

Southwestern Illinois Flood Prevention District Council

Annual Report 2015-2016



August 17, 2016



**Southwestern
Illinois
Flood Prevention
District Council**

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August 17, 2016

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Hon. Terry Liefer
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100 South Main Street
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Sirs:

Charles M. Etwert
Chief Supervisor of
Construction and the Works

Transmitted herewith is the 2015-2016 Annual Report of the Southwestern Illinois Flood Prevention District Council. The submission of this report is in satisfaction of the requirement of our authorizing statute (70 ILCS 750/).

The Council has adopted two primary goals: to assure accreditation by the Federal Emergency Management Agency of area levee systems and to limit any economic damage to the region during the period during which accreditation is being sought. The Council has continued to make great progress toward achieving both goals during the last year.

We will enter FY2017 with over eighty percent of our current nine construction packages complete and anticipate construction of all nine package to be finished by the end of 2016.

Delays due to high river conditions, the Corps of Engineers offering a cost saving construction alternative not previously mentioned, and the East St. Louis 126-inch Sewer Project being added the certification process have pushed the accreditation schedule back but the Council is well on its way to achieving accreditation in 2017, using only revenue available from the dedicated FPD sales tax..

a regional partnership to rebuild Mississippi River flood protection

Certification reports will be submitted to FEMA, as each levee system is completed. This will occur approximately four months after completion of construction, with FEMA accreditation anticipated in another four months.

In December, the Council was successful with the issuance of additional sales tax revenue bonds which will generate an additional \$77.5 million for the 500-Year Authorized Level of Protection Projects. It is the intent, to use these funds, to build the most cost effective and highest priority flood protection projects throughout the Counties of Madison, Monroe, and St. Clair, Illinois.

The Corps of Engineers will provide oversight on the design and construction of these projects, to ensure that funds expended by the Council will be eligible for future Work In-Kind credit towards future Corps projects when the Corps able to obtain funding.

The Council continues to work with the Corps of Engineers regarding the process of the Council moving ahead with the 500-Year Authorized Level of Protection Projects..

The Board of Directors has already accepted Authorized Level Project Summary Reports for the Wood River Levee System and Metro East Sanitary District (MESD) Levee System. Bid Packages, based on the Corps' limited oversight funds, are under design in both of these systems.

In the Prairie Du Pont/Fish Lake area, the Corps of Engineers has identified 500-Year Authorized Level of Protection projects in the areas where there weren't any 100-Year Level Improvements or where only seepage berms were built. The Corps is seeking additional federal funding to complete their identification of the projects in the remaining areas. Amec Foster Wheeler will be providing an Authorized Level Project Summary Report Phase I for the Council to consider at their August meeting, with a request for funding to be presented in September.

In summary, I am pleased to report on behalf of our Board of Directors, that we continue to make progress in building and financing significant improvements to the flood protection systems in Metro-East.

Thank you for supporting our efforts throughout the year.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles M. Ewert". The signature is fluid and cursive, with the first name "Charles" being the most prominent part.

Charles M. Ewert
Chief Supervisor of Construction and the Works

I. Introduction

On August 15, 2007 the Federal Emergency Management Agency announced their intention to “de-accredit” the Mississippi River levee systems protecting a 174 square mile area in three Illinois counties known as the American Bottom. The practical effect of this action would be to cripple the area economically and put an enormous financial burden on businesses and residents in this area. The threat of this action by FEMA prompted a chain of events that is without precedent in the area. The end result is a cooperative regional effort to improve flood protection and secure FEMA accreditation for the levee system protecting the American Bottom from flooding.

The American Bottom is an area of incalculable economic value and historical significance. It is home to some 156,000 residents. Businesses in the area employ upwards of 55,000 people. Some of the nation’s most prestigious companies have major manufacturing facilities having national significance in the area. Additionally, the area is rich in multimodal transportation assets that make it well-positioned as a future center of commerce and industry.

The region’s leadership recognized that extraordinary measures were necessary to protect this economic asset and the homes and livelihoods of a large portion of the region’s population. A new revenue source was created in 2008 and a regional organization was formed to carry out an ambitious plan to maintain a level of flood protection that has been in place for some 70 years. That plan is now being implemented.

Acting on a plan to improve flood protection, even one that may be subject to adjustment from time to time, is an essential ingredient in helping businesses and citizens prepare for the future, to restore investor confidence in the area, and to assure taxpayers that their money is being spent effectively. The unpredictability of the Mississippi River serves as constant reminder that we need to demonstrate real progress in carrying out that plan.

The purpose of this report is to outline the activities of the Southwestern Illinois Flood Prevention District Council in 2015-2016 towards implementing flood protection improvements.

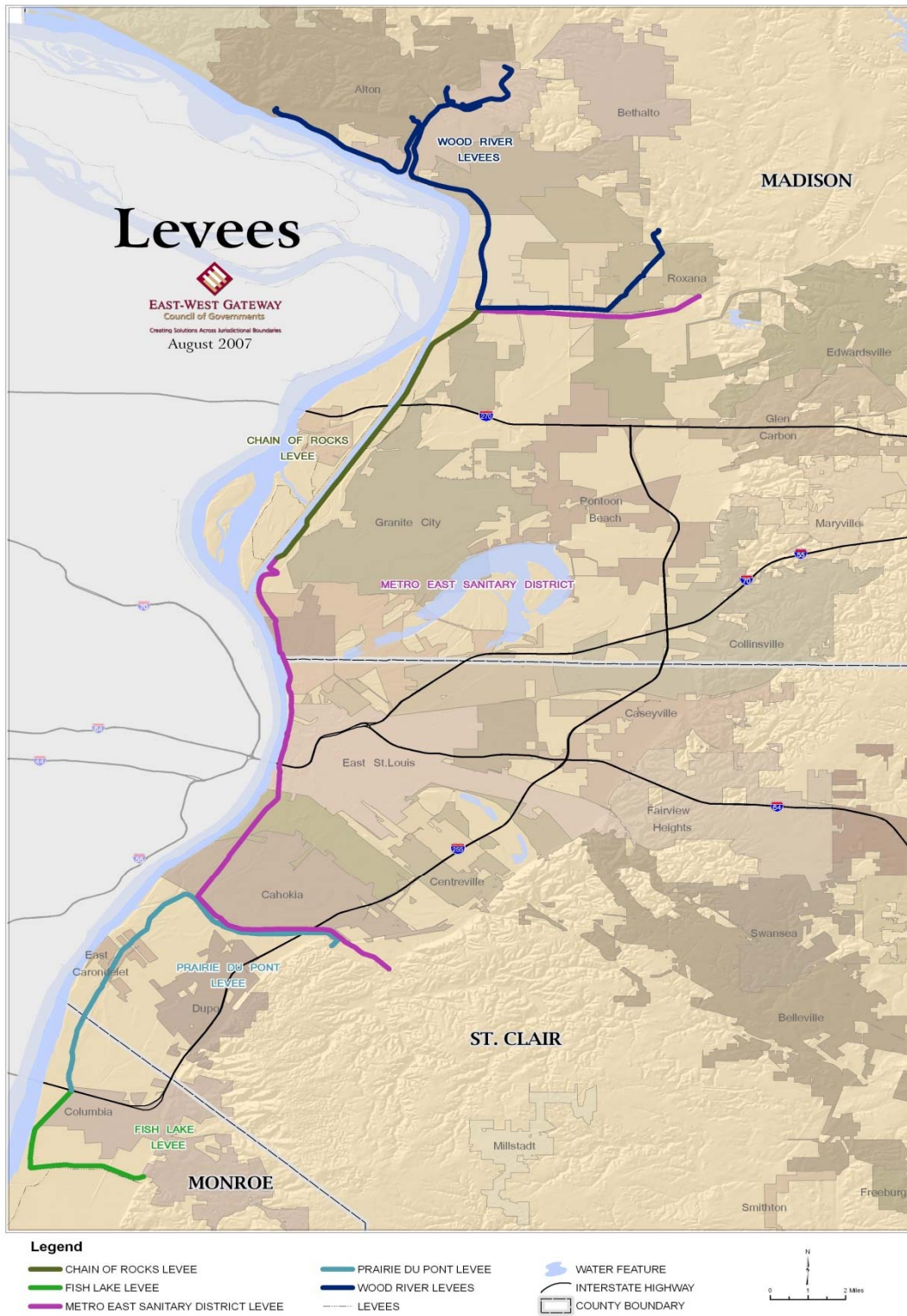
II. Background

A system of 85 miles of mainline and wing levees protects an area called the American Bottom in Southwestern Illinois from flooding by the Mississippi River. The American Bottom is an area of 174 square miles that is home to 156,000 people and 55,000 jobs. The levee system was authorized by Congress and designed and built by the U.S. Army Corps of Engineers to provide protection from a flood event on the Mississippi River of 54 feet on the St. Louis gauge. The American Bottom has not been flooded by the Mississippi River in the 70 years since the flood protection system was initially built, including during the flood of record in 1993, reportedly as much as a 380-year event.

Mississippi River flood protection consists of five “federal” levees (see Figure 1), i.e. levees designed and built by the federal government and whose owners participate in the Corps of Engineers Public Law 84-99 emergency assistance program. The construction of the following five (5) levees was authorized in federal law:

- **Wood River Levee**, operated and maintained by the Wood River Drainage and Levee District. Construction was authorized under Section 4 of the Flood Control Act of 1938, Pub. L. 75-761, with subsequent improvement was authorized under Section 1001(20) of the Water Resources Development Act of 2007, Pub. L. 110-114 (“WRDA 2007”)
- **Chain of Rocks Canal, Levee, and Locks**, operated and maintained by the Corps. Construction was authorized under the River & Harbors Act of 1945, Pub. L. 79-114
- **East St. Louis Levee**, operated and maintained by the Metro East Sanitary District. Construction was authorized by the Flood Control Act of 1936, Pub. Law 74-738, as modified by the Flood Control Act of 1965, Pub. L. 89-298, and the Water Resources Development Act of 1976, Pub. L. 94-587. Subsequent improvement was authorized under the Energy and Water Development Appropriations Act of 1988, Pub. L. 100-202
- **Prairie Du Pont Levee**, operated and maintained by the Prairie Du Pont Levee and Sanitary District. Construction was authorized under the Federal Flood Control Act of 1936. Subsequent improvement was authorized under Section 102(8) of the Water Resources Development Act of 2000, Pub. L. 106-541 (“WRDA 2000”) and Section 5070 of the WRDA 2007
- **Fish Lake Levee**, operated and maintained by the Fish Lake Drainage and Levee District. Construction was authorized by the Flood Control Act of 1954. Subsequent improvement was authorized under Section 102(8) of WRDA 2000 and Section 5070 of WRDA 2007

The Metro-East Sanitary District (formerly the East Side Levee and Sanitary District, originally formed in 1910) is authorized by the Metro-East Sanitary District Act of 1974, 70 ILCS 2905/. The Wood River and Fish Lake districts were authorized by the Illinois Drainage Code, 70 ILCS 605/. The Prairie Du Pont district was authorized by the Sanitary District Act of 1907, 70 ILCS 2205/. The levee districts own and have primary responsibility for maintaining the levee systems (with the exception of the Chain of Rocks Levee, which is owned and maintained by the Corps of Engineers).



**Figure 1 –
Levee Systems**

The Southwestern Illinois Flood Prevention District Council was formed in 2009 through an Intergovernmental Agreement between the Flood Prevention Districts of Madison, St. Clair and Monroe counties as authorized by the Illinois Flood Prevention District Act of 2008, 70 ILCS 750/. The primary responsibility of the FPD Council is to plan, finance, design, and build capital improvements to the levee system. The Council's principal goal is to assure accreditation by FEMA in accordance with criteria described in 44 CFR 65.10 – Mapping of Areas Protected by Levee Systems.

In 2007, the Corps indicated that the agency had “reduced confidence” that the levee system could protect against a flood that has a 1% chance of being equaled or exceeded in any single year (commonly referred to as a 100-year flood or a base flood) without flood fighting. FEMA's announced decision to deaccredit the levee systems in our area, which is the industrial core of the St. Louis region, was based on this assertion by the Corps. In July, 2009 FEMA issued preliminary flood insurance rate maps for the area that showed the American Bottom as a flood hazard area with no protection from flooding. Appeals of those maps were submitted by a number of local governments during the 90-day period provided by law; all of those appeals were denied in September, 2010.

The region's leadership did not agree with the decision by FEMA to deaccredit the levee system. A number of area governments, businesses and citizens joined to file a lawsuit challenging this decision based, in part, on the lack of any documentation of levee system deficiencies. In part as a result of that lawsuit and complaints about the mapping process across the country, FEMA agreed to revamp its mapping process and has not yet issued any new flood insurance rate maps from the area.

While the levee systems in this area were built by the Corps generally in the 1940s and 1950s using design standards in place at the time for a high level of flood protection, the current “design deficiencies” are measured relative to current engineering standards, so the issue is not a failure of adequate maintenance by local levee districts, or any dramatic change in the condition of the levees, but primarily a change in engineering standards and in the procedures for measuring risk. The levee systems have consistently been determined to be in *acceptable* or *marginally acceptable* condition by annual and more thorough 3-year periodic inspections by the Corps.

According to its own preliminary evaluations and cost estimates the Corps suggested that it could cost hundreds of millions of dollars to restore and maintain the authorized (54 feet flood elevation) level of flood protection. Further, the schedule to make these investments would essentially be open-ended, dependent entirely on the pace of federal appropriations. Making assumptions consistent with typical levels of federal appropriations, the project could take decades to complete. While the federal government could pay as much as 65% of the cost, it could take decades for those funds to be authorized and appropriated, so there would be significant uncertainty about the cost and schedule of the project. That continued uncertainty would impose very high costs on residents and businesses in the area, and, more importantly, would subject the area to increased flood risk.

Because of the uncertainty of federal funding and the complexity and time consuming nature of the USACE project development process, levee improvements will be primarily locally funded. The three affected counties have imposed a ¼% sales tax to pay for the restoration of the levee system and formed a new organization, the Southwestern Illinois Flood Prevention District Council, to carry out the levee improvement project. The tax has been collected since January 2009 and produces about \$11.5 million annually.

III. FPD Council Activities

The following describes the work of the Council over its seven year existence. Work done this year has brought the Council much closer to meeting its objectives. The probability of success has significantly increased in the last year. The Project Timeline since the announcement of de-accreditation by FEMA is shown in Figure 2.

