



What is Your Story?

FEMA Region VII Levee Data Documentation to Share Our Past

ASFPM Conference 2017

May 4, 2017

Agenda

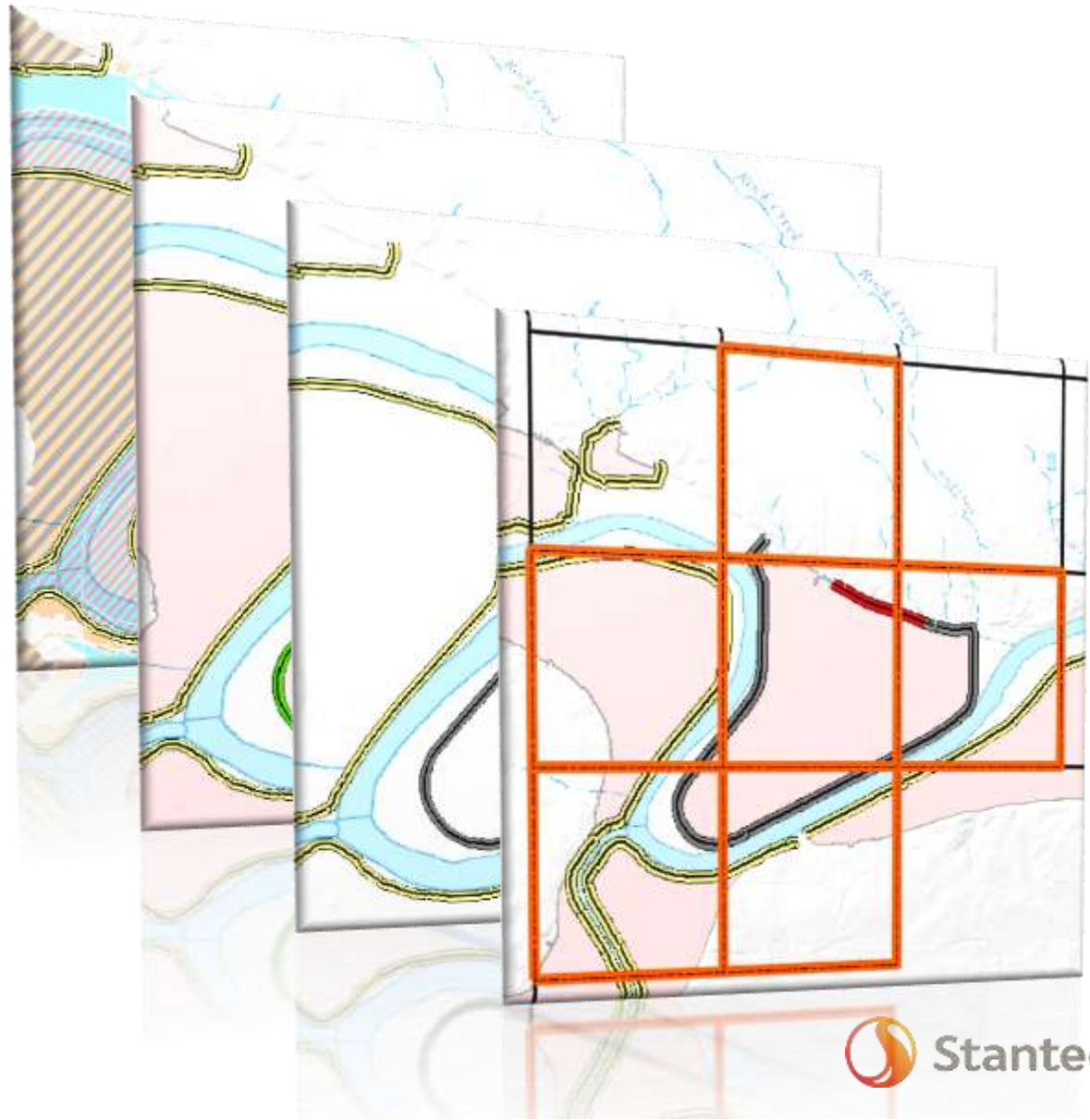
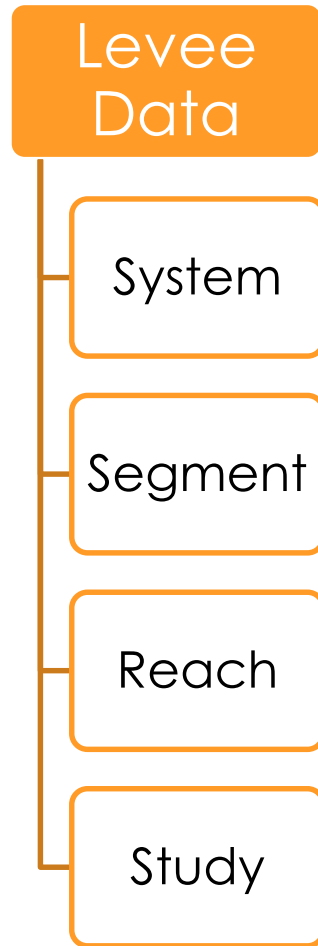
1 Levee Data

2 Data Analysis

3 Region VII Levee Database and Map

4 Future Applications

Levee Data



Levee Data

Tables in the Region VII Levee Database

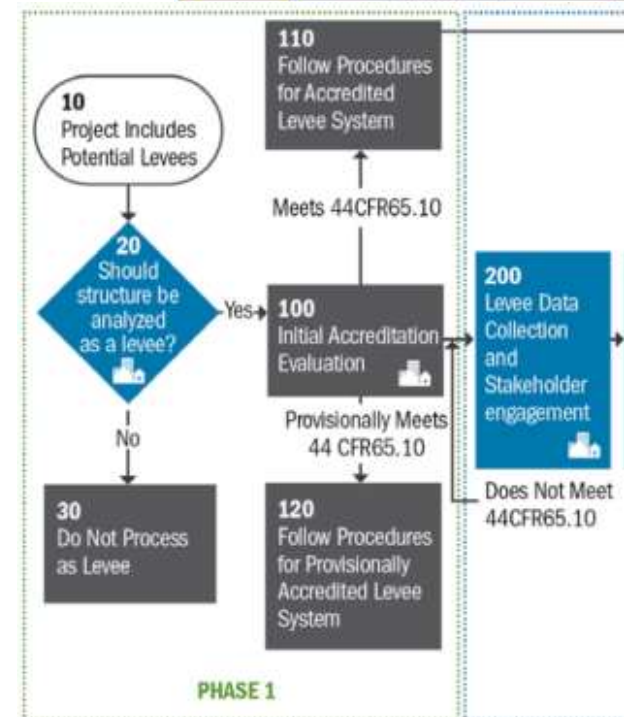
- System Information
- Studies Tracker
- PAL Status
- 65.10 Tracker
- Media
- Region VII Levee Mapping

Data Analysis

Region VII Levee Mapping Table

- Supports Region VII Levee Mapping Strategy
- Follows the Levee Mapping Decision Matrix
- Answers the levee data evaluation phase of LAMP
- Relates to the other levee data tables

