of wetland impacts Reduce acreage of land acquisition Maintain water storage areas
9	Use 2D modeling to reduce the berm widths/depths between Sta. 962 and 972	Reduce volume of berm material required Reduce acreage of wetland impacts Reduce acreage of land acquisition Maintain water storage areas
10	Re-evaluate using 2D finite element model the effectiveness of 40' cutoff between Stations 987 and 1013 in light of identified section of toe drain and new field data to confirm existence or absence of clay layer at 40'	Possible reduction in length of cutoff wall
11	Use 2D modeling to reduce the berm widths/depths at Sta. 1492	Eliminate need for berm to provide seepage control in this area
12	Use 2D or 3D modeling to reduce the number of relief wells at Sta. 1499+54	Reduce number of new relief wells required
13	Move cutoff wall from crest of levee to river side toe of levee between Sta. 1304 and 1319	Reduce quantity of deep cutoff wall quantity by approximately 37,500 SF

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Value Engineering Considerations



PdP/FL Value Engineer/Design Optimization Items

Item	Description	Potential Benefits
1	Reduce berm slopes from 2% to max. 1.33% or to actual berm shape (levee-wide)	Reduce volume of berm material required
2	Use 2D finite element modeling to underseepage control in North/South Elbow and at Stations 467+95 - 471+25	Reduce volume of berm material required
		Reduce acreage of wetland impacts
		Reduce acreage of land acquisition
	Maintain water storage areas	
3	Water berm solution from Station 560+00 to 620+00	Eliminate need for berm/well solution

7

Field Activities



Well cleaning, testing and aquifer testing

Levee	Wells Tested / Remaining	Results vs. Assumptions	Aquifer Tests Performed / Remaining
WR	0/18		0/3
MESD	29/120	18 – 4	3/1
PdP	6/42	3 - 2	2/0
FL	28/17	6 – 15	1/0

8

Schedule



- Working to deliver progress set and cost estimate week of May 9th.
- Begin activities associated with TO #4



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Budget



- Fifth invoice prepared for the Council
- Budget status
 - Program Management \$330,000 spent, 22% of budget
 - Preliminary Design \$2,100,000 spent, 65% of budget
 - Preliminary Construction \$2,500,000 spent, 44% of budget

10

QUESTIONS?





Memo to: Board of Directors
From: Les Sterman
Subject: Program Status Report for May, 2011
Date: May 16, 2011

Design/Construction

AMEC submitted the 30% design level construction drawings and cost estimate on May 13. The outreach and review activities over the last two months were used by AMEC, together with additional analysis, to refine the progress submittal made on March 1. The extent of some levee improvements has been reduced and the cost estimate revised downward. In addition, contingency amounts have been increased to a more credible level to allow for some uncertainty in construction costs and the final design. AMEC representatives will review these changes at the May Board meeting.

Continuing effort will be made to make the design more cost-effective in the next stage of the design process. The use of more sophisticated underseepage modeling will likely allow some further reductions in scope and cost.

We have been working with the Corps of Engineers to clarify the requirements of the permitting process. In particular, the "Section 408" permit is a major source of concern. This is a permit from the Corps that may be required to make alterations to a federal levee. This requirement arises from a simple provision of the law (33 USC Section 408) that reads, in part:

"...the Secretary may, on the recommendation of the Chief of Engineers, grant permission for the alteration or permanent occupation or use of any of the aforementioned public works when in the judgment of the Secretary such occupation or use will not be injurious to the public interest and will not impair the usefulness of such work."

The Corps has developed internal procedural guidance to determine how to implement this requirement. In the case of major improvements, such as those contemplated in our project, the Corps has indicated to us that for granting of the 408 permit we must effectively follow the identical project planning and development process that they would follow on a similar project. As you know, this lengthy process is exactly what we are choosing to avoid by funding the project with local monies. The process includes lengthy and costly internal and external reviews

and the preparation of significant additional documentation. The net effect of complying with the Corps' requests would be to delay our project for at least a year. I have responded to Corps representatives that the process specified by their guidance is inappropriate, wasteful, and redundant as it applies to our project and is entirely unacceptable to us. At a time when the Corps is emphasizing the importance of better flood protection, it is unconscionable to delay significant levee improvements while the Corps dithers with additional reviews and documentation that add no value to the project. In addition, the delay will add millions of dollars to the cost of the project and extract an additional economic toll on our region of tens, if not hundreds, of millions of dollars.

The purpose of the law is to assure that any work done on the flood protection infrastructure is not "...injuriously to the public interest and will not impair the usefulness of such work." All concerned agree that we are significantly improving the levee system with our investment, and doing so in a manner that is cooperative with the Corps staff and consistent with Corps practice. In this case, the Corps' slavish adherence to their own internal procedure will actually injure the project and our region.

We are in continuing discussions with the agency regarding approaches to mitigate or avoid the negative outcome of this onerous permitting process. This issue may be the biggest single threat to our project schedule and budget.

It is apparent now that the state of the federal budget, combined with a cumbersome and time-consuming project development and funding process, will limit the Corps' financial participation in the project. However, their regulatory role will indeed be critical to our success, and we hope that they can be persuaded to adopt a more reasonable and practical approach to granting the 408 permit.

In addition, we hope that the Corps may still undertake a limited portion of project for which they can access funding over the next few years as well as to certify two reaches of levee, the Chain of Rocks levee and the Mel Price Lock and Dam area.

I recently wrote to Col. O'Hara, the St. Louis District Commander, to clarify our expectations of their participation in the project.

Financing

We are working with our financial advisors at ButcherMark to refine the financing model and develop a financing plan based on current market conditions, the availability of other revenue sources, and our project funding draw schedule to determine our financial capacity to build a project in accordance with the preliminary design.

On May 17, the entire project team (AMEC, ButcherMark, Campion, USACE) will come meet to start the process of bringing together design, financing, scheduling and administrative requirements for the purpose of developing a project implementation plan. The plan will be a public document that will formally establish the design, schedule and budget for the project. This will be a critical milestone that will allow us to determine with some confidence how the project will be carried out.

Roy Torkelson will present the latest results of financial modeling at the May Board meeting.