Over the last few of years, the greatest challenge and source of doubt about the project has been the continued involvement of the Corps of Engineers in granting permission for most of the improvements to the levee system that the Council has proposed. The Corps is an institution that moves very deliberately, is governed by elaborate and extensive guidelines and procedures, most of which apply to federally funded projects but are being applied to our locally funded project. This process caused significant delays in the design process, but most of that is now behind us. The focus now is completing all construction in early 2017.

The FPD Council began operations in July, 2009. Since that time, the organization has:

- Completed a comprehensive inspection of the levee system
- Performed an economic analysis of the costs of mandatory flood insurance
- Provided support to local governments to appeal preliminary flood insurance rate maps,
- Conducted a design competition to determine the most cost-effective approach to assuring compliance with FEMA standards for levee system accreditation
- Sold \$94 million in bonds to pay for levee improvements.
- Completed the design of levee system improvements that will meet FEMA standards
- Developed a budget to complete the project solely with the proceeds from the FPD sales tax
- Received all required permits from state and federal agencies to proceed with construction
- Awarded contracts on the nine construction packages required to complete the project
- Sold an additional \$83.8 million in bonds for 500-Year Authorized Level Protection Projects

The Council's general goals have been to:

- assure compliance with FEMA accreditation standards with currently available revenue sources summer of 2017 (originally the end of 2015, but extended due to obtainment of easements, high river stages, construction alternatives, and construction delays); and
- minimize economic and financial hardship should the levee systems be de-accredited by FEMA

Notwithstanding the Council's strong disagreements with FEMA's decision to deaccredit the Metro-East levees and the agency's continuing efforts to overturn that decision, every effort is being made to remove all doubt about compliance with FEMA accreditation criteria. In October 2010, the Council engaged a team of engineering consultants led by AMEC Environment & Infrastructure, Inc. to design and manage construction of improvements to the levee system. Today, after more than two years of design work, multiple levee system inspections, drilling nearly 2000 borings along the entire length of the levee system, and submitting thousands of pages and many gigabytes of electronic files

of design documentation to the Corps of Engineers, the Council is performing major construction. The design is complete, construction is nearing completion, financial plans have been developed and kept updated, and a current project budget demonstrates convincingly that the Council will build the project using only the funds from the dedicated sales tax and have significant funds to utilize towards the 500-Year Authorized Level of Protection.

The general design features of the Proposed FEMA Certification Levee System Improvements are shown in Appendix I to this report.

The Council has adopted policies that emphasize the use of our local workforce on the construction of the project. It is our policy that all contractors working on the project will use a Project Labor Agreement (PLA) and comply with Illinois law regarding the use of prevailing wages. The Council is also implementing a minority business and workforce utilization policy. We remain committed to employing local labor and local firms to the maximum extent possible on the project, and to paying fair wages and providing good working conditions for everyone working on the project.

The Corps of Engineers reviewed the Project Labor Agreement issue for over two years. The Corps agreed that PLAs can contribute to project cost savings and efficiency, however, they indicated, they cannot mandate the use of PLAs.

Therefore, this past year, the Corps tested the use of a Best Value Tradeoff Approach for the construction of the Wood River Shallow Cutoff Wall Phase II. The evaluation criteria was to give weight to proposals that include PLAs and demonstrate the ability to achieve economy and efficiency.

The Corps originally requested 35% Council cash funding for this project, with the Council countering with a request for Work In-Kind Credit in lieu of cash. The Corps agreed to the Work In-Kind Credit but then determined that it could not be utilized until after the amendment of the Project Partnership Agreement, which would take up to a year. Therefore, the Corps decided to proceed utilizing only federal funds to build the project.

Unfortunately, the Corps awarded the contract to Mi-Con, a division of Michels Corporation, whose proposal didn't include a Project Labor Agreement (PLA). None of the four proposals received had a PLA. Therefore, per the Council's policy of requiring Project Labor Agreements on all construction contracts, the Council future participation with the Corps utilizing the Best Value Tradeoff Approach is very unlikely.

The Council now needs to maximize Work In-Kind Credit work as much as possible, satisfy the 5% cash requirement by providing the Corps funds for oversight on design and construction, and construct projects 100% where the Corps' benefit cost ratio is low and Corps funds aren't anticipated.

During the last year there have been three significant events that have impacted the certification schedule.

First, in August 2015, the Corps of Engineers informed the Council that replacing the high density polyethylene pipe (HDPE), the Corps had previously approved under a 408 permit process, with reinforced concrete pipe (RCP), would eliminate 14,300 feet of deep cutoff wall costing an estimated \$62.9 million dollars. This change affected three different bid packages.

The cost to remove and replace the HDPE pipe with RCP pipe was estimated to cost approximately \$12.9 million, for a net savings was \$50.0 million dollars. Council acted quickly and authorized the installation of the RCP pipe. Why Corps didn't suggest this alternative originally is unknown.

Unfortunately, it took until December for the Corps of Engineers to approve revised construction plans utilizing the RCP pipe. That is when the second event, the Flood of December 2015 occurred. The effects of this unusual, time of year, flood event, slowed construction and prevented the installation of any of the RCP pipe thru the month of July.

The last event is the repair of a 126 inch sewer located in the MESD levee. This is a City of East St. Louis sewer which has been identified to be repaired, in order, to achieve certification. It is a City of East St. Louis' maintenance responsibility, but unfortunately the City doesn't have the funds to correct the situation. The Council will have to advance the funds for the design and construction, with an agreement with the City for repayment.

The Council and the Corps of Engineers are currently looking at a solution involving the construction of an interior cofferdam with the lining of the existing sewer under the MESD levee, the sewer between the MESD levee and the cofferdam, and the sewer under the cofferdam. Unfortunately, the approval process and construction will extend into early 2017.

The Council has worked to comply with all relevant environmental laws and regulations. The Illinois Environmental Protection Agency has granted approval for the project under Sec. 401 of the Clean Water Act to certify that the project will not discharging pollutants into any bodies of water. Similarly, the Corps of Engineers has granted conditional approval under Sec. 404 of the Clean Water Act for mitigating the project's impact on wetlands.

We have continued to work closely with our congressional delegation throughout the year to help expedite the project and to advance legislation that would streamline future design approvals and would enable future funding of improvements to the levee system. All of the members continue to be very supportive of the project and are working on our behalf to advance our interests with the Corps, with FEMA, and in Congress.

With the interim goal of achieving FEMA accreditation in sight and the Corps of Engineers' decision on the utilization of Project Labor Agreements, the Board of Directors, by resolution (Appendix II), in February 2015, established its official intent to restore the federally Authorized 500-Year Level of Mississippi Flood Protection in the Metro-East to the best of its financial capabilities.

In December the Council was successful with the issuance of additional sales tax revenue bonds which will generate a net \$77.5 million for the 500-Year Authorized Level of Protection Projects. It is the intent, to use these funds, to build the most cost effective and highest priority flood protection projects throughout the Counties of Madison, Monroe, and St. Clair, Illinois.

The Corps of Engineers will provide oversight on the design and construction of these projects, to ensure that funds expended by the Council will be eligible for future Work In-Kind credit towards future Corps projects when the Corps is able to obtain funding.

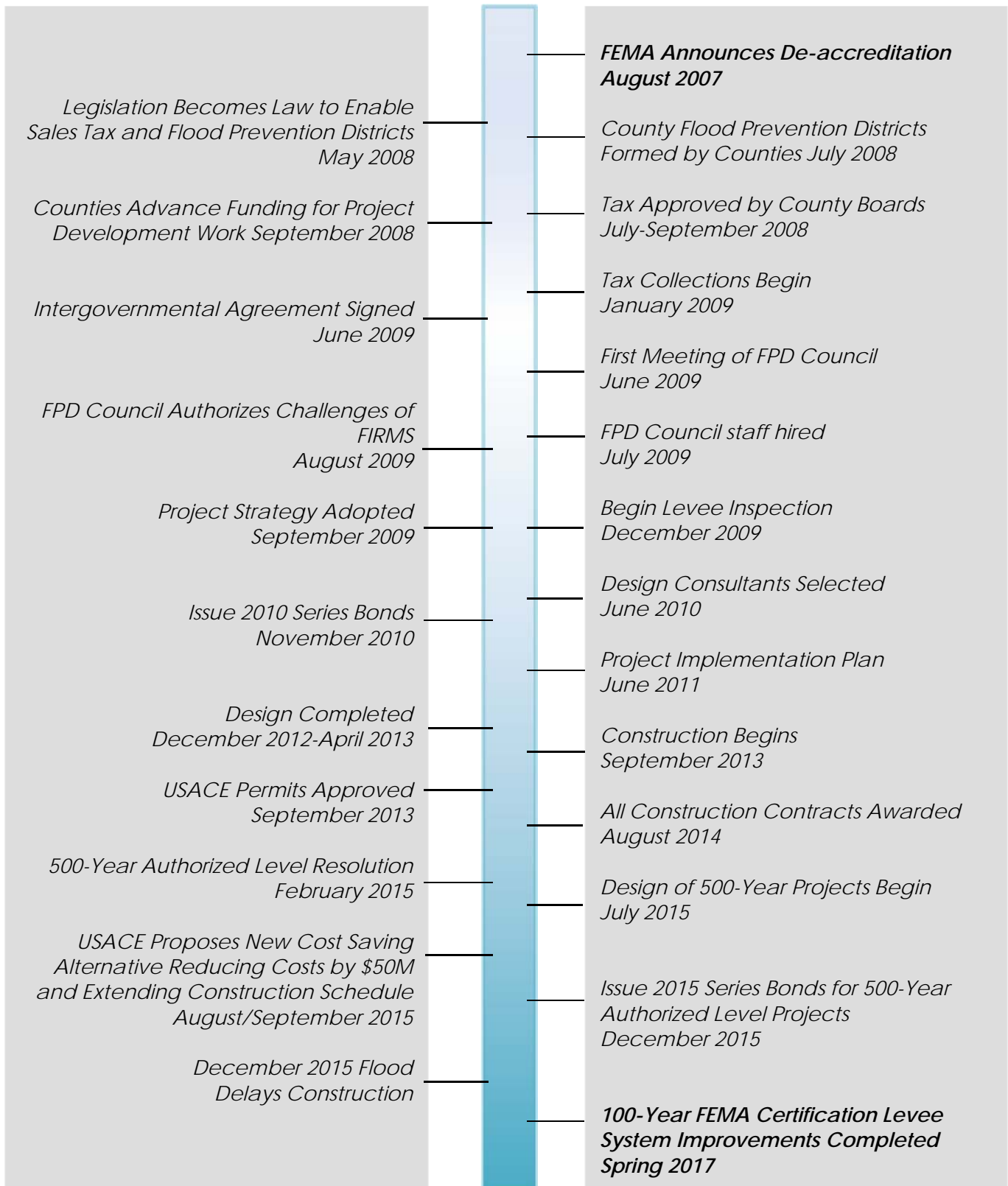
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In the Prairie Du Pont/Fish Lake area, the Corps of Engineers has recently identified 500-Year Authorized Level of Protection projects in areas where there weren't any 100-Year Level Improvements or where only seepage berms were built. The Corps is seeking additional federal funding to complete their identification of projects in the remaining areas. Amec Foster Wheeler will present the Authorized Level Project Summary Report Phase I for the Prairie Du Pont/Fish Lake area at the Council's August meeting, with a request for funding to be presented in September.

The general design features of the Wood River Levee System, the Metro East Sanitary District (MESD) Levee System and the Prairie Du Pont/Fish Lake Levee System Phase I Authorized Level Projects are provided in Section V and Appendix III of this report.

In summary, progress continues in building and financing significant improvements to the flood protection systems in Metro-East. The Council remains committed to achieving accreditation in 2017. With the continued support of the area's leadership and cooperation from the Corps of Engineers, we will be able to meet any remaining challenges to completion of the project.

Figure 2
Project Timeline



IV. Financing and Budget

Table 1 is a financial summary of the Council's activities through September 30, 2015, prepared by Scheffel Boyle.

Revenue from a dedicated sales tax was used to support the Council's ongoing design and construction activities. While sales tax revenue showed substantial growth in 2009, 2010 and 2011 coming out of the recession, growth was slowed in 2012, declined in 2013, but has reached new highs in 2014 & 2015. (See Figure 3).

The Council issued bonds in the amount of \$94,195,000 in November 2010. After setting aside funds for a debt service reserve and costs of issuance, around \$87 million was available to fund construction of the FEMA Certification Levee System Improvements. In December 2015 additional bonds were issued providing \$77.5 million in funds to be used for the 500-Year Authorized Level of Protection Projects. The Council will meet its goal of achieving FEMA certification in 2017 utilizing only the revenues available from the dedicated FPD sales tax.