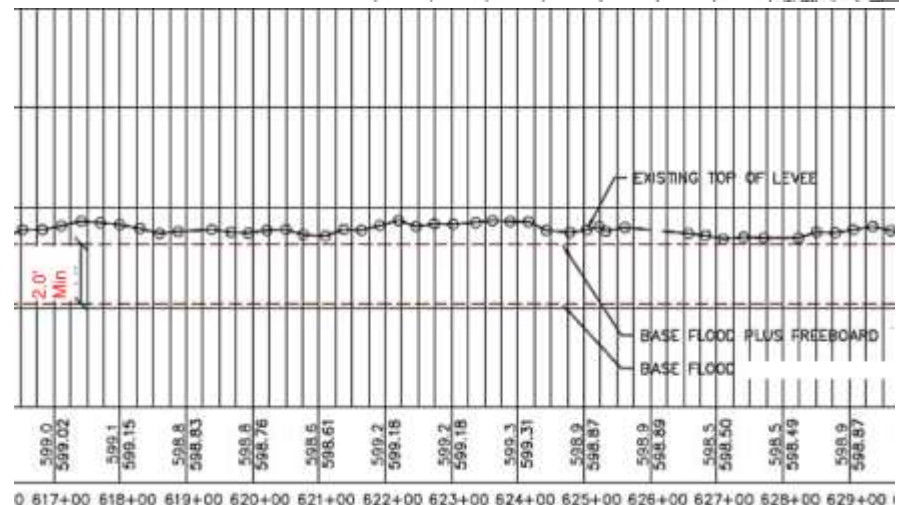
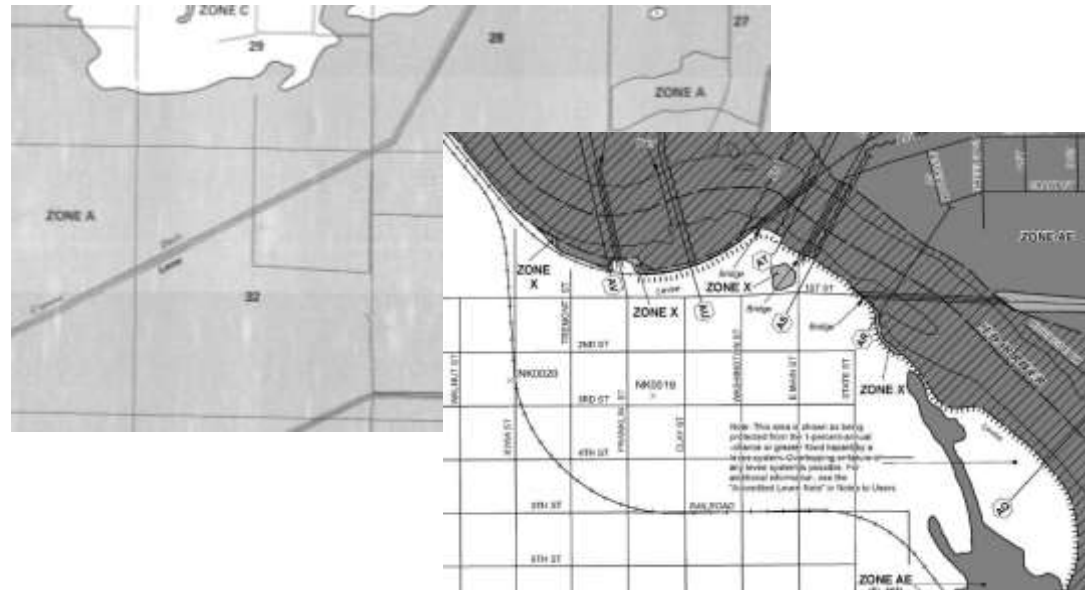
	Value of LBR	Assessed Engineering Design	Assessed Area Mapping
Assessed by LBR	100% LBR	Assessed values "New or enhanced" (only not enhanced)	Assessed values with effective 44 CFR 65.10
		Assessed values "New or enhanced" (only not enhanced)	Assessed values with effective 44 CFR 65.10
	Data not used 44 CFR 65.10 (Data not used for proposed mapping)	Assessed values "New or enhanced" (only not enhanced)	Assessed values with effective 44 CFR 65.10
		Assessed values "New or enhanced" (only not enhanced)	Assessed values with effective 44 CFR 65.10
Assessed by LBR	Assessed Engineering Design	Assessed Engineering Design	Assessed Area Mapping
		Assessed Engineering Design	Assessed Area Mapping
	Assessed Engineering Design	Assessed Engineering Design	Assessed Area Mapping
		Assessed Engineering Design	Assessed Area Mapping
Assessed by LBR	Assessed Engineering Design	Assessed Engineering Design	Assessed Area Mapping
		Assessed Engineering Design	Assessed Area Mapping
	Assessed Engineering Design	Assessed Engineering Design	Assessed Area Mapping
		Assessed Engineering Design	Assessed Area Mapping



Data Analysis

Key Factors For Mapping Path Decision

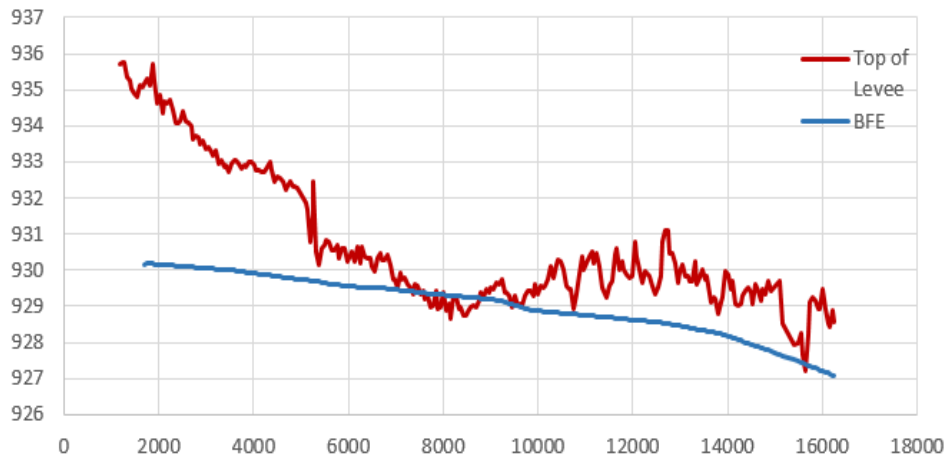
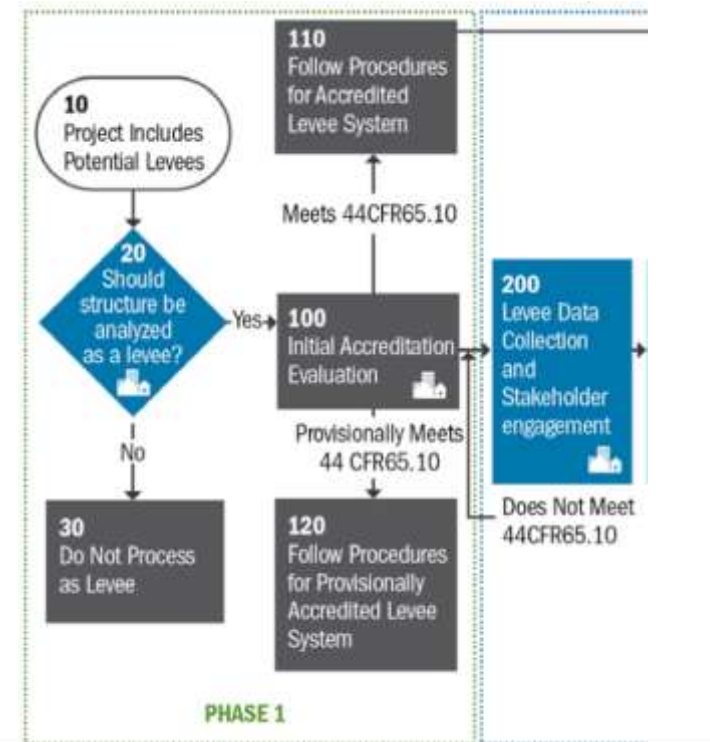
- Current Accreditation Status
- Freeboard greater than or equal to 2 feet
- CNMS validation status