Legislation

The House subcommittee on Insurance, Housing, and Community Opportunity has passed a bill (HR 1309) to reauthorize and reform the nation's flood insurance program. The legislation provides for a five-year extension of the National Flood Insurance Program (NFIP) and phases out the program's rate subsidies, gradually raises all premiums to reflect actual costs, improves the accuracy of flood maps and allows more public input into the mapping process, and encourages private insurer and reinsurer participation in the market.

The bill would establish an advisory council to give local communities more say in the flood mapping process and it directs the Federal Emergency Management Agency (FEMA) that manages the program to take steps to improve the accuracy of maps.

Rates for property owners in communities newly designated as in flood hazard zones would be move to cost-based pricing over a five-year span. Their rates would start at 20 percent of the actuarial indications the first year, with 20 percent hikes each year thereafter until they are brought in line with what actuaries say they should be.

If indeed there is an actuarial basis for rates, that would be beneficial to areas like ours where flood risk is very small, but it is not clear that rate standard would apply individually to each insured property or the program overall. Moreover, the gradual withdrawal of public subsidy will cause flood insurance rates to go up in the future, perhaps dramatically.

There is no provision in the bill to postpone the implementation of new flood insurance rate maps or the mandatory requirement for insurance (although rates would be phased in for newly mapped floodplains).

Legal

We continue to await the federal court's ruling on FEMA's motion to dismiss our lawsuit.



Memo to: Board of Directors
From: Les Sterman
Subject: Budget Report through April 31, 2011
Date: May 16, 2011

Attached is the budget report for April 2011. It includes an accounting of revenues and expenditures in the current year and the year ended on September 30, 2010. Accrued expenditures for the current fiscal year are \$11,094,289. Expenditures are running at the expected pace, except that we probably will use only a small amount of the budgeted construction costs. Except for pre-construction testing such as soil borings and relief well testing, significant construction activities will likely not begin until the first quarter of 2012.

We are beginning a third year of sales tax receipts. In 2010, sales tax collections totaled a little over \$11 million or about 6.7% higher than in 2009. In January 2011, the trend remained positive, but the rate of increase slowed to 3.29% compared to the same month in 2010 and in February, growth slowed further to 0.71% and turned negative in St. Clair County. It remains to be seen if this represents a continuing trend reflecting the state of the local economy or is simply an anomaly caused by bad weather (ice storms caused major disruption over several days) or some other transient condition affecting retail sales.





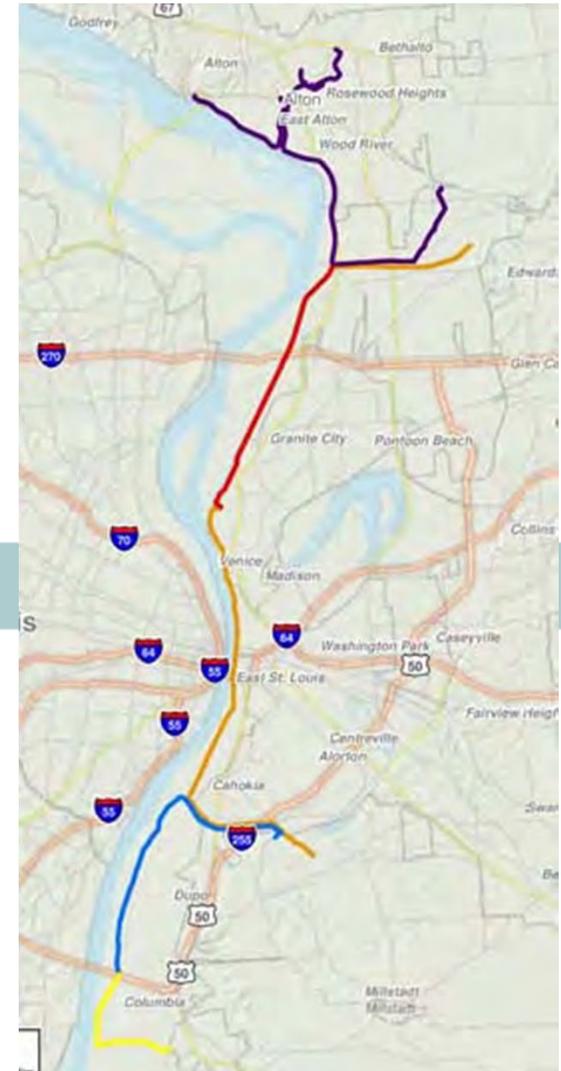
Memo to: Board of Directors
From: Les Sterman
Subject: April, 2011 Disbursements
Date: May 16, 2011

Total disbursements for April 2011 were \$902,757.07. The largest payments were to AMEC Earth & Environmental for pre-construction activities, preliminary design and program management. We also received the federal subsidy on interest payments on the Council's Economic Recovery Zone, and Build America bonds. As required by the indenture for those bonds, the interest payments were disbursed to the Trustee for deposit in the construction fund for the project.

Recommendation: Accept disbursement report.



Progress Report May 18, 2011 SW IL Levee System By Jay Martin



03/31/2010

- Design Activities – Progress Set
- Look Ahead
- Budget

- Internal team meeting to prioritize short-term targets to further evaluate, March 3.
- Developed list of priority areas and schedule
- Complete analysis on selected reaches
- Update drawings to reflect results
- Develop cost estimate