Figure 3
Flood Prevention District Sales Tax Trends 2009-2015

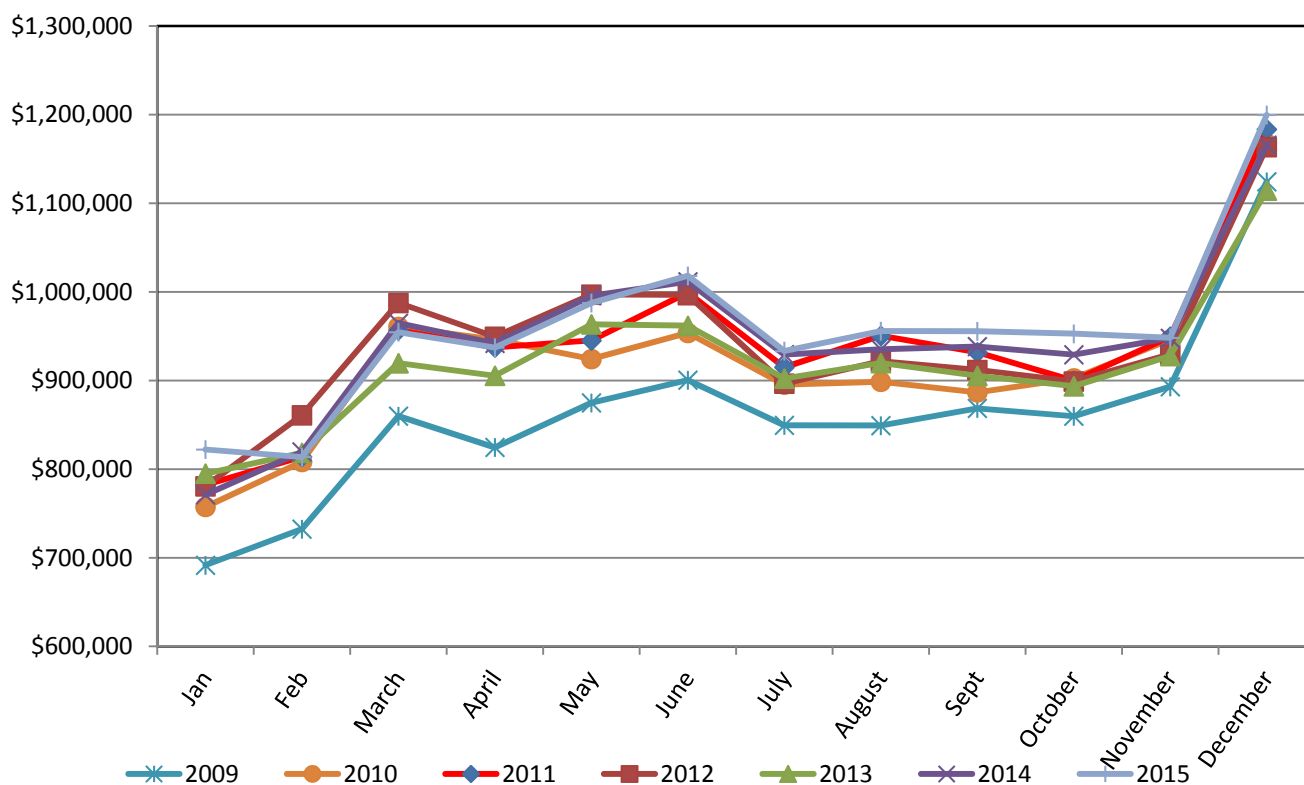


Table 1

**SOUTHWESTERN ILLINOIS FLOOD PREVENTION DISTRICT COUNCIL
STATEMENT OF REVENUES, EXPENDITURES. AND
CHANGES IN FUND BALANCES - GOVERNMENTAL FUND
FOR THE YEAR ENDED SEPTEMBER 30, 2015**

REVENUES:	
District Sales Tax	\$ 11,403,134
Less: Return of Excess Sales Tax to Districts	(3,829,139)
Interest Income	212,424
Total Revenues	\$ 7,786,419
EXPENDITURES:	
Current:	
General and Administrative	\$ 247,447
Design and Construction	31,467,779
Professional Services	423,562
Debt Service:	
Principal	2,605,000
Interest	4,496,239
Less: Federal Interest Subsidy	(843,700)
Total Expenditures	\$ 38,396,327
NET CHANGE IN FUND BALANCE	\$ (30,609,908)
FUND BALANCES:	
Beginning of Year	<u>55,316,687</u>
End of Year	<u>\$ 24,706,779</u>

Table 2 summarizes estimated project costs for FY2016 and FY2017.

Table 3 compares expenses to revenues between 7/1/2016 and 9/30/2017. The table illustrates, as of July 1, 2016, all 2010 Bond Issue construction funds have been spent, the amount of available 2015 Bond Issue construction funds is \$70,216,710, and total amount of individual County FPD funds is \$27,531,855.

Table 4 illustrates that currently anticipated Authorized Level funding is approximately \$86 million.

This information illustrates that *the Council will meet our goals of achieving FEMA certification in 2017 with the revenue available from the dedicated FPD sales tax.* Easements, high river stages, and construction delays have push accreditation back but the Council is well on the way to achieving accreditation in 2017.

Table 2
Estimated Project Expenditures 10.1.2015 -9.30.2017

Design & Construction Management	FY 2016	FY 2017	TOTAL 2 YEAR COST
Engineering Design			
<i>W. O. #1 Program Mgmt.</i>	\$212,772	\$239,853	\$452,625
<i>W. O. #3 Preconstruction Activities</i>	\$56,412	\$100,000	\$156,412
<i>W. O. #7 Final Design</i>	\$17,000	\$2,485	\$19,485
<i>W. O. #9 Wood River Cutoff Walls</i>	\$37,412	\$25,000	\$62,412
<i>W. O. #11 FEMA Certification Services</i>	\$71,473	\$224,481	\$295,954
<i>W. O. #12 Authorized Level Planning Services</i>	\$141,999	\$44,577	\$186,576
<i>W.O. #15 East St. Louis Combined Sewer</i>	\$145,014	\$20,000	\$165,014
Authorized Level Work Orders			
<i>W.O. #13 Wood River Field & Design Activities BP #8, #9, & #10</i>	\$546,982	\$175,000	\$721,982
<i>W.O. #13 Wood River Additional (if Corps obtains review funds)</i>	\$185,000	\$1,200,000	\$1,385,000
<i>W.O. #14 MESD Field & Design Activities</i>	\$2,600,449	\$3,000,000	\$5,600,449
<i>Prairie Du Pont/Fish Lake Field Activities</i>	\$0	\$2,400,000	\$2,400,000
<i>Prairie Du Pont/Fish Lake Design</i>	\$50,000	\$600,000	\$650,000
Construction Management.			
<i>W. O. #8 Construction Management BP #1 - #6 & Amendment #4</i>	\$1,748,815	\$600,864	\$2,349,679
<i>W. O. #10 Construction Management BP #7A & #7B</i>	\$1,047,149	\$100,000	\$1,147,149
<i>W.O. # ? Construction Management BP #8 & BP #14</i>	\$0	\$50,000	\$50,000
<i>WO#16 Construction Management BP5A (ESTL Sewer)</i>	\$0	\$250,000	\$250,000
<i>QC/Materials Testing</i>	\$227,402	\$164,795	\$392,197
TOTAL ENGINEERING DESIGN & CONSTRUCTION MGMT.	\$7,087,879	\$9,197,055	\$16,284,934
Construction			
<i>Bid Package #2B</i>	\$526,470	\$806,830	\$1,333,300
<i>Bid Package #2C</i>	\$281,632	\$3,390	\$285,022
<i>Bid Package #3</i>	\$6,602,613	\$1,174,311	\$7,776,924
<i>Bid Package #4</i>	\$815,306	\$3,018,709	\$3,834,015
<i>Bid Package #5</i>	\$1,404,091	\$7,067,826	\$8,471,917
<i>Bid Package #6</i>	\$1,264,920	\$340,717	\$1,605,637
<i>Bid Package #7B</i>	\$11,715,663	\$1,262,349	\$12,978,012
<i>East St. Louis Combined Sewer</i>	\$0	\$4,000,000	\$4,000,000
<i>Bid Package # 8</i>	\$0	\$400,000	\$400,000
<i>Bid Package #14</i>	\$0	\$400,000	\$400,000
<i>Contingency (10% FPD Construction)</i>	\$0	\$1,697,413	\$1,697,413
<i>Property Acquisition 100-Year Projects</i>	\$123,909	\$0	\$123,909
<i>Property Acquisition Authorized Level - Wood River</i>	\$0	\$125,000	\$125,000
<i>Property Acquisition Authorized Level - East St. Louis</i>	\$0	\$300,000	\$300,000
<i>Property Acquisition Authorized Level - Prairie Du Pont/Fish Lake</i>	\$0	\$175,000	\$175,000
<i>Wetland Mitigation</i>	\$27,970	\$27,970	\$55,940
<i>HazMat Mitigation</i>	\$251,792	\$1,500,000	\$1,751,792
<i>Legal</i>	\$781,347	\$541,000	\$1,322,347
<i>Corps of Eng. Authorized Level Costs (Oversight)</i>	\$2,439,618	\$5,760,115	\$8,199,733
TOTAL CONSTRUCTION	\$26,235,331	\$28,600,630	\$54,835,961
TOTAL ENGINEERING DESIGN & CONSTRUCTION	\$33,323,210	\$37,797,685	\$71,120,895
REFUND OF SURPLUS FUNDS TO COUNTY FPD ACCOUNTS	\$4,000,000	\$4,000,000	\$8,000,000

Operations & Financing			
<i>General & Administrative</i>	\$253,105	\$279,800	\$532,905
<i>Debt Service</i>	\$9,483,278	\$10,725,020	\$20,208,298
<i>Interest Rate Subsidy</i>	(\$848,250)	(\$848,250)	(\$1,696,500)
Professional Services			
<i>Legal</i>	\$361,006	\$362,500	\$723,506
<i>Legislative</i>	\$96,000	\$96,000	\$192,000
<i>Financial Advisor</i>	\$110,849	\$65,000	\$175,849
<i>Diversity Program Mgr.</i>	\$27,680	\$25,000	\$52,680
<i>Bond Trustee</i>	\$11,127	\$12,000	\$23,127
TOTAL OPERATIONS	\$9,494,795	\$10,717,070	\$20,211,865
TOTAL EXPENSES	\$46,818,005	\$52,514,755	\$99,332,760

Table 3

Estimated Revenues 7.1.2016 - 9.30.2017

Fund Sources	
<i>Cash on hand (6/30/16)</i>	\$712,058
<i>2010 Bond Project Funds (6/30/2016)</i>	\$0
<i>2015 Bond Project Funds (6/30/2016)</i>	\$70,216,710
<i>County FPD Tax Bal. (6/30/2016)</i>	\$27,531,855
<i>Sales Tax Revenue (7/1/2016-9/30/2016)</i>	\$2,990,000
<i>Interest Income (7/1/2016-9/30/2016)</i>	\$200,000
<i>Sales Tax Revenue (10/1/2016-9/30/2017)</i>	\$11,750,000
<i>Interest Income (10/1/2016-9/30/2017)</i>	\$640,000
Total Available Funds	\$114,040,623

Estimated Expenditures 7.1.2016 - 9.30.2017

Expenditures	
<i>Engineering Design and Construction Mgmt. (7/1/2016-9/30/2016)</i>	\$2,729,724
<i>Construction (7/1/2016-9/30/2016)</i>	\$4,619,019
<i>Professional Services (7/1/2016-9/30/2016)</i>	\$149,525
<i>General & Administrative (7/1/2016-9/30/2016)</i>	\$61,590
<i>Federal Interest Subsidy</i>	(\$424,125)
<i>Engineering Design and Construction Mgmt. (10/1/2016-9/30/2017)</i>	\$9,197,055
<i>Construction (10/1/2016-9/30/2017)</i>	\$28,600,630
<i>Professional Services (10/1/2016-9/30/2017)</i>	\$560,500
<i>Debt Service (10/1/2016-9/30/2017)</i>	\$9,876,770
<i>General & Administrative (10/1/2016-9/30/2017)</i>	\$279,800
Estimated Expenditures	\$55,650,488
Net Available Funds	\$58,390,135

Table 4

Current Anticipated Authorized Level Funding

<i>Design FY2016 & FY 2017</i>	\$10,994,007
<i>Concrete Pipe Change Orders</i>	\$9,446,022
<i>FPD Construction FY2017</i>	\$1,400,000
<i>Corps of Engineers (Oversight)</i>	\$5,760,115
<i>Construction Contingencies</i>	\$80,000
<i>Net Available Funds (9/30/2017)</i>	\$58,390,135
Total Estimated Available Authorized Level Funds	\$86,070,279

V. FEMA Certification Construction Costs and Completion

Southwestern Illinois Flood Prevention District Council FEMA Certification Levee Improvement Projects

BID PACKAGE	LOCATION/PROJECT	CONTRACTOR	CONSTRUCTION CONTRACT	ESTIMATED COMPLETION
2A	Fish Lake 1 Pump Station	Korte & Luitjohan	\$797,599.53	December 2014
2B	Prairie DuPont, MESD, and Wood River 5 Pump Stations	Korte & Luitjohan	\$5,345,510.92	December 2016
2C	MESD Site 12 Force Mains	Haier Plumbing	\$285,022.00	December 2015
3	Wood River Blanket Drains, Earth Fill, Relief Wells, Seepage Berms, Piping, Weirs	Keller Construction	\$13,028,848.92	December 2016
4	MESD 1 Pump Station, Clay Cap, Piping, Relief Wells	Haier Plumbing	\$6,367,985.05	December 2016
5	MESD Clay Cap, Earth Fill, Piping, Relief Wells Rip Rap, Sluice Gate Rehabs	Keller Construction	\$14,307,894.23	December 2016
6	Prairie du Pont & Fish Lake Clay Cap, Seepage Berms, Piping, Relief Wells, Sluice Gate Rehabs	Lane Construction	\$15,428,536.00	September 2016
7A	Upper Wood River Shallow Cutoff Wall	Kamadulski Excavating	\$3,375,350.25	June 2015
7B	Lower Wood River Deep Cutoff Wall	TREVIICOS	\$14,812,263.26	September 2016
		TOTAL	\$73,749,010.16	
ADDITIONAL REQUIRED PROJECT				
5A	City of East St. Louis 126 Inch Sewer Repair	To Be Determined	\$4,000,000 Current Estimate	March 2017

VI. Authorized Level Levee Improvement Projects

To date, the Board of Directors has approved the design of Authorized Level Projects in the Wood River Levee System and the Metro East Sanitary District (MESD) Levee System as follows:

Wood River Levee System

Bid Package 8 – Comprised of four USACE decision segments and spans from Levee Station 123+75 to 455+50. Construction of a new pump station, between Stations 430+65 and 455+15, and 40 relief wells.

Estimated Construction Cost \$ 9,559,292.

Bid Package 9 – Comprised of two USACE decision segments and spans from Levee Station 493+35 to 480+15. Construction of a new pump station, between Stations 455+50 and 450+15, and 18 relief wells.

Estimated Construction Cost \$ 4,776,688.

Bid Package 10 – Comprised of seven USACE decision segments and spans from Levee Station 530+50 to 630+30. Construction of a new pump station, at Station 530+50, and 36 tributary relief wells. Also, includes seepage berm and fill areas. Two seepage berms, 5 feet thick and 100 feet wide, are to be constructed between Stations 608+85 and 613+70 & 627+00 and 630+30, for a total of 815 linear feet of berm. In addition, 1,010 linear feet of fill is to be added to landside depressions between Stations 613+70 and 623+80.

Estimated Construction Cost \$ 11,461,714.

Due to lack of oversight funds by the Corps of Engineers, Bid Packages 9 & 10 have been put on hold, and Bid Package 8 has been revised to comprise of fourteen decision segments and spans from Levee Station 120+45 to 457+05. Construction of 29 relief wells, 3,500 linear feet of pipe conveyance systems and one new pump station. The estimated construction cost is still being developed.