Data Analysis

Possible Levee Mapping Paths

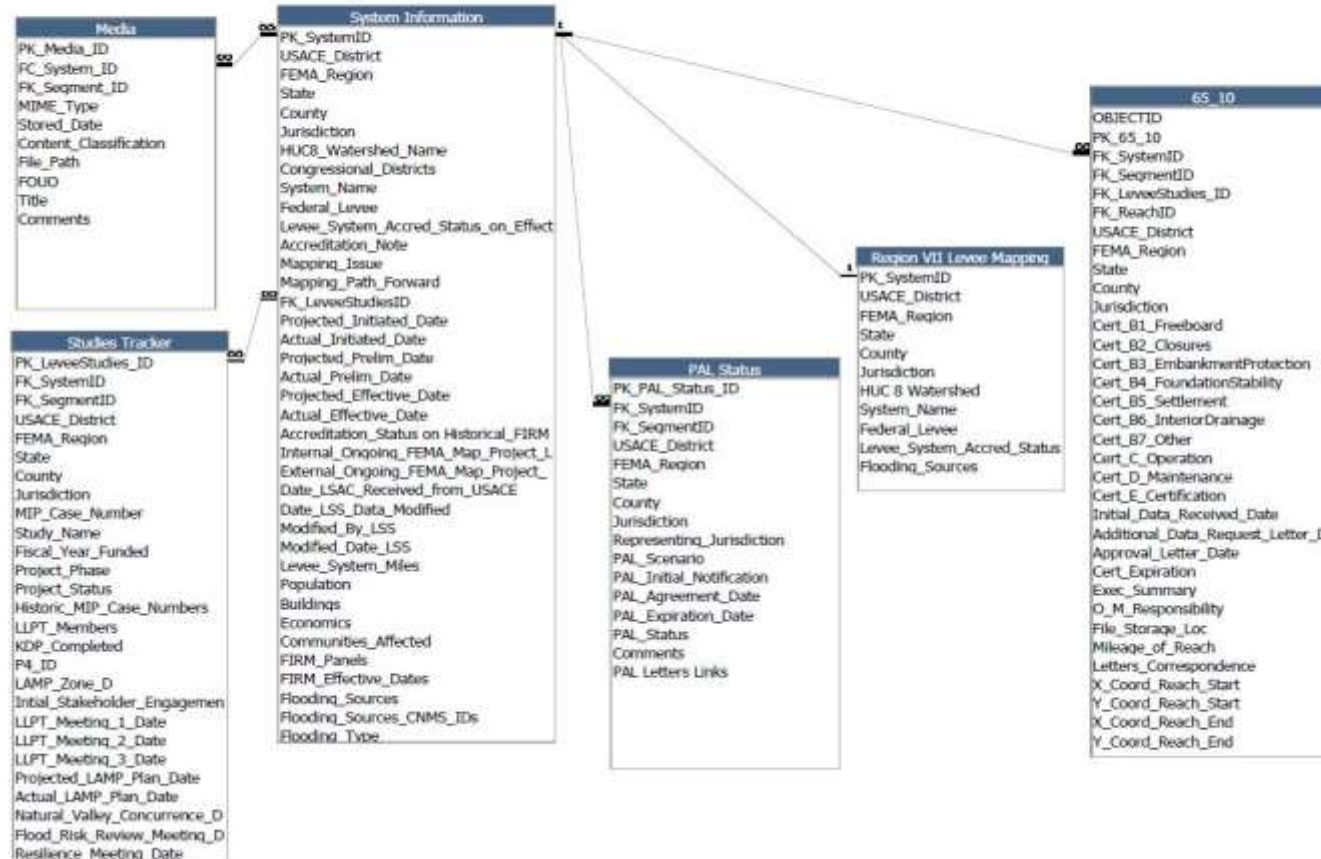
- Accreditation
- PAL Eligible
- LAMP Eligible
- Not Hydraulically Significant - Natural Valley



Region VII Levee Database

Relationships Schema Levee Database-Region VII

Thursday, April 27, 2017
4:16:53 PM



Region VII Levee Database

Region VII Levee Database



Welcome to Region VII
Levee Database

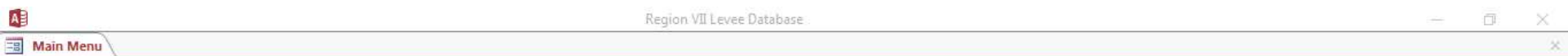


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Region VII Levee Database

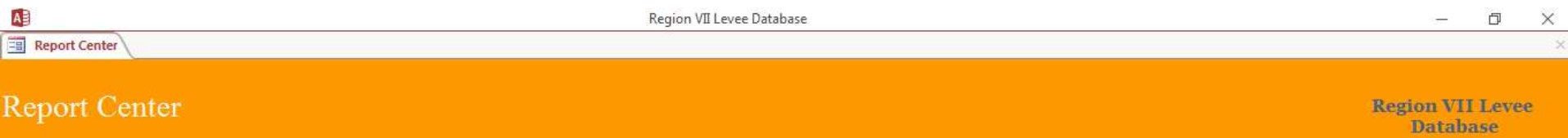


Main Menu

Region VII Levee
Database



Region VII Levee Database



Single Levee System Story Book ⓘ

3605000008

Levee System Story Book Selection ⓘ

Select a State

KS

Select a County

Miami County

Select a System

3605000008

Countywide Story Book ⓘ

Select a State

[state]

Select a County

[county]

Watershedwide Story Book ⓘ

Select a Watershed

[watershed]

FEMA RRR ⓘ

Select a State

[state]

Select a County

[county]



Region VII Levee Database

Report Center

Levee system story book

Region VII Levee Database

Close the story book

Sunday, April 30, 2017
2:31:49 PM

EmailExport to X3Export to IWAExport to PDFPrint

Region VII Levee
STARR II
Stantec

System Information

System ID

3605000008

System Name

Osawatomie

Federal Levee

Yes

Levee System Miles

5.0

USACE District

Kansas City

Flooding Sources

Marais Des Cygnes River

State

KS

County

Miami County

Congressional Districts

02

FEMA Region

7

Jurisdiction

Osawatomie city,Miami County

HUC8 Watershed Name

Upper Marais Des Cygnes

Levee System Accred Status on Effective FIRM LSS

Provisionally Accredited Levee (PAL) System

Accreditation Note

PAL note still on FIRM

Mapping Issue

Expired PAL

Mapping Path Forward

LAMP Initiation and Planning - LAMP Phases 1-3

FIRM Panels

20121C0168C,20121C0277C,20121C0281C,20121C0276C,20121C0164C

FIRM Effective Dates

08/19/2008,08/19/2008,08/19/2008,08/19/2008,08/19/2008

Projected Initiated Date

FY13

Actual Initiated Date

8/26/2014

Projected Prelim Date

Actual Prelim Date

Projected Effective Date

FY19

Actual Effective Date

System Information Comment

LAMP Plan completed. Community seeking Freeboard Deficient Procedure

Study Status

Levee Studies ID

R7KS003

Study Name

MIAMI COUNTY, KS. RISK MAP 09

Fiscal Year Funded

FY13

MIP Case Number

14-07-2606S



Region VII Levee Database

ASFPM_Demo_Story Book-Single Levee System Selection Box.pdf - Adobe Acrobat Pro

File Edit View Window Help

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Will's Common Tools Fill & Sign Comment