Value Engineering Considerations



Wood River Value Engineering/Design Optimization Items

Item	Description	Potential Benefits
1	Reduce berm slopes from 2% to max 1.33% or to actual berm shape (levee-wide)	Reduce volume of berm material required
2	Examine feasibility of moving cutoff wall to riverside toe of the levee. Stations 21+00 to 32+00 and 54+55 to 118+00	Reduce square footage of cutoff reducing cost.
3	UWR - Use 2D finite element modeling to examine alternatives to reduce or eliminate berms and relief wells at stations 213+00 to 222+50. (South of water treatment plant).	Reduce berm, culvert and relief well abandonment costs. Reduce potential wetlands impacts.
4	LWR - Use 2D modeling and assume that planned USACE relief wells are installed to reduce/eliminate berms. Sta. 195+00 to 207+00	Reduce berm sizes. Avoid abandoning wells. Avoid realigning and raising power lines.
5	LWR - Multi-phase approach to a high cost area. Deep Cutoff wall, Sta. 132+00 to 187+00.	Potential significant cost savings by reducing wall size.
5a	Use 2D modeling to reduce or eliminate wall.	
5b	Examine possibility of moving cutoff wall to toe of levee.	
6	LWR - Use 2D modeling to reduce/eliminate berms and relief wells 548+00 to 569+00	Reduce berm sizes. Potentially avoid installing new relief wells.
7	LWR - Reexamine flooding elevations, hydrology and hydraulics, and potentially use 2D modeling to reduce or eliminate clay cap from about 565+00 to 630+00.	Reduce or eliminate clay cap. Avoid some wetlands impacts.
8	LWR - Use 2D modeling to reduce /eliminate berm and new relief wells, stations 569+00 to 577+00.	Reduce berm size. Avoid construction limits/limits of disturbance impacting neighboring residences.
9	LWR - Use 2D modeling to eliminate/reduce large berm and 72" culvert. Sta. 595+00	Reduce berm and culvert cost Avoid or reduce wetlands impact.
10	LWR - Use 2D analysis to reduce/eliminate cost of ditch fill and new 72-inch culvert. Sta 594+00 to 608+00	Reduce cost of expensive culvert.

Significant Changes Wood River



- **UWR 213+00 - 222+50 (Area near City of Alton WWTP)** Sheets: CA-X118 – CA-X119
 - Removed seepage berm and 72” pipe culvert
 - Replaced with graded filter and small pump station

- **LWR 153+00 – 187+00 (WR Elbow Area)** Sheets: CA-W149 – CA-W152
 - Moved deep cutoff wall from the crest to the riverside toe of the levee (typical)

- **LWR 199+00 - 208+00** Sheets: removed from the set
 - Completely removed fill and pipe culvert with additional modeling
 - (No improvement needed)

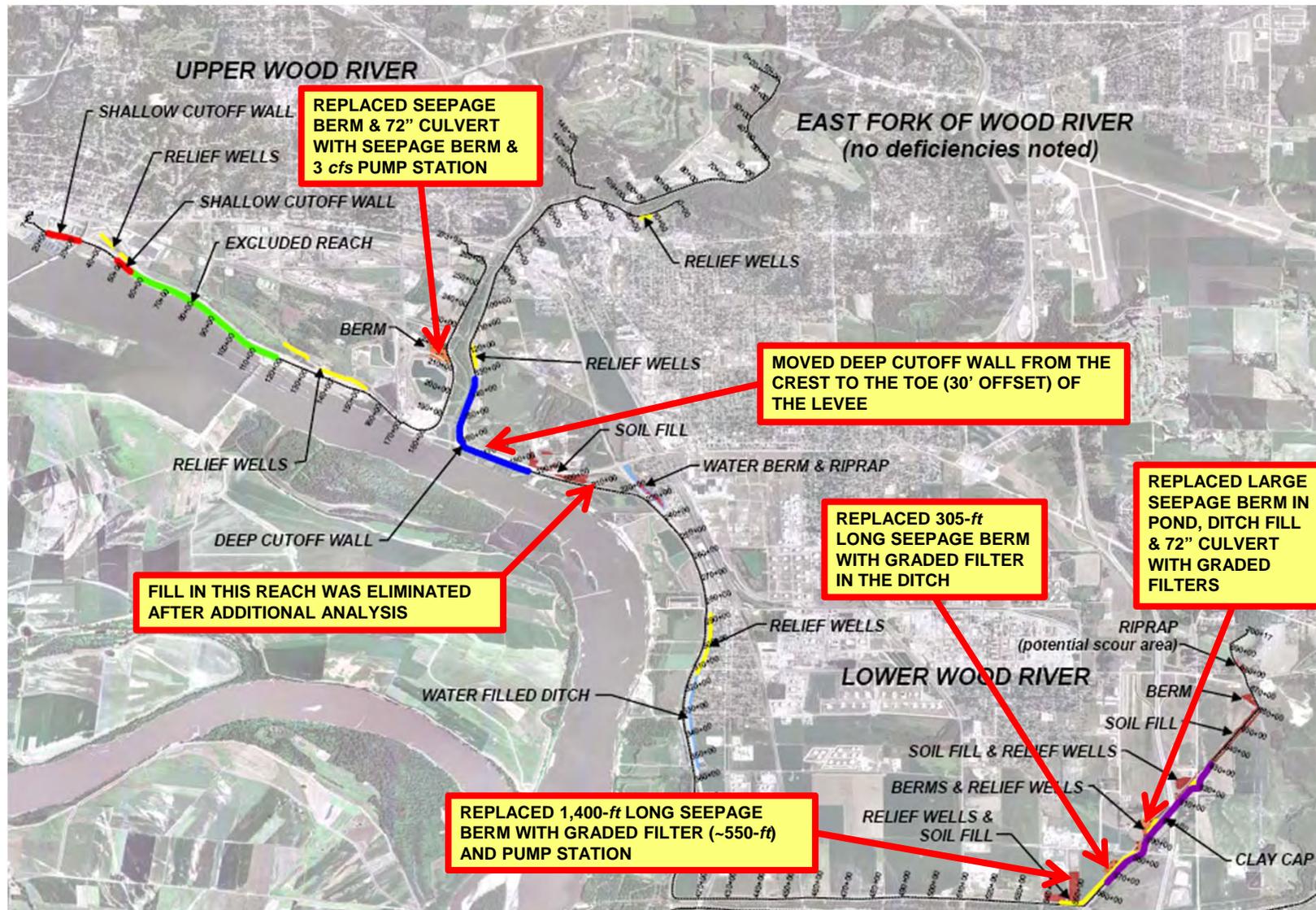
- **LWR 548+00 - 569+00 (Long Borrow Pit Area)** Sheet: CA-X182
 - Removed 1,400-ft long seepage berm in borrow pit
 - Replaced with ~550-ft of graded filter along one side of the pit and a pump station

- **LWR 569+00 - 579+00** Sheets: CA-X184 – CA-X185
 - Removed 305' long seepage berm
 - Replaced with graded filter in the ditch