Metro East Sanitary District (MESD) Levee System

Bid Package 11 – Comprised of ten USACE decision segments and spans from Levee Station 255+90 to 913+30, minus the Chain of Rocks system. Construction of 150 relief wells.

Estimated Construction Cost \$ 13,371,200.

Bid Package 12 – Comprised of five USACE decision segments and spans from Levee Station 929+80 to 1051+90. Construction of a new pump station, between Stations 987+50 and 1018+90, and 50 relief wells.

Estimated Construction Cost \$ 8,454,750.

Bid Package 13 – Comprised of ten USACE decision segments and spans from Levee Station 1065+10 to 1497+40. Construction of a new lift station, between Stations 1144+30 and 1180+60, and 106 relief wells.

Estimated Construction Cost \$ 21,555,818.

Bid Package 14 – Comprised of eleven USACE decision segments and spans from Levee Station 45+60 to 972+70. All earthwork including 8 seepage berms, 1 fill area, and a clay cap spanning from Station 824+20 to 860+60.

Estimated Construction Cost \$ 7,865,622.

Due to lack of oversight funds by the Corps of Engineers, Bid Packages 11, 12, & 13 have been put on hold, and Bid Package 14 has been revised to comprise of 14 seepage berms, one area of earthen fill, and one clay cutoff trench. The decision segments and stationing remain the same. The estimated construction cost is still being developed.

Prairie Du Pont/ Fish Lake Levee System

In the Prairie Du Pont/Fish Lake Levee System, the Corps of Engineers has recently completed their analysis of 500-Year Authorized Level Projects in the areas where there weren't any 100-Year Level Improvements or where only seepage berms were built. For these areas, Amec Foster Wheeler will provide an Authorized Level Project Summary Report Phase I to the Council for acceptance in August 2017 with design approval anticipated in September 2017.

Bid Package to be presented to the Council in September:

Bid Package 15 – Comprised of twenty three USACE decision segments and spans from Levee Station 227+05 to 735+25. Construction of 38 relief wells and 16 seepage berms.

Preliminary Estimated Construction Cost \$ 24,100,000.

The Corps is currently seeking additional federal funding to complete the identification of Authorized Level Projects in the remaining areas.

VII. FEMA Certification and Mapping

Certification reports will be submitted to FEMA as each levee system is completed. Amec Foster Wheeler will be preparing reports for Lower Wood River, Wood River East/West Forks, and Prairie Du Pont/Fish Lake.

The USACE will be preparing National Flood Insurance Program (NFIP) Levee System Evaluation Reports (LSER) for the for East St. Louis (MESD) Levee System, including the Chain of Rocks levee and the Upper Wood River Levee System, which includes the Mel Price uncontrolled underseepage area.

Concern remains about the timeline for the Corps of Engineers to make necessary improvements to a critical stretch of levee in the Wood River area in the vicinity of the Mel Price Lock and Dam. This is the most serious problem on the entire levee system. Fortunately, FEMA has agreed to accept the Corps' certification of that portion of the system with the Corps utilizing an interim operations plan until final improvements can be made.

Certification reports will be submitted to FEMA approximately four months after completion of construction, with FEMA accreditation anticipated in another four months.

As it now stands, the FEMA mapping process has been interrupted while the agency implements better methodology for developing maps, especially for those areas protected by de-accredited levees. The FEMA website currently indicates that the Project Status is On-Hold, which is defined as, mapping project experiencing delays. However, a Projected Effective Date of 06/21/2017 is shown. There aren't any suggestions that new maps would differ significantly from those issued a few years ago, so the urgency of making levee system improvements is not diminished.

All levee improvements leading to certification will be completed by spring 2017

The intent is to work closely with FEMA to ensure that when the new maps are issued, they reflect these levee improvements. Currently, FEMA is in the process of holding Open House events focusing on the interior drainage and floodplain in Madison, St. Clair and Monroe counties.

VIII. Work In-Kind Credit

The Council continues to work with the Corps of Engineers regarding the process of the Council moving ahead with the 500-Year Authorized Level of protection projects to ensure that the work the Council does is eligible for future Work In-Kind Credit.

This is an elaborate and multi tasked process that can take up to two years before a project is completely guaranteed to be eligible for Work In-Kind Credit. A project is only guaranteed to be eligible if there is a properly executed Project Partnership Agreement (PPA) for the Levee System.

The Council first operated under Memorandums of Understanding, which allowed for work to be considered for Work In-Kind Credit prior to the execution of an amended Project Partnership Agreement. The credit is only good towards the non-Federal contribution of funds for a project, and it will not be considered for the five percent cash requirement.

Next an Integral Determination Report (IDR) that identifies the work the Council intends to perform as In-Kind contributions in a Levee System must be approved. The approved IDRs for Wood River and East St. Louis have been received. The amendments to the PPAs have been finalized and submitted to the Corps' Mississippi Valley Division (MVD). After approval by the MVD, they will be forwarded to headquarters in Washington, D.C. for approval. Approval is currently anticipated to be achieved in January 2017.

A draft of the Integral Determination Report for Prairie Du Pont/ Fish Lake is anticipated early next year.

There is a slight risk of moving forward without amended Project Partnership Agreements, however, it is felt that the risk is low since the Council is working with the Corps and will be designing and constructing projects that the Corps has identified as part of the Authorized Level of Protection. In addition, the Corps will be providing design and construction oversight,

Starting the design process now with a low risk, allows projects to be built two years earlier and provide much needed additional flood protection to the Metro-East area quicker.

The Council will satisfy the Corps' five percent cash requirement by providing the Corps funds for the oversight of the design and construction of authorized projects being built by the Council.

IX. Conclusions, Issues and Next Steps

Much progress has been made in the seven years that the Council has been in existence towards the regional goal of maintaining a high level of flood protection for the American Bottom. Doing so is a regional priority and the Council has acted with a great sense of urgency, commitment, and cooperation in conceiving major improvements to the flood protection system. That process reached an important milestone this year with over eighty percent of the construction of the nine current projects being completed as of June of this year, and the remaining twenty percent estimated to be completed before the end year.

With the interim goal of achieving FEMA accreditation in sight, the process of achieving the long term goal of 500-Year Authorized Level of Protection is well on its way. The Council's intent has been expressed by resolution, action has been initiated by the authorization of the design of Authorized Level Projects in the Wood River Levee System and the Metro East Sanitary District (MESD) Levee System, and a successful bond sale generating an additional \$77.5 million in construction funds.

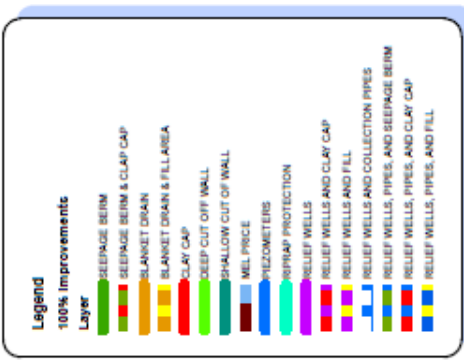
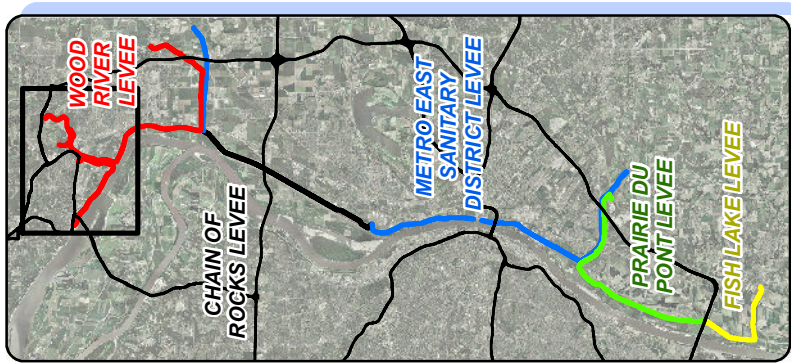
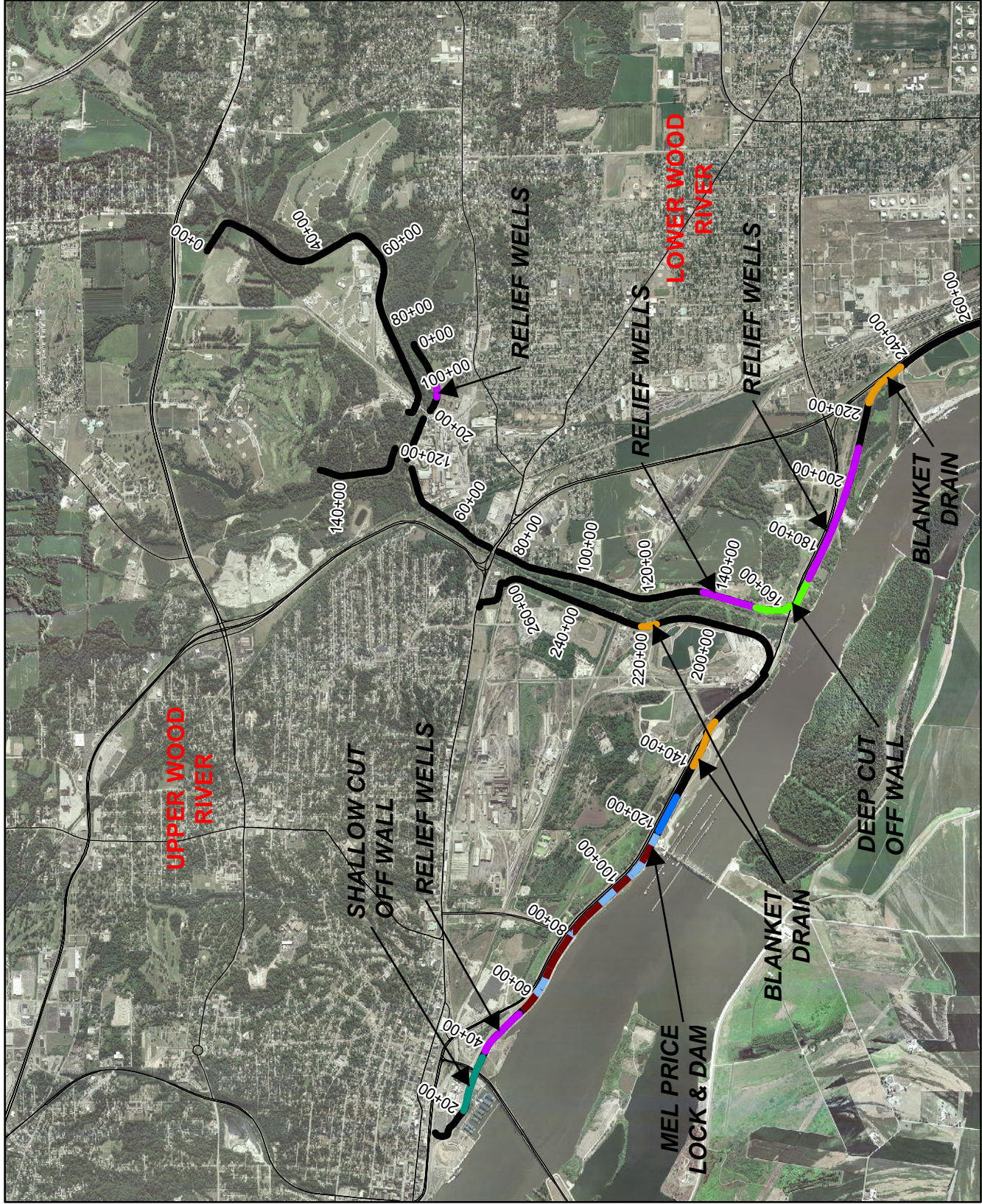
There are a number of critical next steps as we move forward:

- Complete remaining 100-Year Construction Projects
- Submit Certification reports as each individual levee system is completed
- Achieve FEMA certification
- Continue to work with levee districts to establish sufficient funding for ongoing maintenance of improvements.
- Identify the Authorized Level Projects in the Prairie Du Pont/Fish Lake Levee Systems
- Complete the design of the 500-Year Authorized Level of Protection Projects that will be built by the FPD
- Construct as many cost effective and high priority Authorized Level Projects, which qualify for Work In-Kind Credit

Easements, high river stages, cost saving construction alternatives, and construction delays may have pushed accreditation back, but the Council will meet its interim goal of achieving FEMA certification with the revenue available from the dedicated FPD sales tax. In addition, with the added 2015 bond issue revenue, the Council is working on the ultimate goal of providing Authorized Level of Protection to the Metro-East. If the Corps of Engineers can obtain federal funding in FY 2018 and future years, the Authorized Level of Protection could be achieved twenty years sooner than original thought.