Levee System Story Book

Sunday, April 30, 2017
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 **Region VII
Levee Database**
 **Stantec**

System Information

System ID	3605000008	System Name	Osawatomie		
Federal Levee	Yes	Levee System Mile	5.0		
USACE District	Kansas City	Flooding Source	Marais Des Cygnes River		
State	KS	County	Miami County	Congressional District	02
				FEMA Regio	7
Jurisdiction	Osawatomie city,Miami County		HUC8 Watershed Name		
			Upper Marais Des Cygnes		
Levee System Accred Status on Effective FIRM LSS	Provisionally Accredited Levee (PAL) System				
Accreditation Note	PAL note still on FIRM				
Mapping Issue	Expired PAL	Mapping Path Forward	LAMP Initiation and Planning - LAMP Phases 1-3		
FIRM Panels	20121C0168C,20121C0277C,20121C0281C,20121C0276C,20121C0164C				

Region VII Levee Database



Single Levee System Story Book ⓘ

 3605000008   

Levee System Story Book Selection ⓘ

Select a State

Select a County

Select a System

Countywide Story Book ⓘ

Select a State

Select a County

Watershedwide Story Book ⓘ

Select a Watershed

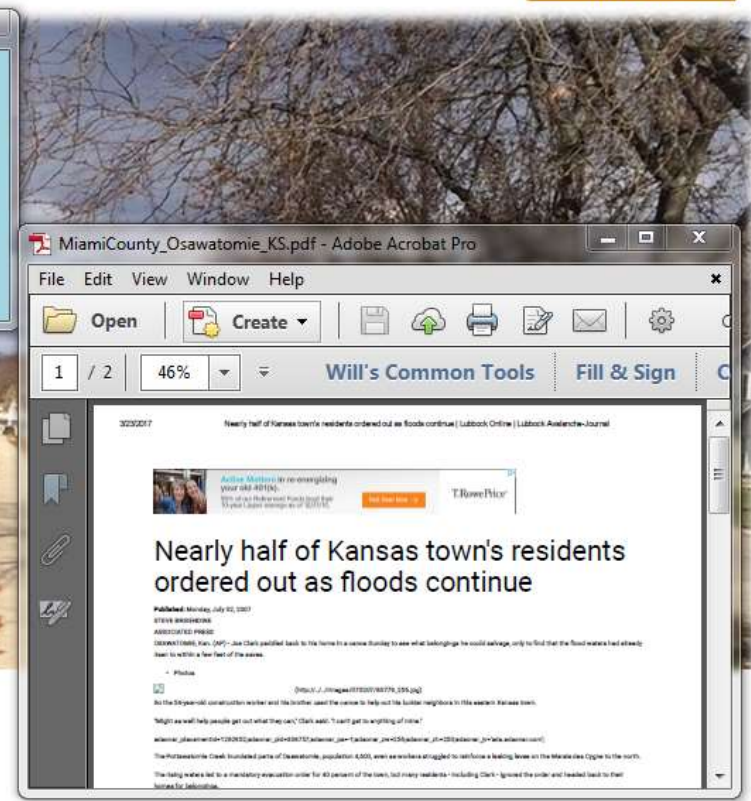
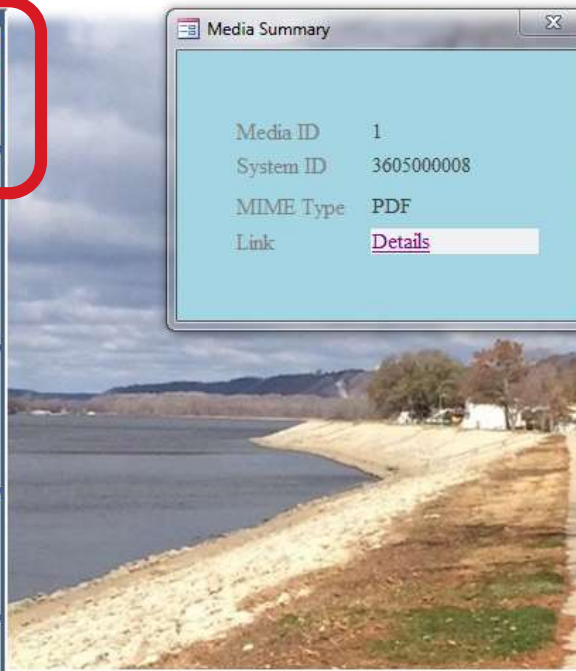
FEMA RRR ⓘ

Select a State

Select a County

Media Summary

Media ID	1
System ID	3605000008
MIME Type	PDF
Link	Details



Region VII Levee Database

Single Levee System Story Book ⓘ

 [Please enter a 10-digit system ID]

Levee System Story Book Selection ⓘ

Select a State

Select a County

Select a System

Countywide Story Book ⓘ

 Select a State

Select a County

Watershedwide Story Book ⓘ

 Select a Watershed

FEMA RRR ⓘ

Select a State

Select a County



Region VII Levee Database

 Report Center

 CW-Ch01

 CW-Ch02

 CW-Ch03

 CW-Ch04

 CW-Ch05

 CW-Ch06

Region VII Levee Database

Chapter 01

Levee System Overview

Close this chapter

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IA

Clayton County

FEMA Region 7

System ID	System Name	Jurisdiction	Accreditation Status	Mapping Path Forward
1705000447	UNDEFINED	Marquette city	Non-Accredited Levee System	No Mapping Issue
5105590001	Elkport, IA	Elkport city	Non-Accredited Levee System	No Mapping Issue
5105590180	Elkader, IA	Elkader city	Non-Accredited Levee System	No Mapping Issue
5105910001	VOLGA, IA	Volga city	Non-Accredited Levee System	No Mapping Issue
5105910002	Volga, IA - Nagle Creek	Volga city	Non-Accredited Levee System	No Mapping Issue
5705000042	Mississippi River - Guttenberg	Clayton County, Guttenberg city	Provisionally Accredited Levee (PAL) System	Map Revision - LAMP Phase 4

6 system(s) found in Clayton County, IA

6

Region VII Levee Database



Region VII Levee Database

Report Center CW-Ch01 CW-Ch02 CW-Ch03 CW-Ch04 CW-Ch05 CW-Ch06

Chapter 02

Levee Geographic Footprint

Close this chapter

Region VII
Levee

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IA

Clayton County

FEMA Region 7

System ID	System Name	USACE District	State	County	Jurisdiction	Watershed Name	Congressional Dist.
1705000447	UNDEFINED	St. Paul	IA	Clayton County	Marquette city	Coon-Yellow	01
5105590001	Elkport, IA	Rock Island	IA	Clayton County	Elkport city	Turkey	01
5105590180	Elkader, IA	Rock Island	IA	Clayton County	Elkader city	Turkey	01
5105910001	VOLGA, IA	Rock Island	IA	Clayton County	Volga city	Turkey	01
5105910002	Volga, IA - Nagle Creek	Rock Island	IA	Clayton County	Volga city	Turkey	01
5705000042	Mississippi River - Guttenberg	St. Paul	IA	Clayton County	Clayton County, Guttenberg city	Grant-Little Maquoketa	01