- **LWR 592+00 - 599+00 (Pond Area)** Sheet: CA-X186
 - Removed large seepage berm
 - Replaced with graded filter

- **LWR 599+00 - 612+00 (Pond to I-255)** Sheets: CA-X186 – CA-X187
 - Removed ditch fill & 72" pipe culvert
 - Replaced with graded filter

Overview Wood River



Value Engineering Considerations



MESD Value Engineer/Design Optimization Items

Item	Description	Potential Benefits
1	Revised unit cost for Deep Cutoff Walls may be set to \$32/sf (Reference Line 6 of Cost Est.)	Reduce overall cost of cutoff walls in MESD by \$1.8M
2	Reduce berm slopes from 2% to max. 1.33% or to actual berm shape	Reduce volume of berm material required
3	Deep cutoff wall 781-791; evaluate with SEEP/W to see if gradients necessitate cutoff wall	Reduction in quantity of cutoff wall by 100,000 SF
4	Replace Deep cutoff wall between Stations 1209-1219 with a Berm/RW hybrid solution	Reduction in quantity of cutoff wall by 140,000 SF
5	Use 2D modeling to reduce the berm widths/depths at Dead Creek; Sta. 1291+40, 1298+09, 1304+55	Reduce volume of berm material required Reduce acreage of wetland impacts Reduce acreage of land acquisition Reduce or eliminate cost for relocation of Dead Creek Maintain water storage areas
6	Use 2D modeling to reduce the berm widths/depths between Sta. 1320 and 1349	Reduce volume of berm material required Reduce acreage of land acquisition Maintain water storage areas Eliminate/reduce need to put blue water ditch in a box culvert
7	Use 2D modeling to reduce the berm widths/depths between Sta. 1219 and 1239	Reduce volume of berm material required Reduce acreage of land acquisition Maintain water storage areas Reduce need to route surface water and remove need to relocate Phillips Pump Station Possibly eliminate need to relocate power poles
8	Use 2D modeling to reduce the berm widths/depths between Sta. 1268 and 1344	Reduce volume of berm material required Reduce acreage of wetland impacts Reduce acreage of land acquisition Maintain water storage areas
9	Use 2D modeling to reduce the berm widths/depths between Sta. 962 and 972	Reduce volume of berm material required Reduce acreage of wetland impacts Reduce acreage of land acquisition Maintain water storage areas
10	Re-evaluate using 2D finite element model the effectiveness of 40' cutoff between Stations 987 and 1013 in light of identified section of toe drain and new field data to confirm existence or absence of clay layer at 40'	Possible reduction in length of cutoff wall
11	Use 2D modeling to reduce the berm widths/depths at Sta. 1492	Eliminate need for berm to provide seepage control in this area
12	Use 2D or 3D modeling to reduce the number of relief wells at Sta. 1499+54	Reduce number of new relief wells required
13	Move cutoff wall from crest of levee to river side toe of levee between Sta. 1304 and 1319	Reduce quantity of deep cutoff wall quantity by approximately 37,500 SF

Significant Changes MESD



- **781+00 – 791+00 (Granite City depot area)** Sheets: CA-X124
 - Removed deep cutoff wall in this area
 - Replaced with blanket drain in the ditch; retain existing relief wells

- **1209+00 – 1220+00 (Conoco Phillips area)** Sheets: CB-W159 – CB-W160
 - Moved deep cutoff wall to the riverside toe of the levee

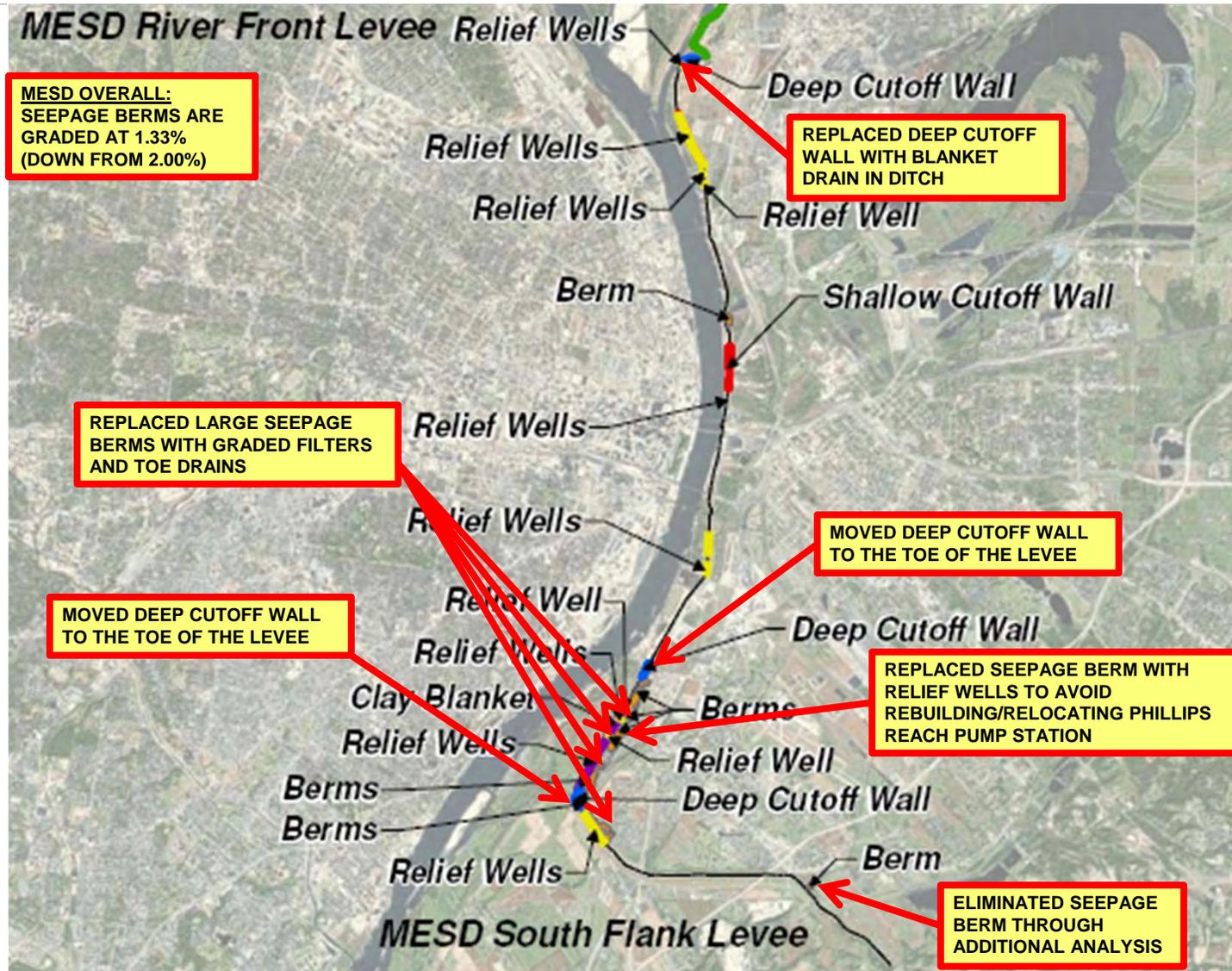
- **1222+00 – 1226+00 (Conoco Phillips pump station)** Sheets: CB-R160 – CB-R161
 - Removed seepage berm and replaced with relief wells to avoid rebuilding pump station