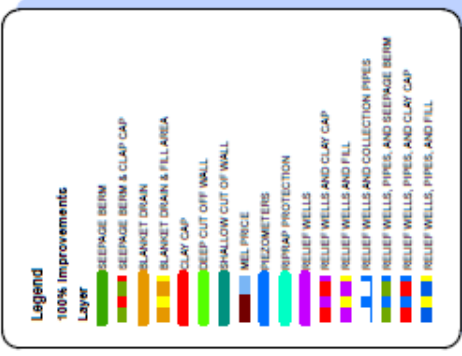
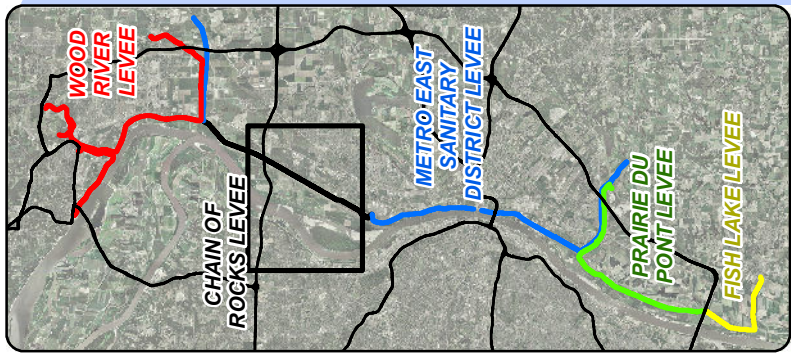
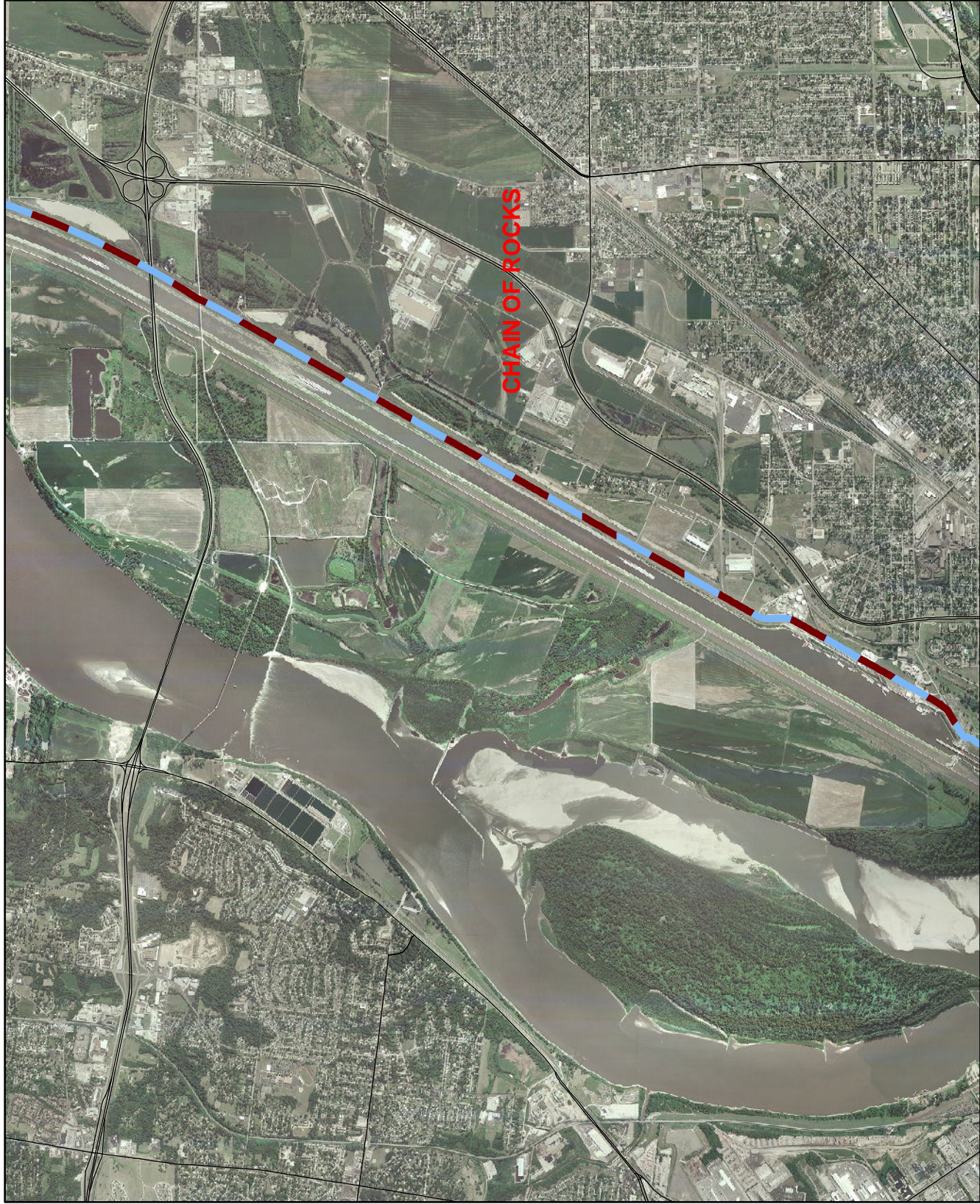
Appendix I

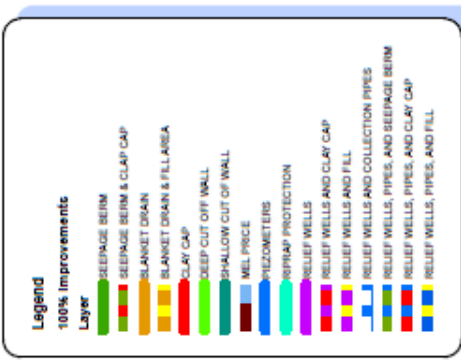
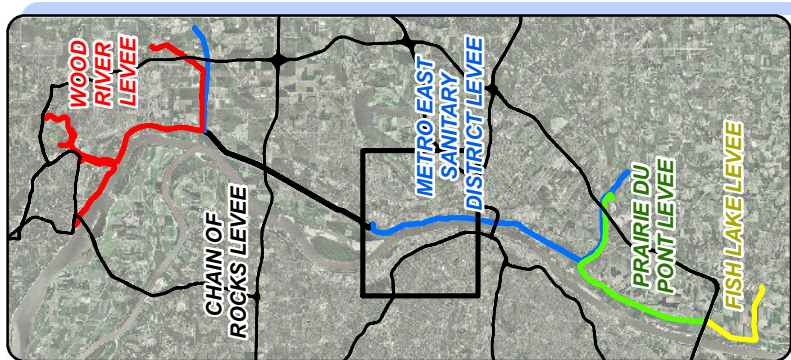
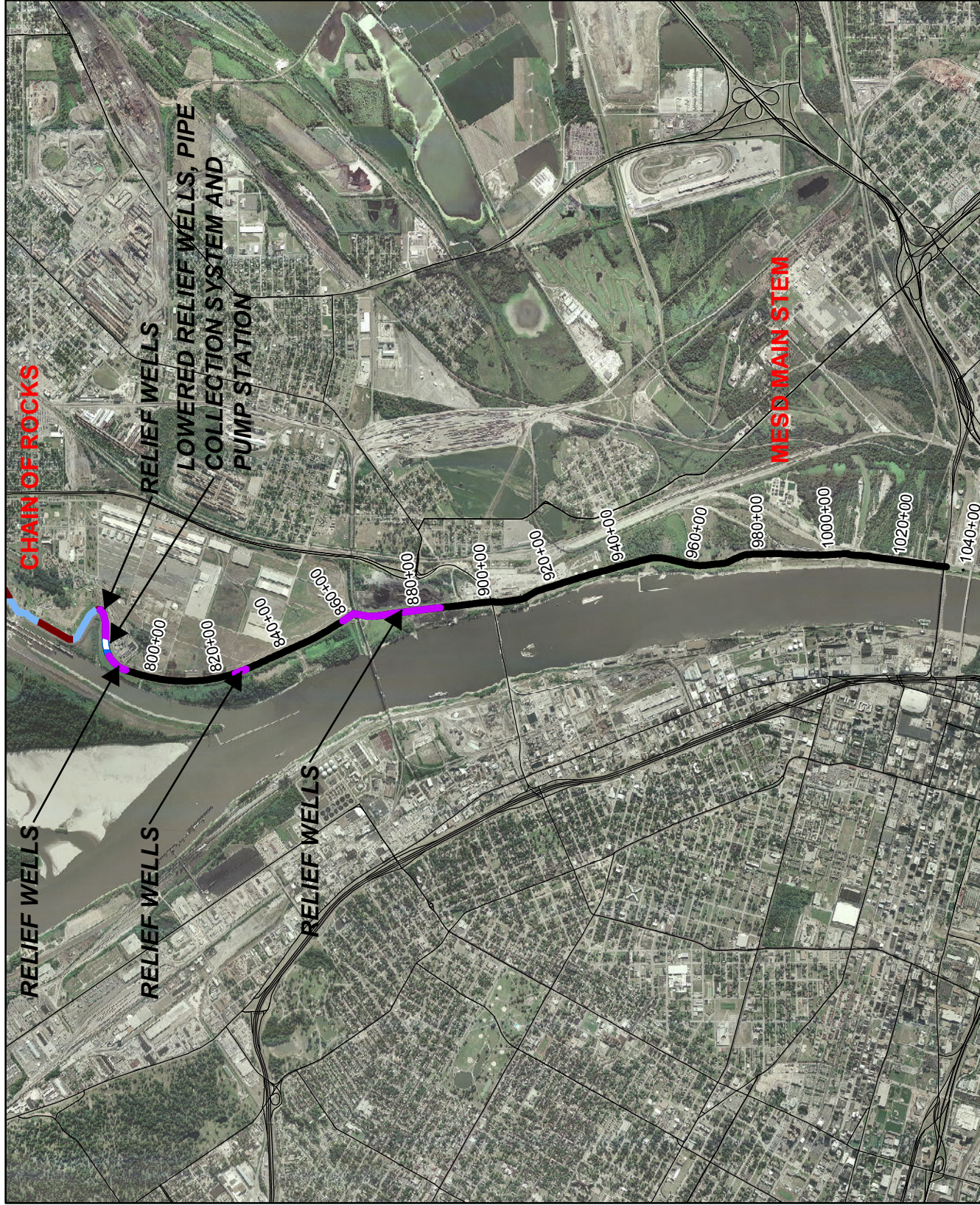
Proposed FEMA Certification Levee System Improvements

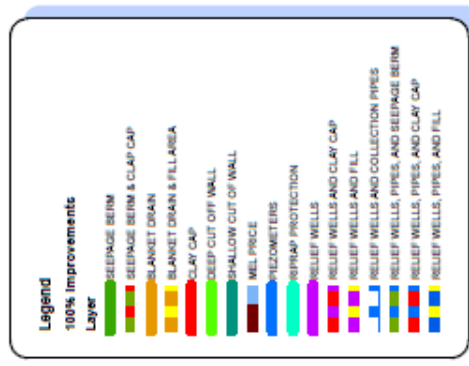
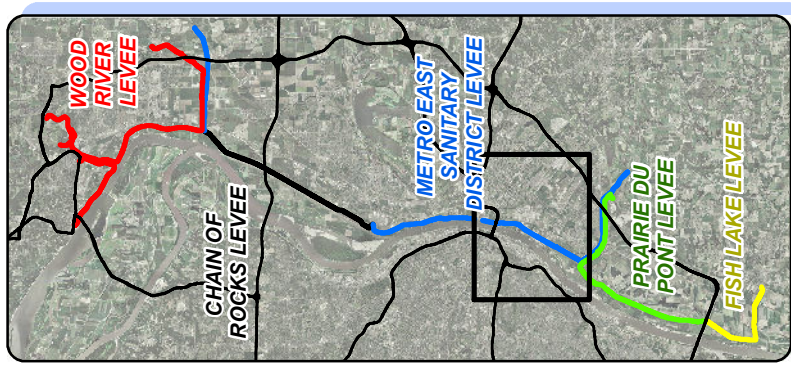
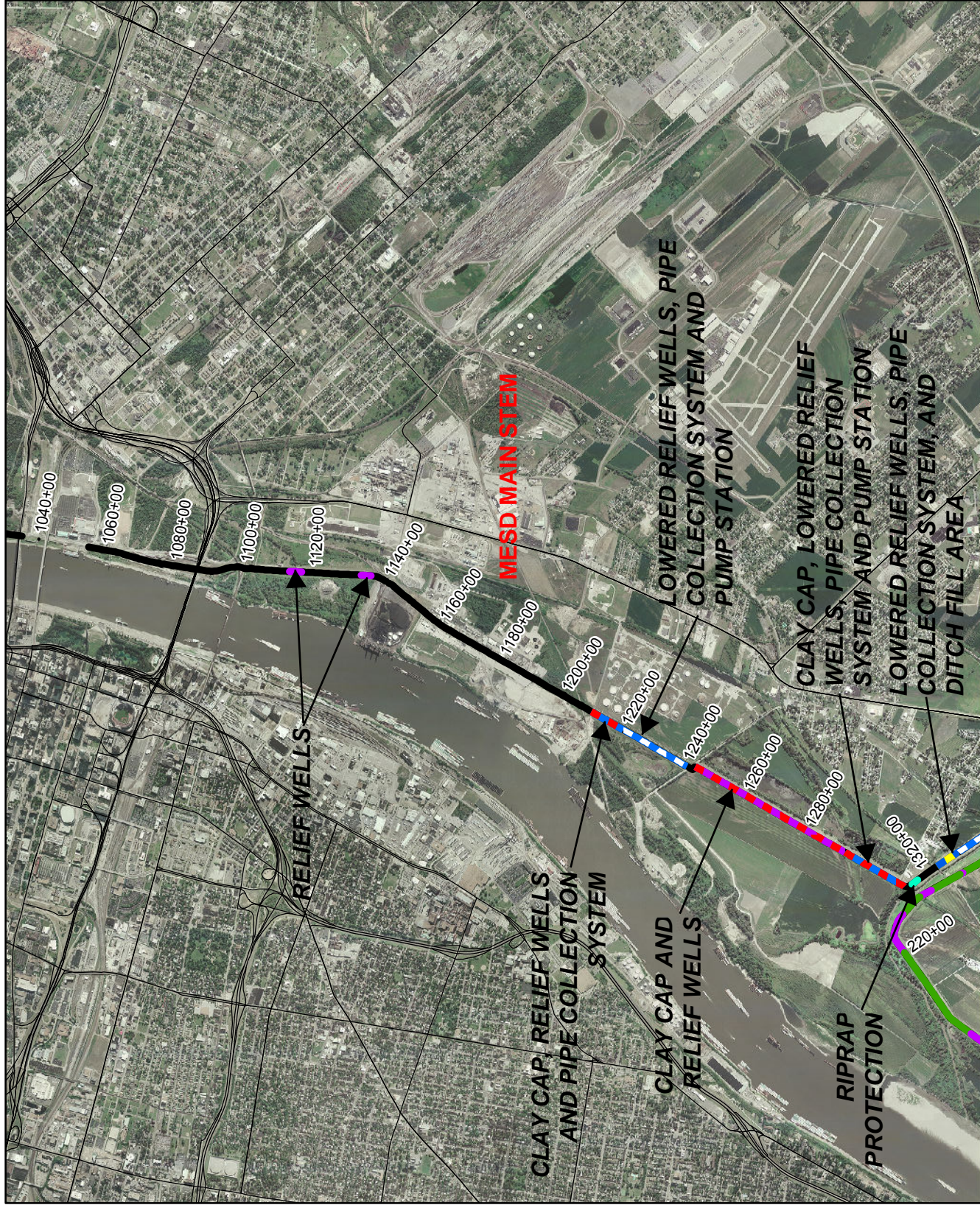