6 system(s) found in Clayton County, IA

6



Region VII Levee Database

Report Center
 CW-Ch01
 CW-Ch02
 CW-Ch03
 CW-Ch04
 CW-Ch05
 CW-Ch06

Region VII Levee Database

Chapter 03
Levee Accreditation Status

[Close this chapter](#)

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IA
 Clayton County

FEMA Region 7

System ID	System Name	Sys. Miles	Accreditation Status	Accreditation Note	FIRM Panels	FIRM Effective Dates	Flooding Sources
1705000447	UNDEFINED	1.0	Non-Accredited Levee System	None: Non-Accredited on FIRM (pre-LAMP)	19043C0091E	06/02/2011	MISSISSIPPI RIVER
5105590001	Elkport, IA	0.5	Non-Accredited Levee System	None: Non-Accredited on FIRM (pre-LAMP)	19043C0407E	06/02/2011	Elk Creek
5105590180	Elkader, IA	0.3	Non-Accredited Levee System	None: Non-Accredited on FIRM (pre-LAMP)	19043C0257E	06/02/2011	Turkey River
5105910001	VOLGA, IA	0.5	Non-Accredited Levee System	None: Non-Accredited on FIRM (pre-LAMP)	19043C0241E	06/02/2011	Volga River
5105910002	Volga, IA - Nagle Creek	0.7	Non-Accredited Levee System	None: Non-Accredited on FIRM (pre-LAMP)	19043C0241E	06/02/2011	Nagle Creek
5705000042	Mississippi River - Guttenberg	2.0	Provisionally Accredited Levee	PAL note still on FIRM	19043C0336E,19043C0338E	06/02/2011,06/02/2011	

Region VII Levee Database



Region VII Levee Database

Report Center CW-Ch01 CW-Ch02 CW-Ch03 CW-Ch04 CW-Ch05 CW-Ch06

Chapter 04

Levee System Information Comments

Close this chapter

Region VII
Levee

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IA

Clayton County

FEMA Region 7

System ID	System Name	Comments
1705000447	UNDEFINED	
5105590001	Elkport, IA	
5105590180	Elkader, IA	
5105910001	VOLGA, IA	
5105910002	Volga, IA - Nagle Creek	
5705000042	Mississippi River - Guttenberg	Community responding to 65.10 review comments

6 system(s) found in Clayton County, IA

6

Region VII Levee Database



Region VII Levee Database

Report Center CW-Ch01 CW-Ch02 CW-Ch03 CW-Ch04 CW-Ch05 CW-Ch06

Chapter 05

Studies

Close this chapter

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Region VII
Levee



R7IA003

System IDs	Segment IDs	MIP Case Number	Study Name	Project Phase	Project Status	Historic MIP	FY Funded
5705000042	5704000042	14-07-2613S	Clayton County IA - Guttenberg Levee LAMP	Phase 4 (FIRM_Update)	Funded	City of Guttenberg	FY14

Region VII Levee Database



Region VII Levee Database

Report Center CW-Ch01 CW-Ch02 CW-Ch03 CW-Ch04 CW-Ch05 CW-Ch06

Chapter 06

Mapping

Close this chapter

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Region VII
Levee
Stantec

IA

Clayton County

FEMA Region 7

System ID	Zone Adjacency	Assumed Engineering Analysis	Assumed Levee Mapping	Assumed mapping summary	Notes
1705000447	AE	Valid	Non-accredited with effective or proposed WSELs/BFEs.	NV	Natural Valley, Not Hydraulically significant, use effective BFE
5105590001	A	Unverified	Non-accredited with effective or proposed WSELs.	LAMP2	FB evaluation using Zone A extent Wsel estimates and USACE levee elevation points

Region VII Levee Database

ASFPD_Demo_Story Book-Countywide Chapter 03-Accreditation Status.pdf - Adobe Acrobat Pro

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Will's Common Tools Fill & Sign Comment

Levee Accreditation Status

Sunday, April 30, 2017
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 **Region VII
Levee Database**


IA

Clayton County FEMA Region 7

System ID	System Name	Sys. Miles	Accreditation Status	Accreditation Note	FIRM Panels	FIRM Effective Dates	Flooding Sources
1705000447	UNDEFINED	1.0	Non-Accredited Levee System	None: Non-Accredited on FIRM (pre-LAMP)	19043C0091E	06/02/2011	MISSISSIPPI RIVER
5105590001	Elkport, IA	0.5	Non-Accredited Levee System	None: Non-Accredited on FIRM (pre-LAMP)	19043C0407E	06/02/2011	Elk Creek
5105590180	Elkader, IA	0.3	Non-Accredited Levee System	None: Non-Accredited on FIRM (pre-LAMP)	19043C0257E	06/02/2011	Turkey River



Region VII Levee Database

Single Levee System Story Book ⓘ

 [Please enter a 10-digit system ID]

Levee System Story Book Selection ⓘ

Select a State

Select a County

Select a System

Countywide Story Book ⓘ

Select a State

Select a County

Watershedwide Story Book ⓘ

 Select a Watershed

FEMA PPP ⓘ

Select a State

Select a County



Region VII Levee Database

Region VII Levee Database							
Report Center	WW-Ch01	WW-Ch02	WW-Ch03	WW-Ch04	WW-Ch05	WW-Ch06	
RDB CEDAR RIVER / RDB BLACK HAWK CK. (SOUTH WEST)	Accredited Levee (PAL) System	FIRM	0301F,19013C0188F,19013C0302F	11,07/18/2011,07/18/2011	Hawk Creek		
5105920003 WATERLOO & EVANSDALE, IA - LDB CEDAR RIVER	11.4	Provisionally Accredited Levee (PAL) System	PAL note still on FIRM	19013C0307F,19013C0306F,19013C0167F,19013C0186F,19013C0189F,19013C0308F,19013C0188F,19013C03	07/18/2011,07/18/2011,07/18/2011,07/18/2011,07/18/2011,07/18/2011,07/18/2011,07/18/2011	Cedar River, Elk Run	
5105920004 WATERLOO, IA - WASTE WATER TREATMENT PLANT (SOUTH)	1.1	Provisionally Accredited Levee (PAL) System	PAL Note Still on FIRM	19013C0306F	07/18/2011	Cedar River	
5105920005 WATERLOO, IA - VIRDEN CREEK DRY RESERVIOR	0.6	Non-Accredited Levee System	None: Non-Accredited on FIRM (pre-LAMP)	19013C0195F,19013C0187F	07/18/2011,07/18/2011	Virden Creek	
11 system(s) found in Middle Cedar watershed, Black Hawk County, IA						11	
Middle Cedar watershed		Linn County			FEMA Region 7		
System ID	System Name	Sys. Miles	Accreditation Status	Accreditation Note	FIRM Panels	FIRM Effective Dates	Flooding Sources
1705000455	UNDEFINED	0.4	Non-Accredited Levee System	None: Non-Accredited on FIRM (pre-LAMP)	19113C0410D	04/05/2010	CEDAR RIVER
1705000456	UNDEFINED	0.7	Non-Accredited Levee System	None: Non-Accredited on FIRM (pre-LAMP)	19113C0410D	04/05/2010	CEDAR RIVER
1705000457	UNDEFINED	0.6	Non-Accredited Levee System	None: Non-Accredited on FIRM (pre-LAMP)	19113C0410D	04/05/2010	CEDAR RIVER
3 system(s) found in Middle Cedar watershed, Linn County, IA						3	