- **1244+00 – 1353+00 (Elbow Area)** Sheets: CB-X162– CB-X171
 - Removed large seepage berms throughout
 - Replaced with graded filters and toe drains

- **1304+00 – 1319+00 (Elbow Area)** Sheets: CB-W167 – CB-W168
 - Moved deep cutoff wall to the riverside toe of the levee

- **1491+00 – 1495+00** Sheet: CB-B183 (Sheet Removed from the set)
 - Removed seepage berm.
 - Additional analysis shows that no improvement is needed

Overview MESD



PdP/FL Value Engineer/Design Optimization Items

Item	Description	Potential Benefits
1	Reduce berm slopes from 2% to max. 1.33% or to actual berm shape (levee-wide)	Reduce volume of berm material required
2	Use 2D finite element modeling to underseepage control in North/South Elbow and at Stations 467+95 - 471+25	Reduce volume of berm material required
		Reduce acreage of wetland impacts
		Reduce acreage of land acquisition
	Maintain water storage areas	
3	Water berm solution from Station 560+00 to 620+00	Eliminate need for berm/well solution

Significant Changes PdP/FL



- **223+00 – 227+50** Sheet CC-B119
 - Removed seepage berm

- **Sta 278+00**
 - Pump station upgraded

- **310+00 - 318+00** Sheets CC-C126 and CC-C127
 - Removed clay cap

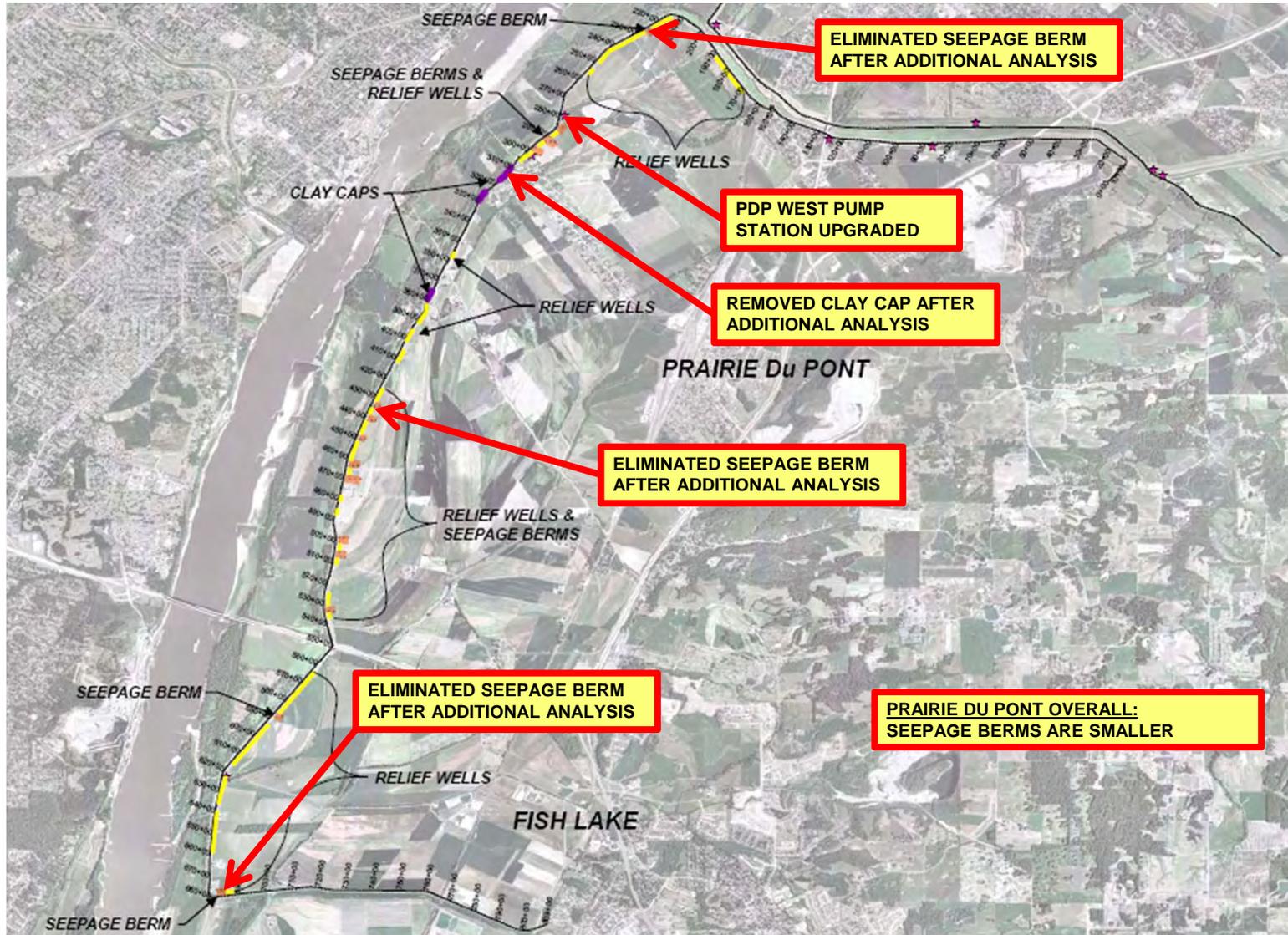
- **431+00 – 436+00** Sheets CC-B136 and CC-B137
 - Removed seepage berm