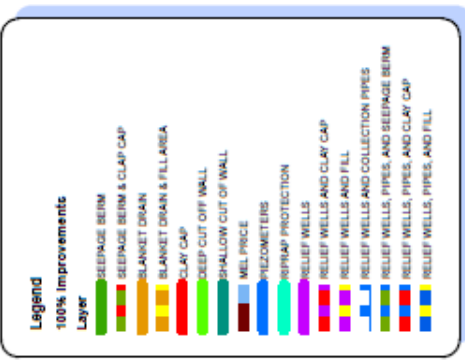
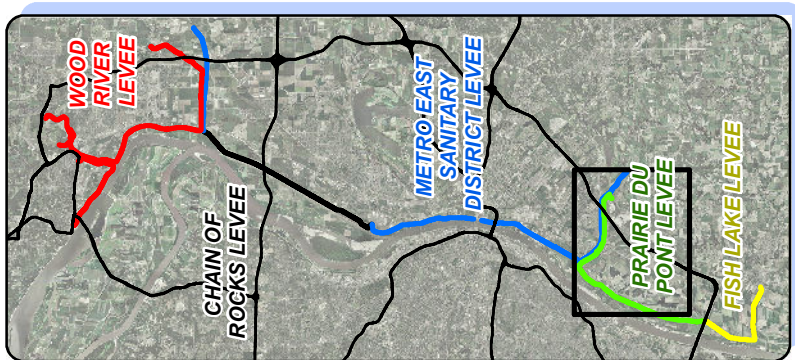
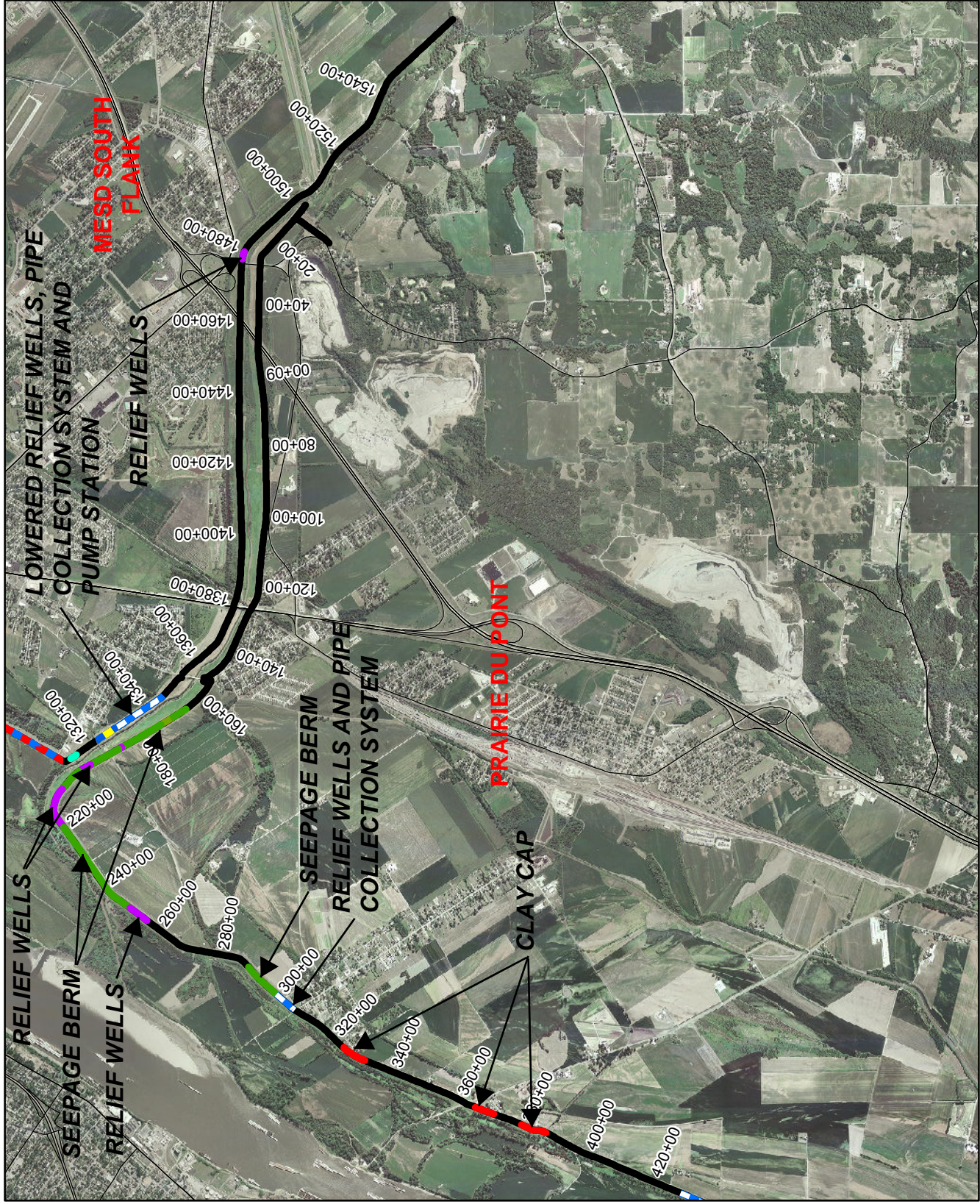
FEMA CERTIFICATION DESIGN - 100% SOLUTIONS

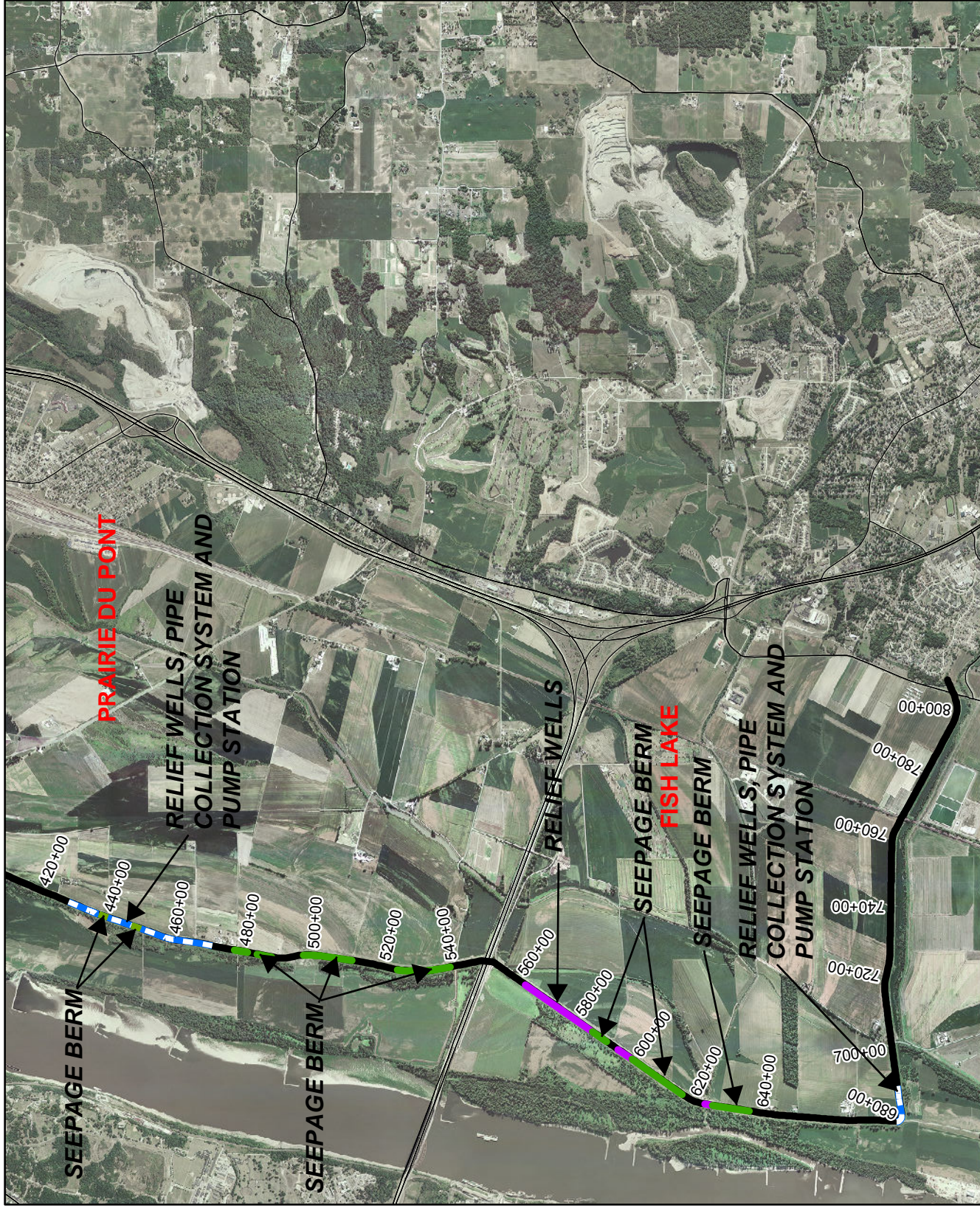
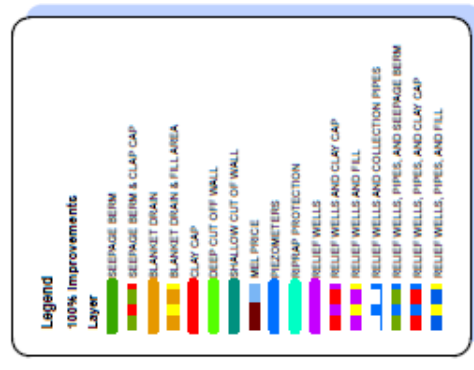
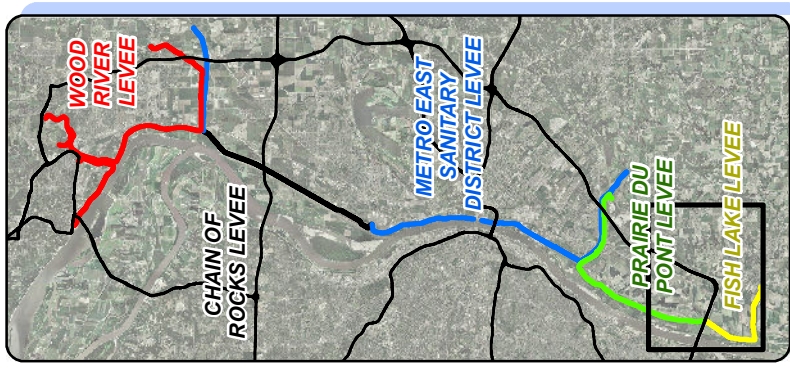
WOOD RIVER (WR) LEVEE











Appendix II

Southwestern Illinois Flood Prevention District Council

Resolution Expressing the Official Intent To Restore the Federally Authorized Level of Mississippi Flood River Protection in the Metro-East

Southwestern Illinois Flood Prevention District Council

RESOLUTION Expressing the Official Intent To Restore the Federally Authorized Level of Mississippi Flood River Protection in the Metro-East

WHEREAS, the Southwestern Illinois Flood Prevention District Council has made great progress towards meeting its goal of fully protecting the Metro-East from a 100-year flood by the end of 2015; and,

WHEREAS, the threat from the Federal Emergency Management Agency to classify the area as prone to flooding will be averted, along with the terrible economic consequences of the action; and

WHEREAS, the Council has demonstrated that the most expeditious and cost-effective approach to improve flood protection over the last several years is to use local funds to undertake critical flood protection projects; and

WHEREAS, the Council cannot continue to delay needed improvements to flood protection because of the lengthy, unpredictable, and costly design and construction process conducted by the U.S. Army Corps of Engineers; and

WHEREAS, the Corps of Engineers is unwilling to comply with local workforce policies; and

WHEREAS, dramatic progress can be made when the pace and cost of construction is determined locally; and

WHEREAS, the design and construction of projects by the FPD can move ahead rapidly and at a far lower cost than by delegating this work to the Corps of Engineers; and

WHEREAS, the FPD has available funds and availability of future federal funding is unknown; and

WHEREAS, the design and construction of projects built by the FPD using local funds may be considered for future Work In-Kind Credit by the Corps of Engineers as allowed by the use of Memoranda of Understanding, the inclusion in Integral Determination Reports, and the amendment of Project Partnership Agreements; and

WHEREAS, economic growth can be expected if the authorized level of protection is being pursued; and

WHEREAS, now is the time to initiate the restoration of the federally authorized level of flood protection in the Metro-East providing the region with a higher level of flood protection, while simultaneously completing the 100-year level projects; and

WHEREAS, the long-term goal of the FPD is to fully restore the federally authorized level of flood protection (Mississippi River elevation of 54 feet on the St. Louis gauge -- also known as the 500-Year flood).

NOW, THEREFORE, It Is Hereby Resolved by the Board of Directors of the Southwestern Illinois Flood Prevention District Council that it is the intent to restore the federally authorized 500-year level of Mississippi River flood protection through the following actions:

1. *Design.* Immediately begin the design of the most critical and cost-effective projects to restore the federally authorized level of flood protection; and

2. *Funding Strategy.* Take immediate steps to implement a funding strategy with the FPD being totally responsible for the design and the construction of flood protection (authorized level) projects. This includes using current surplus funds and judicious borrowing to maximize the available funding for capital expenditures on flood protection through the year 2020 (\$94,500,000 is currently estimated to be available), building the most cost effective and highest priority projects throughout the Counties of Madison, Monroe, and St. Clair, Illinois; and

3. *Workforce Policies.* Comply with all current FPD workforce policies to ensure fair wages and working conditions for project workers, encourage the use of local workers, and avoid any work stoppages that could delay projection completion; and

4. *Levee Districts Participation.* Seek the financial participation of each Levee District to generate additional funds to supplement FPD funding and enable additional construction; and

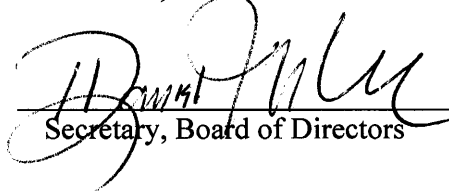
5. *Corps of Engineers Participation.* Notify the Corps of Engineers of the FPD's strategy and request that the Corps expedite projects that are 100% federally funded, such as the emergency design deficiency correction at the Melvin Price Locks and Dam, a project-that was identified as an emergency need six years ago, but still lacks a federally sanctioned permanent design solution and any funding for construction..

If any section, paragraph or provision of this Resolution shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph or provision shall not affect any of the remaining provisions of this Resolution.

This resolution was approved February 18, 2015.