Region VII Levee Database



[Return to Main Menu](#)

Single Levee System Story Book ⓘ

 [Please enter a 10-digit system]

Levee System Story Book Selection ⓘ

Select a State

Select a County

Select a System

Countywide Story Book ⓘ

Select a State

Select a County

Watershedwide Story Book ⓘ

Select a Watershed

FEMA RRR ⓘ

Select a State

Select a County



Region VII Levee Database

 Report Center  FEMA RRR request

Rapid Response Report
Affected Area
Levee Accreditation
Sunday, April 30, 2017
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[Close RRR](#)

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NE

Sarpy County		FEMA Region 7	
System ID	System Name	Jurisdiction	Accreditation Status
1705700264	MRLS R-613 & 616	Sarpy County	Accredited Levee System
1705800264	MRLS R-613 & 616	Sarpy County	Accredited Levee System
1705800612	UNDEFINED	Sarpy County	
1705990656	LB_Jackson_Adams, West Papillion Creek	PAPILLION	
4705000090	R-613 - Platte LB & Papillion RB & MO River RB	Sarpy County	

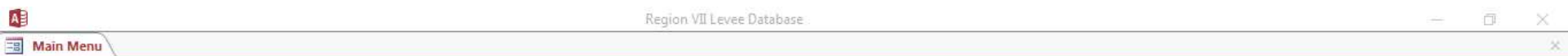
Summary of Status in this report:

14 Non-Accredited Levee System(s)

4 Accredited Levee System(s)

0 Provisionally Accredited Levee System(s)

Region VII Levee Database



Main Menu

Region VII Levee
Database



Version 1.0

Exit

Region VII Levee Map

 Map Center

Region VII Levee Database



Mapping Center

Region VII Levee Database

 View it on your browser

[Return to Main Menu](#)