- **467+00 – 472+00** Sheets CC-B139 and CC-B140 removed
 - Removed seepage berm

- **681+50 – 686+50** Sheets CC-B157 and CC-B158 removed
 - Removed seepage berm

- **Overall berms are smaller**

Overview PdP/FL



Look Ahead

- Continue activities associated with TO #4
- Relief well and aquifer testing
- Cut off walls
- Interior drainage
- Water berms
- Other VE items (reduce clay cap thickness, berm material, modeling)



Construction Cost Estimate



DETAILED SUMMARY - WOOD RIVER, MESD, PdP & FISH LAKE

Item #	Cost Item	Unit	Unit Cost	Contingency	Quantity	Total
1	Clay Cap/Clay Blanket Material - Haul On & Placement	CY	\$ 12	20%	268,311	\$ 3,863,678
2	Clear & Grub - Light Vegetation	AC	\$ 6,000	20%	185	\$ 1,332,072
3	Clear & Grub - Wooded	AC	\$ 21,625	20%	70	\$ 1,816,500
4	Cutoff Wall - Deep	SF	\$ 32	30%	957,418	\$ 39,828,589
5	Cutoff Wall - Hazardous Waste Premium	SF	\$ 28	20%	45,453	\$ 1,527,221
6	Cutoff Wall - Shallow	SF	\$ 12	30%	158,600	\$ 2,474,160
7	Cutoff Wall - Special Waste Premium	SF	\$ 11	20%	181,813	\$ 2,399,932
8	Dewatering	LF	\$ 51	20%	11,455	\$ 701,046
9	Drainage - Enclosed - 30" Pipe	LF	\$ 96	20%	569	\$ 65,549
10	Drainage - Inlet Structure	EA	\$ 2,200	20%	1	\$ 2,640
11	Drainage - Surface - Shallow Ditch	LF	\$ 141	20%	7,200	\$ 1,218,240
12	Excavation	CY	\$ 11	20%	191,485	\$ 2,527,603
13	Gravel Filter - D50=#4 Material - Haul On & Placement	CY	\$ 24	20%	47,161	\$ 1,358,237
14	Gravel Filter - D50=2" Material - Haul On & Placement	CY	\$ 29	20%	70,017	\$ 2,436,592
15	Gravel Filter - Geotextile - Material & Installation	SY	\$ 2	20%	709,631	\$ 1,703,114
16	Gravel Filter - Sand Material - Haul On & Placement	CY	\$ 12	20%	29,590	\$ 426,096
17	Haul Off of Excess Material	CY	\$ 6	20%	187,835	\$ 1,352,413
18	Mobilization (% varies)	LS	\$ 1,492,890		1	\$ 1,492,890
19	Pump Station - WR - New - 220+00 UWR	EA	\$ 605,500	20%	1	\$ 726,600
20	Pump Station - WR - New - 560+00 LWR	EA	\$ 699,500	20%	1	\$ 839,400
21	Pump Station - MESD - Improve Existing - Phillips Reach	EA	\$ 849,500	20%	1	\$ 1,019,400
22	Pump Station - PdP - Improve Existing - PdP West	EA	\$ 849,500	20%	1	\$ 1,019,400
23	Pump Station - Various Improvements	EA	\$ 600,000	20%	4	\$ 2,880,000
24	Pvmt - Curb & Gutter - Remove & Replace	LF	\$ 42	20%	1,247	\$ 62,849
25	Pvmt - Improved Roadway	LF	\$ 122	20%	3,522	\$ 515,621
26	Pvmt - Roads & Trails - Remove & Replace	SY	\$ 50	20%	8,388	\$ 503,280
27	Pvmt - Road Repair	LF	\$ 44	20%	15,840	\$ 836,352

CONTINUED ON NEXT SLIDE

Construction Cost Estimate



DETAILED SUMMARY - WOOD RIVER, MESD, PdP & FISH LAKE

Item #	Cost Item	Unit	Unit Cost	Contingency	Quantity	Total
28	Relief Well - Existing - Abandon	EA	\$ 2,000	20%	42	\$ 100,800
29	Relief Well - Existing - Convert to Type "T"	EA	\$ 6,000	20%	76	\$ 547,200
30	Relief Well - Existing - Hazardous Waste Premium	EA	\$ 48,700	20%	6	\$ 350,640
31	Relief Well - Existing - Rehabilitate	EA	\$ 12,000	20%	78	\$ 1,123,200
32	Relief Well - Existing - Special Waste Premium	EA	\$ 12,700	20%	24	\$ 365,760
33	Relief Well - Lateral Pipe (8-Inch)	LF	\$ 40	20%	3,588	\$ 172,224
34	Relief Well - Manifold Manhole	EA	\$ 3,000	20%	29	\$ 104,400
35	Relief Well - Manifold Pipe (12-Inch)	LF	\$ 50	20%	3,548	\$ 212,880
36	Relief Well - Manifold Pipe (18-Inch)	LF	\$ 64	20%	3,591	\$ 275,789
37	Relief Well - New - Hazardous Waste Premium	EA	\$ 61,950	20%	11	\$ 817,740
38	Relief Well - New - Special Waste Premium	EA	\$ 16,575	20%	51	\$ 1,014,390
39	Relief Well - New Type "D"	EA	\$ 32,500	20%	215	\$ 8,385,000
40	Relief Well - New Type "T"	EA	\$ 40,000	20%	67	\$ 3,216,000
41	RipRap Bank Protection	CY	\$ 120	20%	6,252	\$ 900,288
42	ROW Acquisition - Agricultural	AC	\$ 6,500	20%	135	\$ 1,053,000
43	ROW Acquisition - Commercial	AC	\$ 30,000	20%	9	\$ 324,000
44	ROW Acquisition - Governmental	AC	\$ 25,000	20%	12	\$ 360,000
45	ROW Acquisition - Industrial	AC	\$ 30,000	20%	68	\$ 2,448,000
46	ROW Acquisition - Residential	AC	\$ 18,000	20%	1	\$ 21,600
47	ROW Acquisition - Vacant/Undeveloped	AC	\$ 23,000	20%	79	\$ 2,180,400
48	Seeding	AC	\$ 1,650	20%	180	\$ 356,420
49	Seepage Berm Material - Haul On and Placement (Hauled)	CY	\$ 12	20%	583,346	\$ 8,400,183
50	Slip-Line - 12-Inch Pipe	LF	\$ 110	20%	175	\$ 23,100
51	Slip-Line - 15-Inch Pipe	LF	\$ 115	20%	60	\$ 8,280
52	Slip-Line - 18-Inch Pipe	LF	\$ 121	20%	2,340	\$ 339,768
53	Slip-Line - 24-Inch Pipe	LF	\$ 132	20%	2,870	\$ 454,608
54	Slip-Line - 27-Inch Pipe	LF	\$ 138	20%	960	\$ 158,976