President, Board of Directors



Secretary, Board of Directors

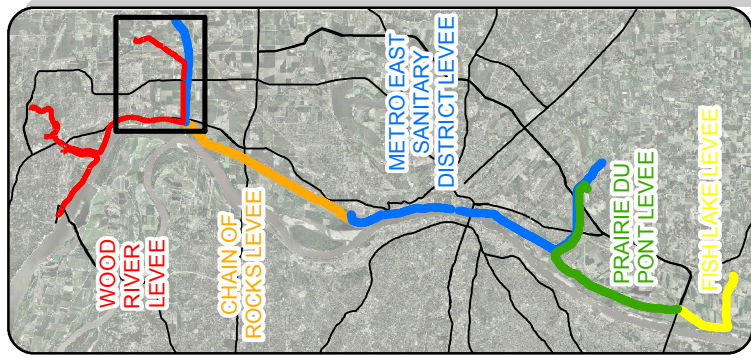
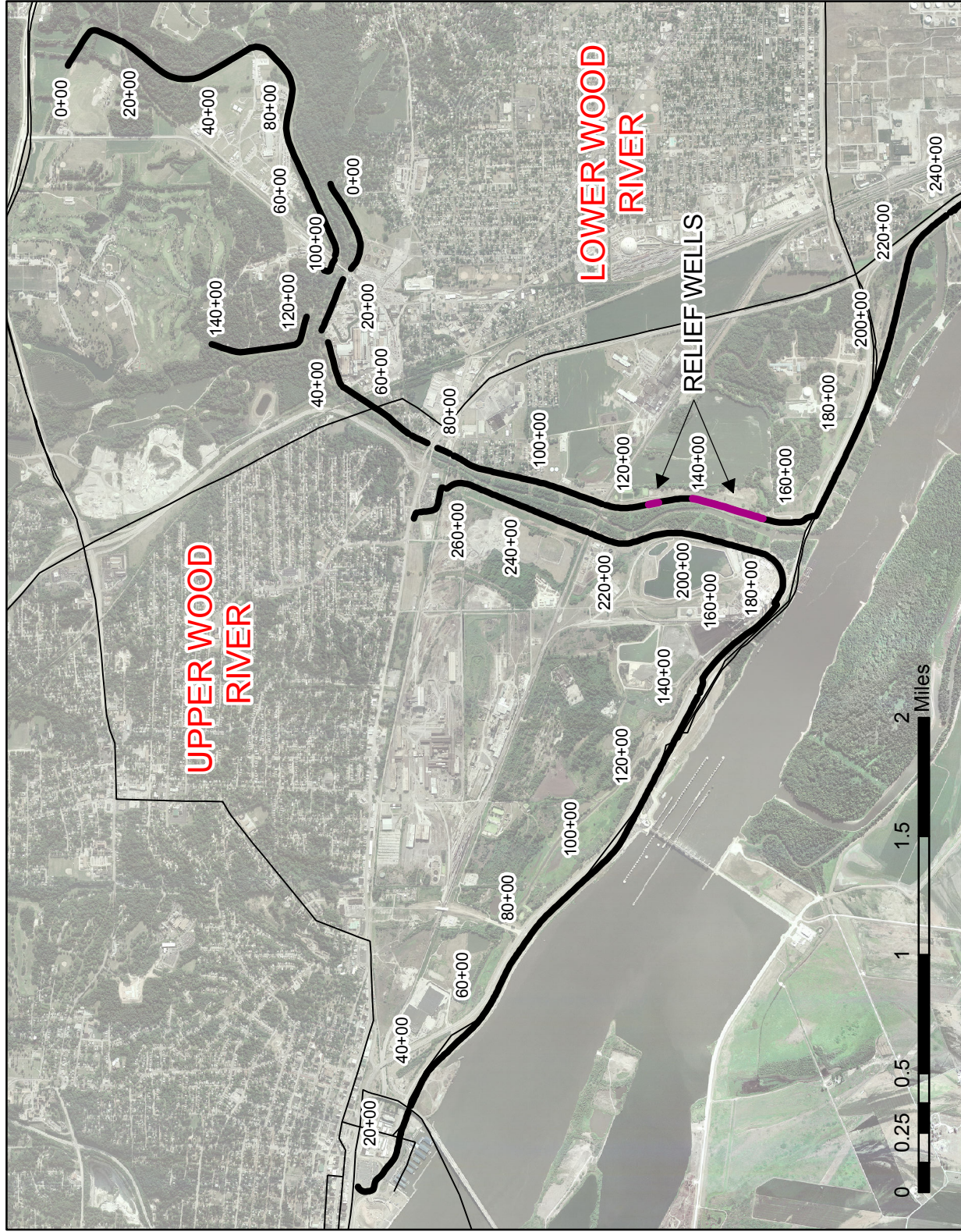
Appendix III

Proposed 500-Year Authorized Level Levee System Improvements

Wood River Levee System

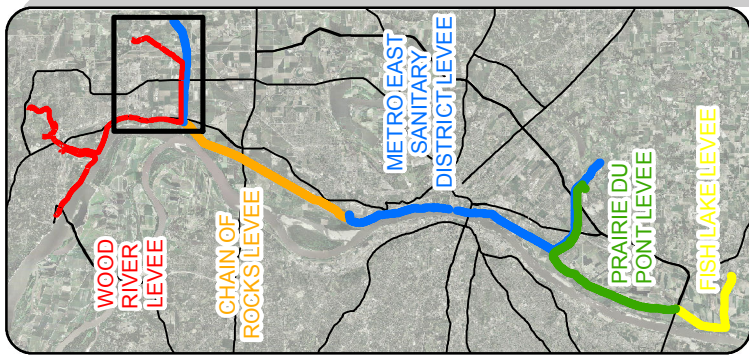
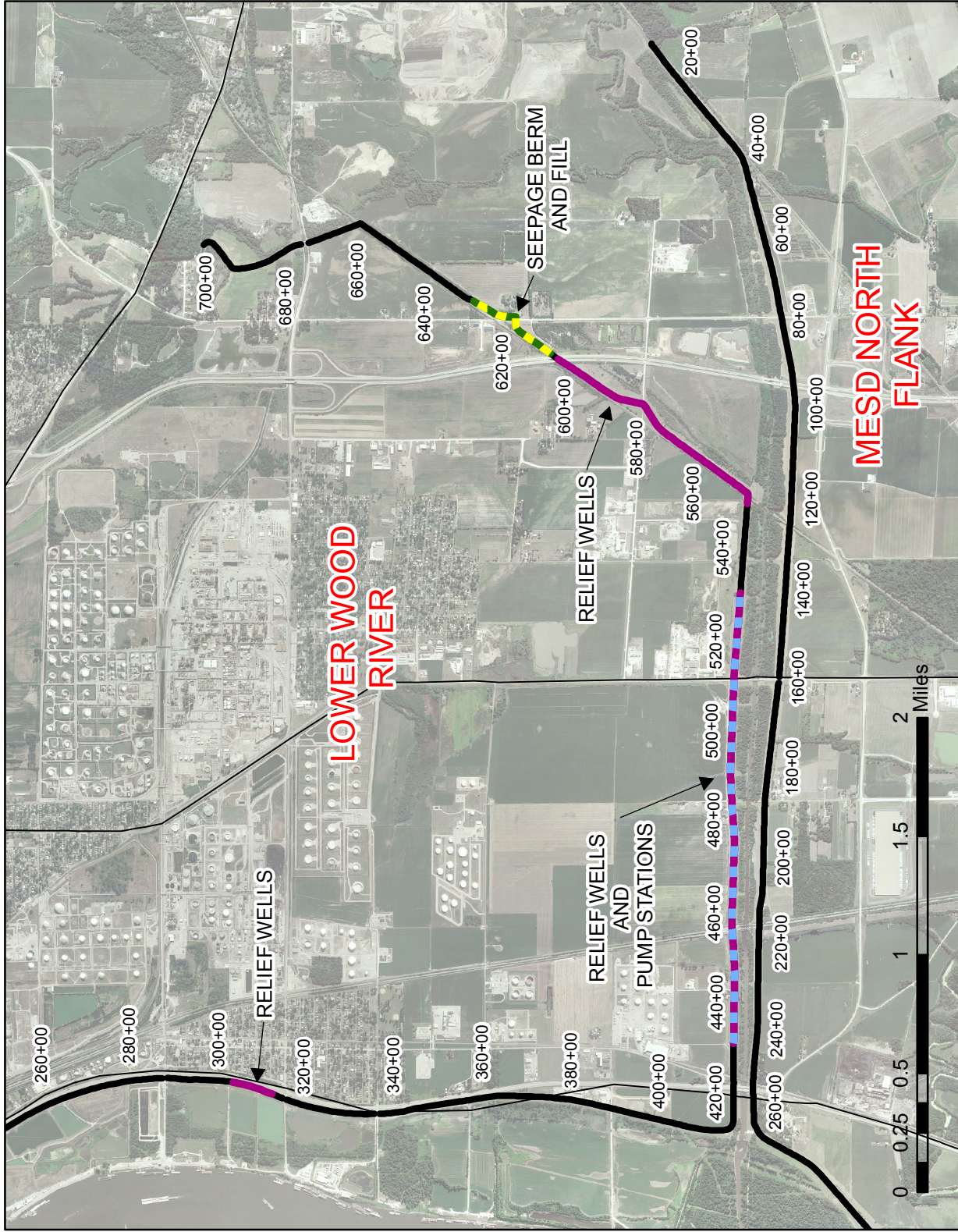
Metro East Sanitary District (MESD) Levee System

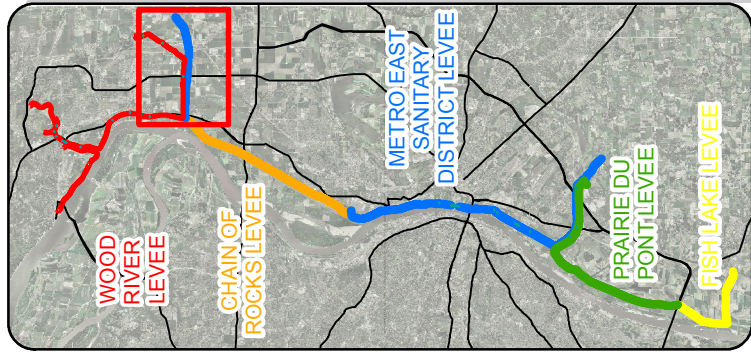
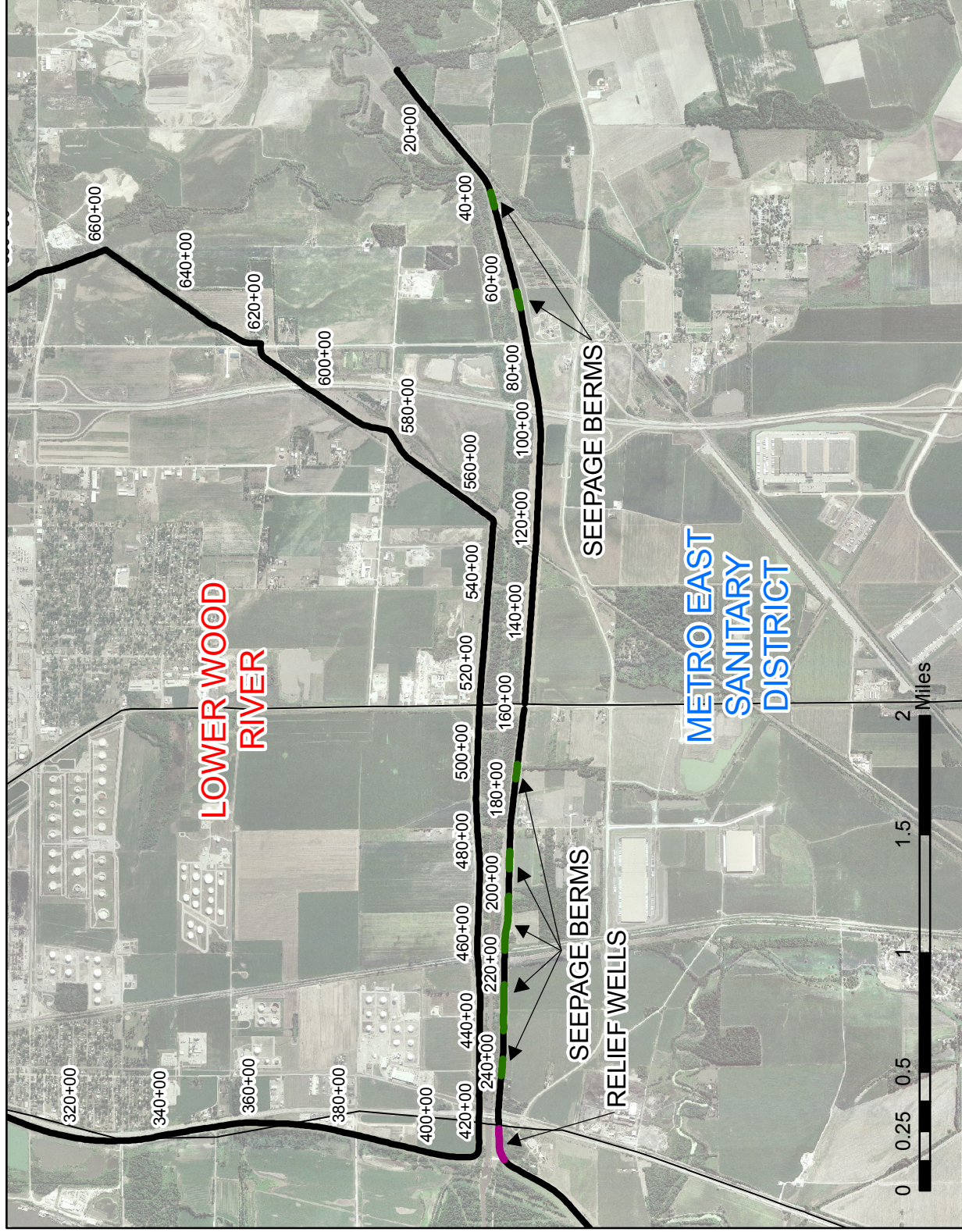
Prairie Du Pont/Fish Lake Levee System