FAST Levee Database

with Web AppBuilder for ArcGIS

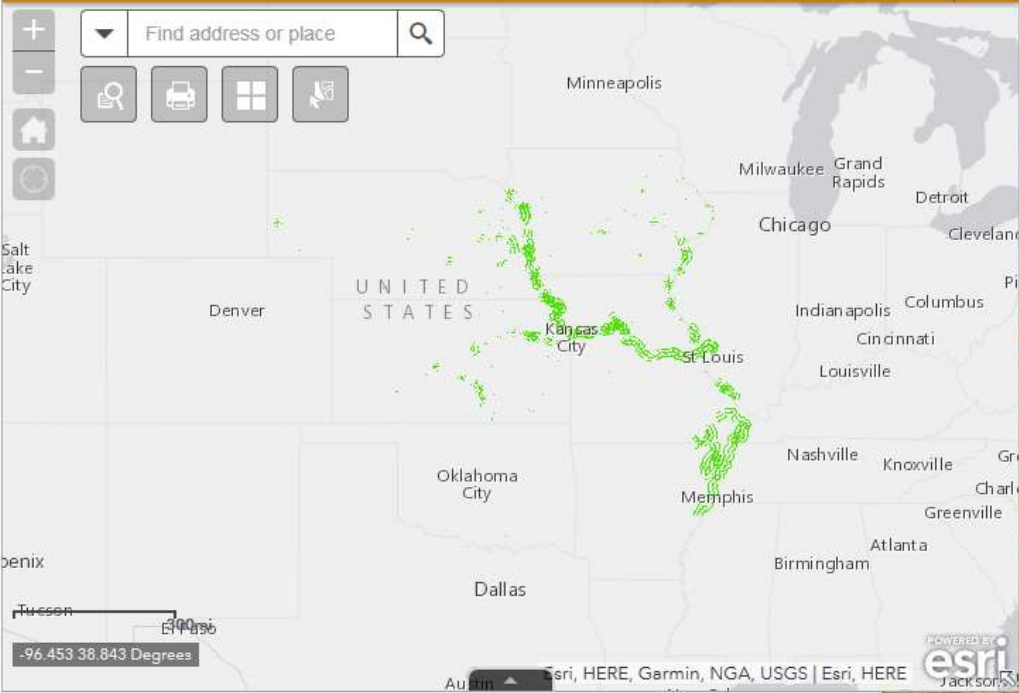




Find address or place

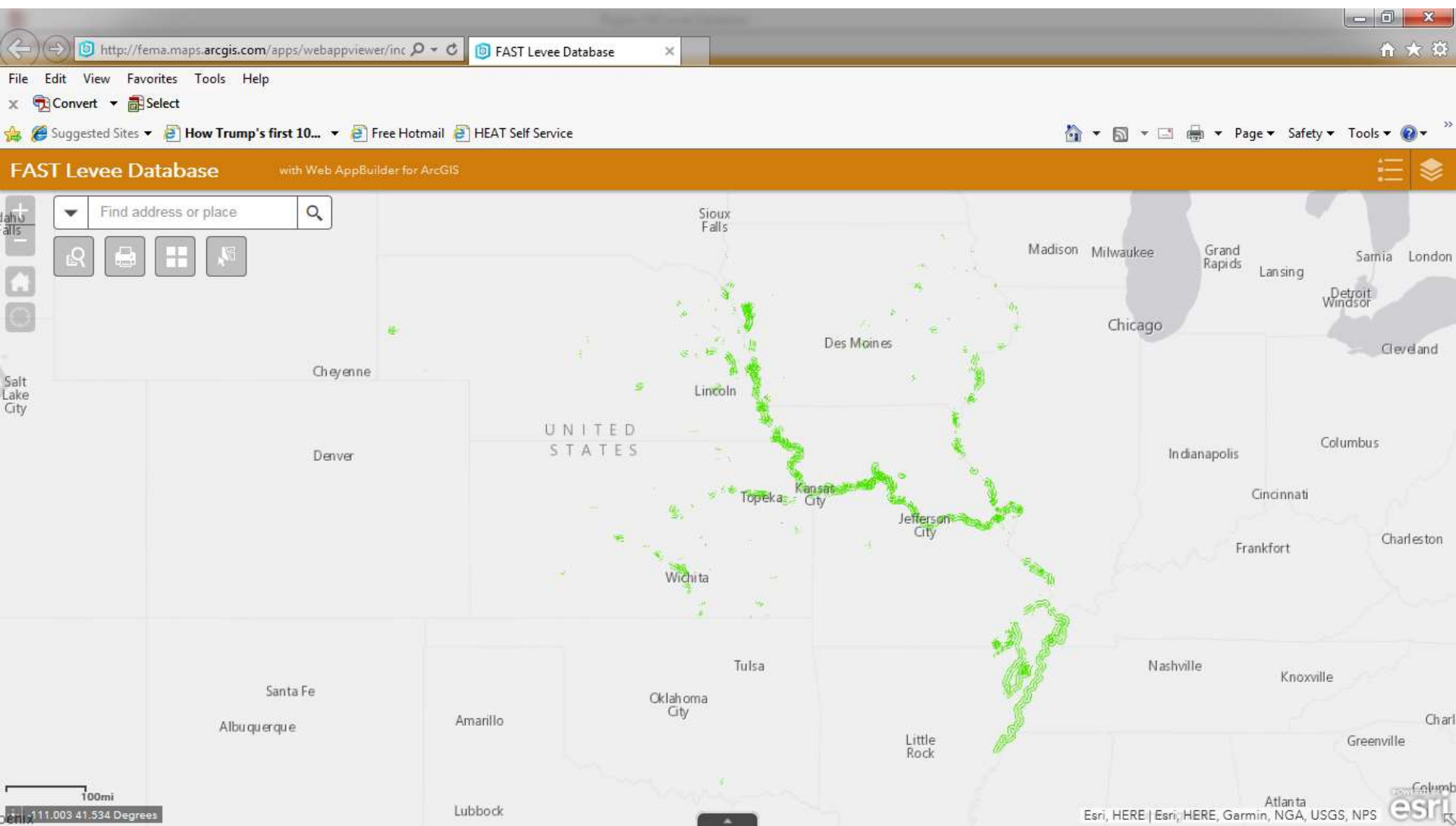




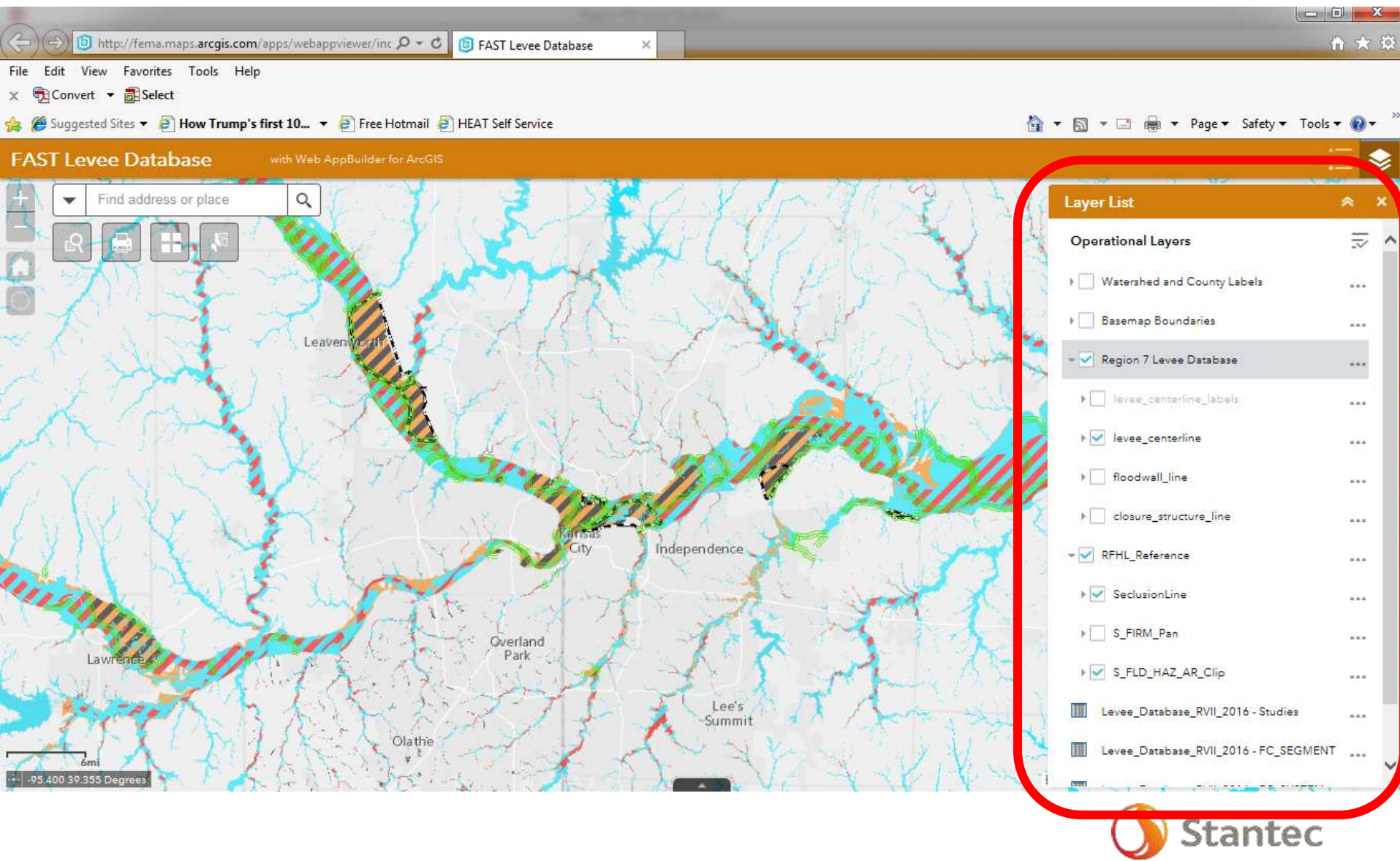




Region VII Levee Map



Region VII Levee Map



Region VII Levee Map

FAST Levee Database

Find address or place

levee_centerline: Birmingham Unit

Primary Key Identifier	3,601,000,040.00
FOREIGN KEY JOIN to FC_SEGMENT	3,604,000,010.00
Up River Mile	353.60
Down River Mile	360.50
Feature Name	Birmingham Unit
Feature Length	8.09
Gage Code	KCDM7
Gage Owner	USGS
Landside Slope Ratio	1V:3.5H
Waterside	1V:3H