CONTINUED ON NEXT SLIDE

Construction Cost Estimate



DETAILED SUMMARY - WOOD RIVER, MESD, PdP & FISH LAKE						
Item #	Cost Item	Unit	Unit Cost	Contingency	Quantity	Total
55	Slip-Line - 36-Inch Pipe	LF	\$ 167	20%	835	\$ 167,334
56	Slip-Line - 42-Inch Pipe	LF	\$ 201	20%	580	\$ 139,896
57	Slip-Line - 48-Inch Pipe	LF	\$ 220	20%	3,190	\$ 842,160
58	Utility Relocation - High Tension Power (Raise)	EA	\$ 300,000	20%	5	\$ 1,800,000
59	Utility Relocation - Natural Gas Pipeline	LF	\$ 500	20%	12,190	\$ 7,314,000
60	Utility Relocation - Power Pole / Light Pole	EA	\$ 10,000	20%	42	\$ 504,000
61	Utility Relocation - Shield OE Power	LF	\$ 50	20%	4,048	\$ 242,880
62	Utility Relocation - Underground Communication	LF	\$ 100	20%	8,300	\$ 996,000
63	Utility Relocation - Underground Communications Pedestal	EA	\$ 10,000	20%	2	\$ 24,000
64	Utility Relocation - Various Buried Facilities	LF	\$ 250	20%	3,805	\$ 1,141,500
65	Wetland Mitigation	AC	\$ 25,000	20%	112	\$ 3,360,000
66	Construction Estimate					\$ 125,175,000
67	Construction Estimate Escalated to Mid-Point of 4 Yrs @ 3.44%					\$ 129,480,000

Budget for Estimate to Complete



Construction Estimate	Present Value	Escalated
Wood River	\$50,435,000	\$52,170,000
MESD	\$57,713,000	\$59,698,000
PdP/FL	\$17,027,000	\$17,612,000
Total Construction Estimate	\$125,175,000	\$129,480,000
Professional Services Completed to Date		
Program Management Services (Work Order #001)	\$392,000	\$392,000
Preliminary Design Services (Work Order #002)	\$2,700,000	\$2,700,000
Total Professional Services Completed to Date	\$3,092,000	\$3,092,000
Testing Construction Services Completed to Date	\$3,000,000	\$3,000,000
Professional Services Remaining		
Program Management Services (Work Order #001)	\$1,078,000	\$1,078,000
60%I Design Services (Work Order #004)	\$2,599,000	\$2,599,000
Final Design Services (Work Order #005)	\$2,500,000	\$2,500,000
Construction Phase Services (WO # 006)	\$5,183,000	\$5,183,000
Certification Services (WO#007)	\$325,000	\$325,000
PM Mod for Time duration Extension	\$750,000	\$750,000
Total Professional Services Remaining	\$12,435,000	\$12,435,000
Testing Construction Services Remaining	\$2,688,000	\$2,688,000
Project Total	\$146,390,000	\$150,695,000

Cost and Schedule Risks



- Hazwaste/special waste at select locations
- Obstructions within the depth of the cut off walls
- Permits (state, federal, USACE)
- Impacts of seepage volumes (interior drainage)
- Relief wells and aquifer results

QUESTIONS?



Southwestern Illinois Flood Prevention District Council

Financial Capacity Analysis

May 2011

Introduction

- Sales tax revenues \$11.0 million in 2010.
- 2011 operating budget included \$600,000 for administrative and professional services costs. These expenses will increase as scale of operations rises with levee infrastructure.
- The difference - tax revenues minus expenses – is available to fund design and construction of levees and/or pay debt service on bonds. This financing plan lays out a strategy for funding construction from revenues.

Construction Draw Schedule - Still Developing

A full schedule of construction draws is not known at this time.

- project is in design phase
- future financing details not known

Estimated draws through April 2013 shown below. Can be paid from current balance in construction fund.

Six Months Ending...	Capital Need	Comment	Cumulative Draw
10/15/2011	10,000,000	Design & Other Costs	10,000,000
4/15/2012	20,000,000	Acquire Materials, initiate construction	30,000,000
10/15/2012	29,000,000	Continue construction	59,000,000
4/15/2013	28,332,000	Continue construction	87,332,000
10/15/2013	?		
4/15/2014	?		
10/15/2014	?		
4/15/2015	?		
10/15/2015	?		
4/15/2016	?		