AUTHORIZED LEVEL DESIGN

WOOD RIVER LEVEE





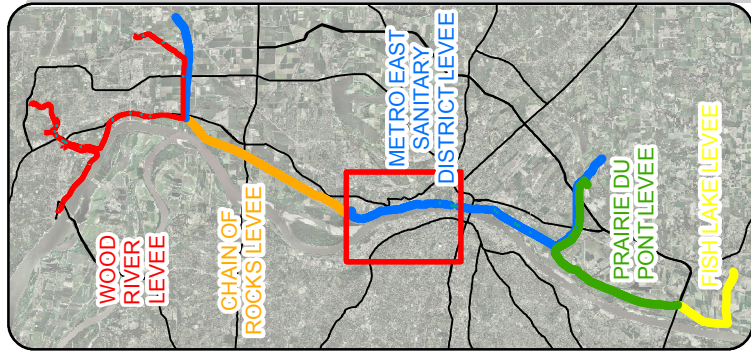
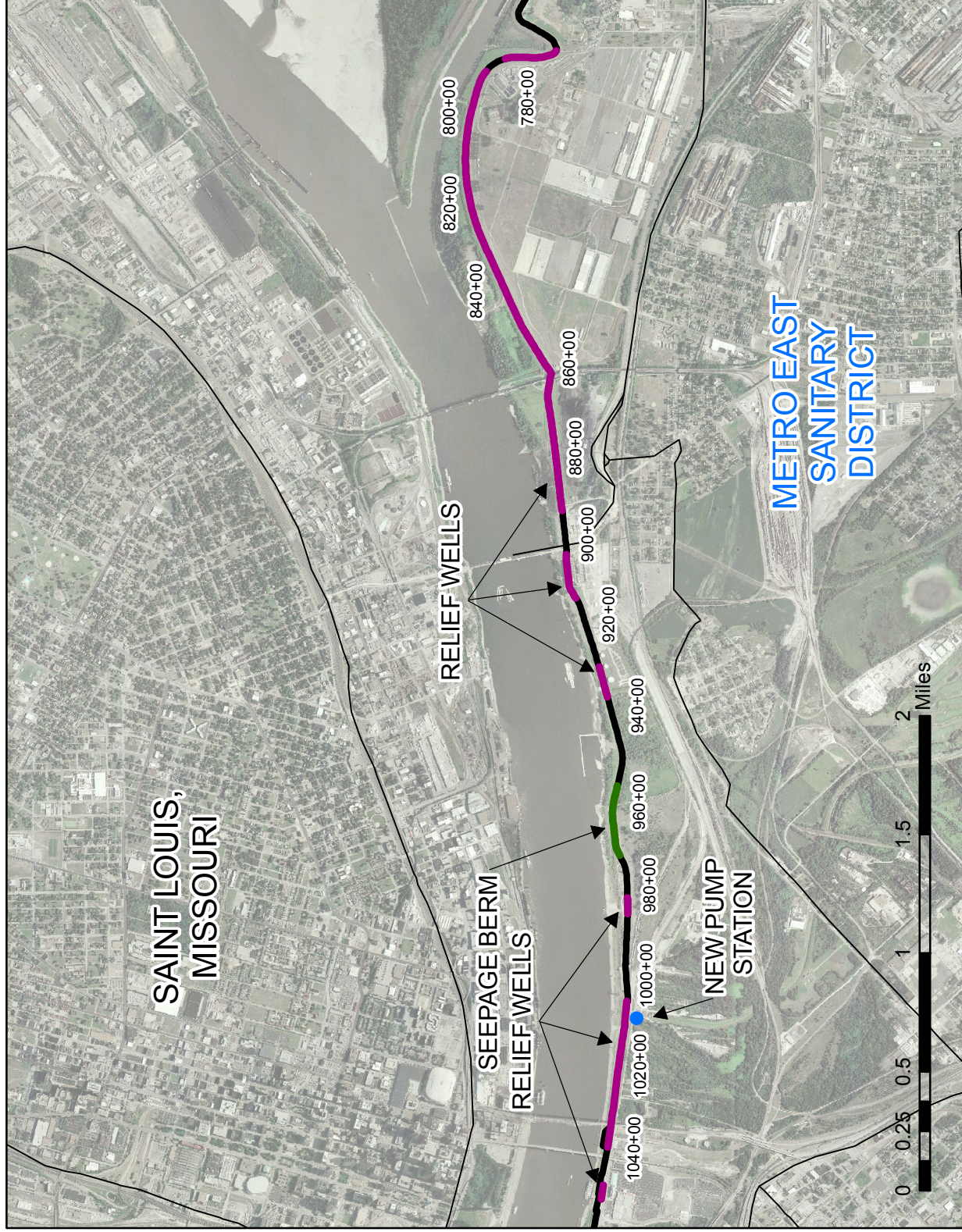
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- RELIEF WELLS
- SEEPAGE BERM
- LEVEE CENTERLINE



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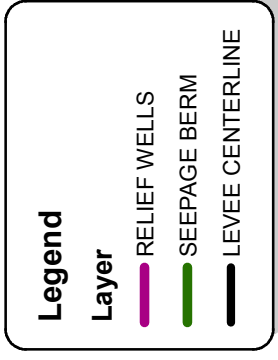
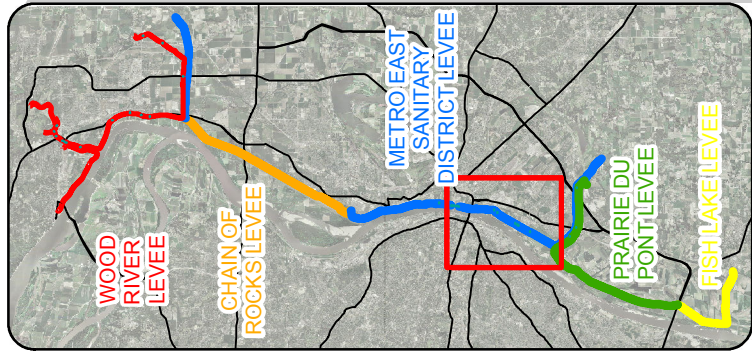
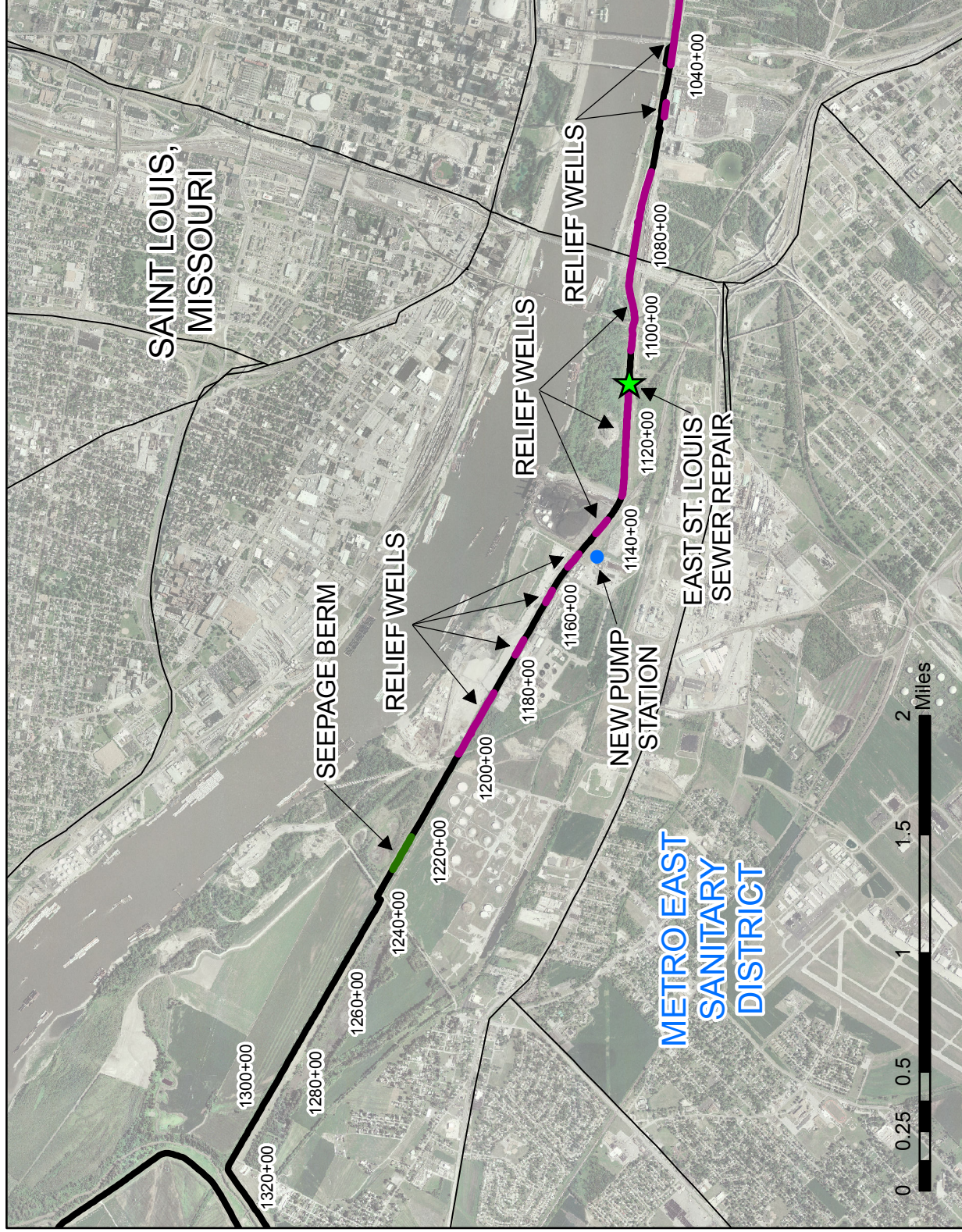
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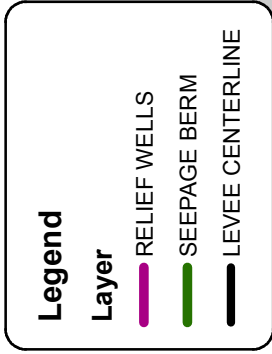
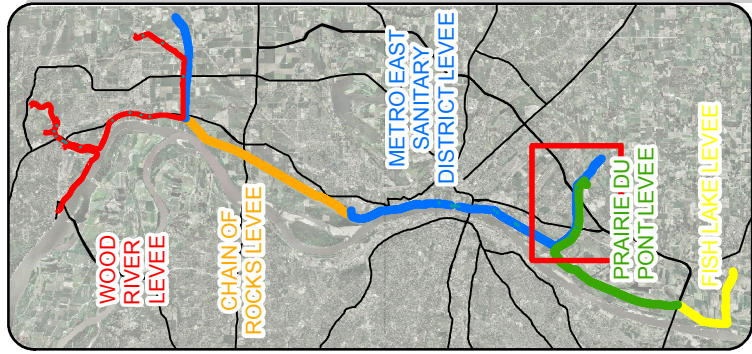
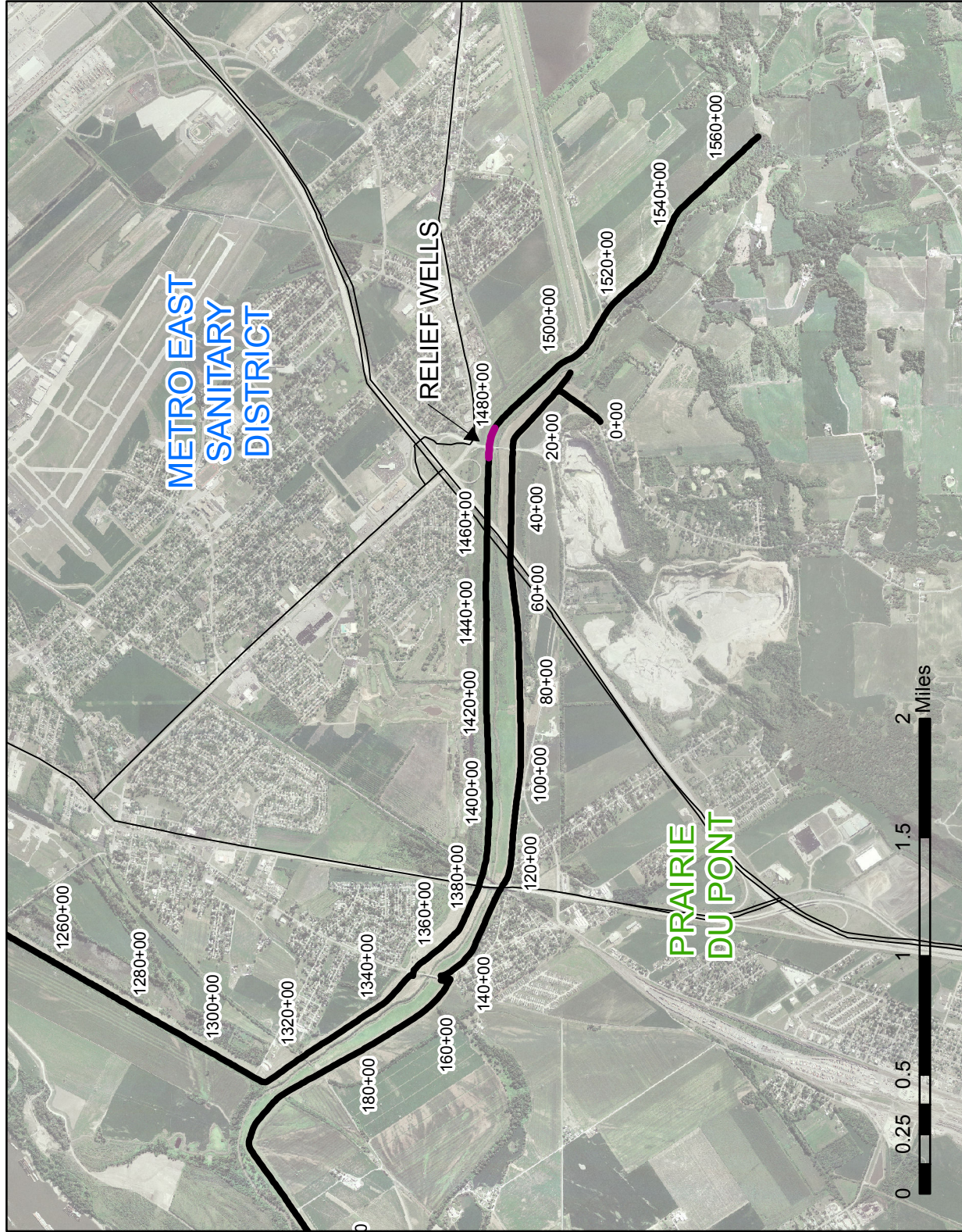
- RELIEF WELLS
- SEEPAGE BERM
- LEVEE CENTERLINE



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AUTHORIZED LEVEL DESIGN PHASE I PRAIRIE DU PONT/FISH LAKE LEVEE