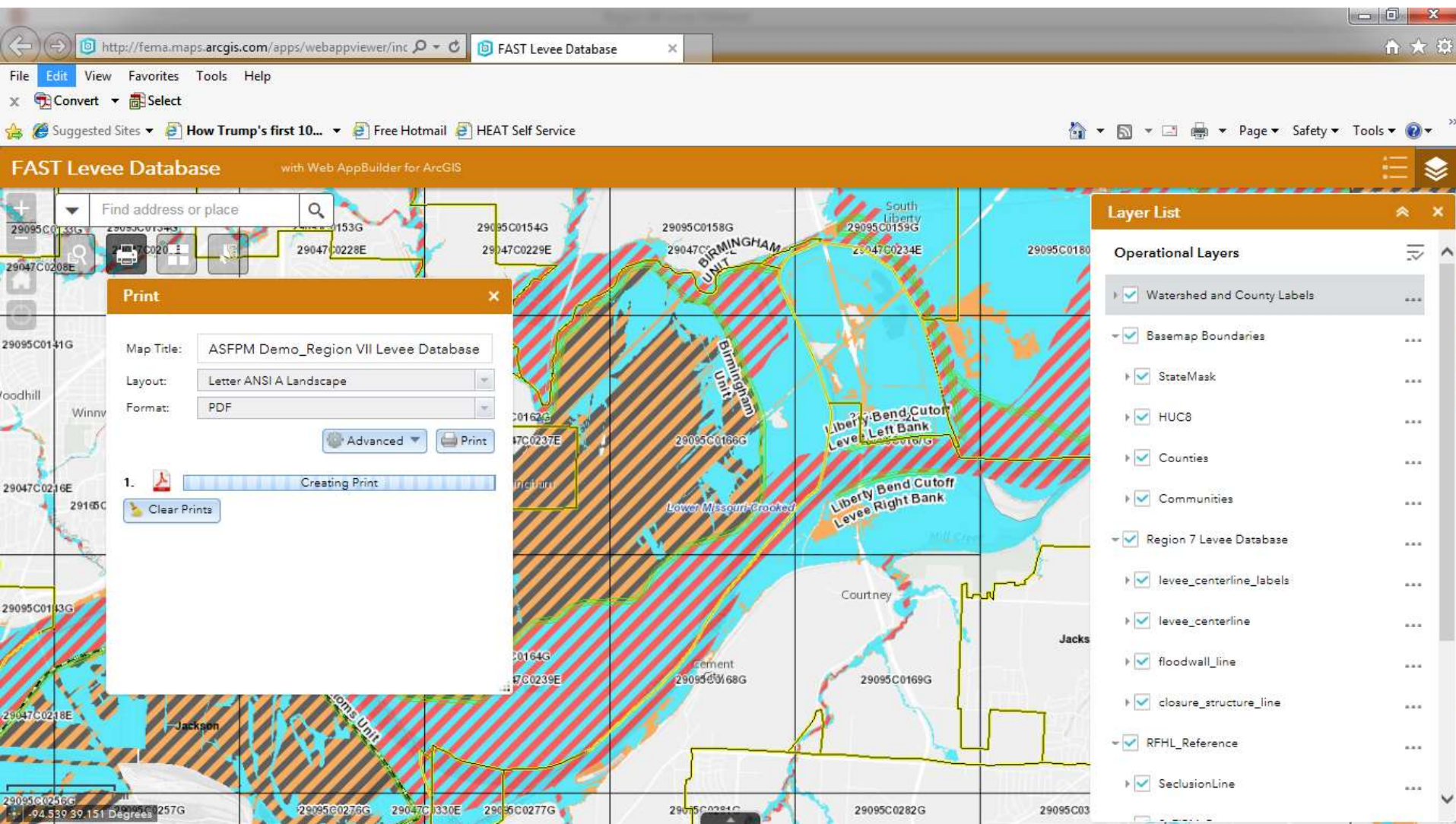
Layer List

- ☐ closure_structure_line
- ☐ RFHL_Reference
- ☒ SeclusionLine
- ☐ S_FIRM_Pan
- ☒ S_FLD_HAZ_AR_Clip
- Levee_Database_RVII_2016 - Studies
- Levee_Database_RVII_2016 - FC_SEGMENT
- Levee_Database_RVII_2016 - FC_SYSTEM
- Levee_Database_RVII_2016 - SystemInfo

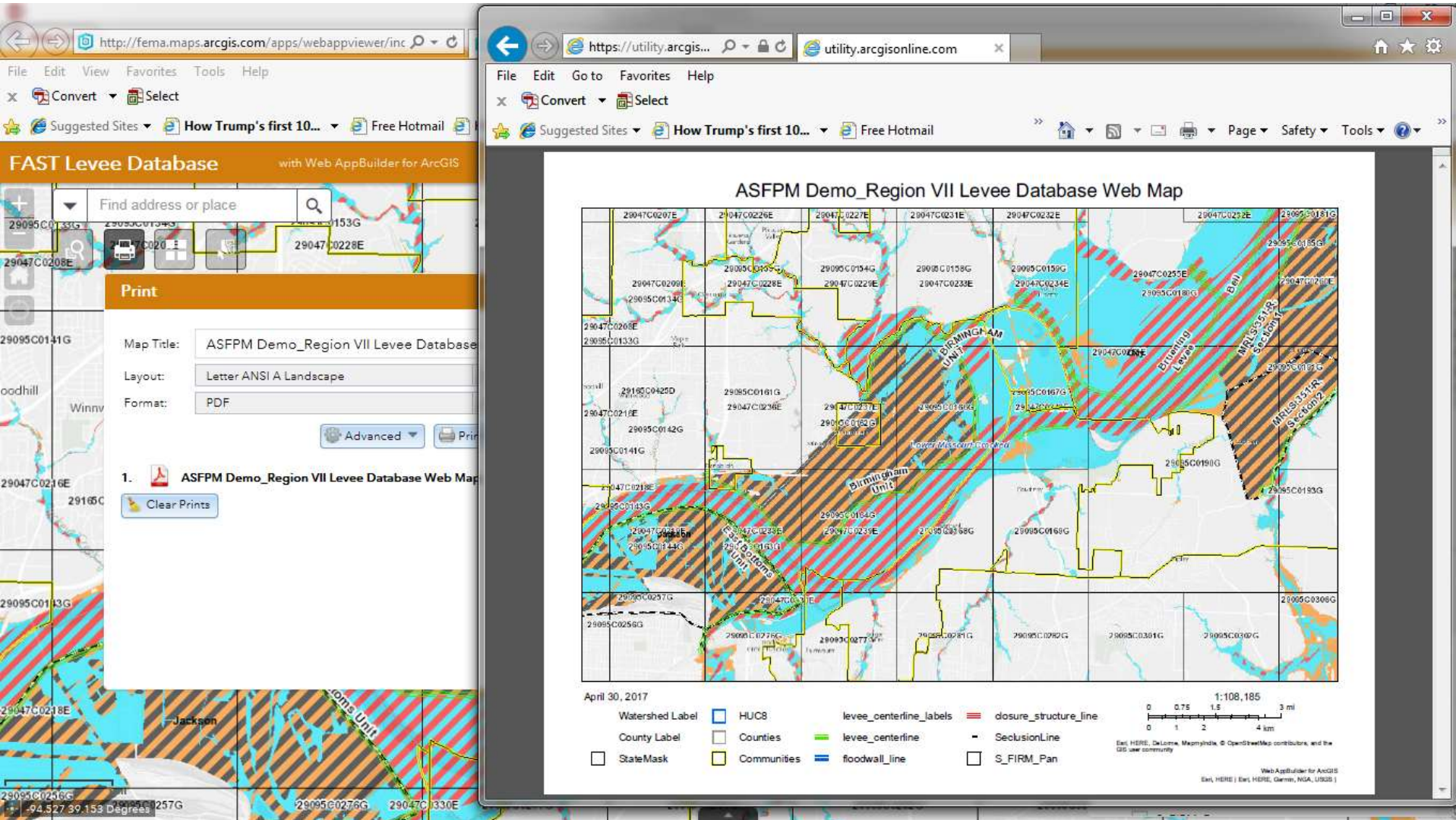
Primary Key Identifier	FOREIGN KEY JOIN to FC_SEGMENT	Up River Mile	Down River Mile	Feature Name	Feature Length	Gage Code	Gage Owner	Landside Slope Ratio	Waterside Slope Ratio	Area Bankside Code	Coordinate Capture Method	Area Cutoff Type Code	Levee Type Code
3,601,000,040.00	3,604,000,010.00	353.60	360.50	Birmingham Unit	8.09	KCDM7	USGS	1V:3.5H	1V:3H	Left descending bank	Centimeter Level, used a minimum of 2 GPS receivers		Mainline

1 features 0 selected

Region VII Levee Map



Region VII Levee Map



Future Applications

Region VII Levee Data Library

- More Story Books
 - Spatial Analysis: How many ____ are within ____?
 - Planning, Projections
- Multi-Media
 - Photographs
 - 2D and 3D model simulation videos

Share Libraries

- All FEMA Regions levee data
- National Levee Database

Share Your Story

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Rick Nusz, PG, CFM

Rick.Nusz@fema.dhs.gov