Sources of Financing

- Future bond issuances of the Council (scheduled for 2013 and 2015)
- Surplus after debt service and Council expenses
- Investment earnings from Reserve Fund and Construction Fund

Supplemental Sources of Financing

- Additional debt capacity from Wood River and Metro East districts
- Corps of Engineers

Surplus Revenue and Bonding Capacity of the Council

- In approximately 2013, the Council will likely need additional construction funds
- Financing strategy will change over time:
 - Interest rate changes
 - Construction fund requirements
 - Etc.
- An optimization model to identify strategies that produce a maximum amount of construction funds in 2013 – 2015

Optimization Model

- Tax Revenue Assumptions
 - 2010 (\$11.047 mn) + 3% annual growth
- Administrative & Professional Services Costs
 - \$600,000 per year + 3% annual growth
- Base Case Financing Assumptions
 - Dates: April, 2013 & 2015
 - Coverage: 1.25x net coverage
 - Rating: A (Subordinate bonds)
 - Market: current interest rates (April 2011) + 50 bp
 - Reserve Fund funded at maximum annual debt service
- Total construction draws through April 2013: \$87.3 million.
- Objective:
 - Model maximizes equal semi-annual draws from November 2013 – April 2015

Optimization Results

- Maximum semiannual draw from 10/13 through 4/15 is \$14.0 mn.
- Total draws come to \$161.4 mn.
- Breakdown by Source (millions)
 - Net proceeds 2010 \$87.4
 - Net proceeds 2013 (see below) 7.0
 - Net proceeds 2015 37.8
 - Draws from surplus revenues 26.4
 - Construction fund earnings 1.7
 - Reserve earnings 1.1
- The Council can issue \$7.0 million in subordinate bonds in 2013 using surplus revenues. Delaying monetization of future tax revenues to 2015 saves two years' interest on borrowing and increases total capacity, all other things (e.g. interest rates) being equal.

Financing Results & Surplus Revenues

Southwestern Illinois Flood Prevention District Council
Capacity Analysis for Levee Construction

5/17/2011

Results

2010 Net Proceeds	87,409,570
2013 Net Proceeds	7,075,733
2015 Net Proceeds	37,782,217
Construction Fund Earnings	1,735,405 (4/15/16)
Reserve Fund Earnings	1,053,672 (4/15/16)
Surplus Draws	26,361,246
MESD & WRDD Net Proceeds	0
Total Capital Improvement Fund Draws	161,417,844

Projected Revenues, Debt Service, Expenses, and Surplus

Date	Tax Revenues	BAB Subsidy	Senior Debt Service	Remaining Revenues	Subordinate Debt Service	Remaining Revenues	Administrative Expenses	Surplus
11/23/2010								
4/15/2011	5,420,374	359,000	1,835,129	3,944,245	0	3,944,245	300,000	3,644,245
10/15/2011	5,420,374	455,070	2,326,220	3,549,224	0	3,549,224	300,000	3,249,224
4/15/2012	5,582,985	455,070	4,781,220	1,256,836	0	1,256,836	309,000	947,836
10/15/2012	5,582,985	455,070	2,301,670	3,736,386	0	3,736,386	309,000	3,427,386
4/15/2013	5,750,475	455,070	4,806,670	1,398,875	0	1,398,875	318,270	1,080,605
10/15/2013	5,750,475	455,070	2,276,620	3,928,925	199,870	3,729,055	318,270	3,410,785
4/15/2014	5,922,989	455,070	4,831,620	1,546,439	199,870	1,346,569	327,818	1,018,751
10/15/2014	5,922,989	455,070	2,251,070	4,126,989	199,870	3,927,119	327,818	3,599,301
4/15/2015	6,100,679	455,070	4,936,070	1,619,679	199,870	1,419,809	337,653	1,082,156
10/15/2015	6,100,679	455,070	2,210,795	4,344,954	1,425,192	2,919,762	337,653	2,582,109
4/15/2016	6,283,699	455,070	4,965,795	1,772,974	1,425,192	347,782	347,782	0
Totals	63,838,702	4,909,699	37,522,874	31,225,527	3,649,865	27,575,662	3,533,264	24,042,399

Assumptions & Construction Draws

Case: Sales Tax Only

Assumptions			
Bonds	2010	2013	2015
Tax Revenues	10,840,748	11,719,810	12,433,546
Net Coverage	1.75x	1.25x	1.25x
Gross Coverage	1.5x	1.1x	1.1x
Rating	AA-	A	A
Spread to Market		0.50%	0.50%
2010 & Future Rev Growth		3%	3%
Surplus Fund Balance 11/23/2010		1,500,000	
Annual Administrative Expenditures		600,000	
Ann. Exp Growth		3.00%	
Construction Fund Earnings		0.87%	
Surplus Earnings		2.00%	
Reserve Earnings		2.32%	
Fixed Costs per Issuance		100,000	
Per bond costs of issuance		\$7	
Minimum Surplus Fund Balance		25,000	
Reserve Percentage		100%	

Date	Projected Bond Proceeds, Construction Fund Balances, Earnings, and Draws											
	Surplus Before Construction	Construction Draws from Surplus	Surplus Fund Earnings	Surplus Fund Balance	Bond Proceeds	Earnings on Construction Fund	Earnings on Debt Service Reserve	Capital Improvement Plan	Construction Draws from Surplus	Construction Fund Draws	Construction Fund Balance	
11/23/2010				1,500,000	87,409,570							87,409,570
4/15/2011	5,144,245	0	11,753	5,155,998		297,935	57,442			0		87,764,946
10/15/2011	8,405,223	0	51,701	8,456,924		382,823	72,813	8,000,000	-	8,000,000		80,220,583
4/15/2012	9,404,760	0	84,801	9,489,560		349,916	72,813	17,000,000	-	17,000,000		63,643,311
10/15/2012	12,916,946	0	95,156	13,012,102		277,607	79,464	24,000,000	-	24,000,000		40,000,382
4/15/2013	14,092,707	0	129,765	14,222,471	7,075,733	173,525	79,464	28,332,000	-	28,332,000		18,997,104
10/15/2013	17,633,256	0	142,614	17,775,871		82,864	79,464	14,014,307	-	14,014,307		5,145,124
4/15/2014	18,794,622	8,767,399	177,272	10,204,494	0	22,320	79,464	14,014,307	8,767,399	5,246,908		0
10/15/2014	13,803,795	13,881,120	102,325	25,000		0	133,187	14,014,307	13,881,120	133,187		0
4/15/2015	1,107,156	0	249	1,107,406	37,782,217	0	133,187	14,014,307	-	14,014,307		23,901,097
10/15/2015	3,689,515	0	11,104	3,700,619		104,255	133,187	14,014,307	-	14,014,307		10,124,232
4/15/2016	3,700,619	3,712,727	37,108	25,000		44,161	133,187	14,014,307	3,712,727	10,301,580		0
Totals		26,361,246	843,848		132,267,520	1,735,405	1,053,672	161,417,844	26,361,246	135,056,597		