

GIS During Disaster Events Think Decision Support

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Chief, Emergency Management and
Security Office. Tulsa District US
Army Corps of Engineers



US Army Corps of Engineers
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Tulsa District

District Level USACE Operations

- ☐ District Scope of Services
- ☐ Civil Works Programs
- ☐ Military Programs
- ☐ Emergency Levee Rehabilitation Projects
- ☐ SWIF Program Point of Contact
- ☐ Anti Terrorism and Force Protection



Tulsa District USACE
Federal Emergency Operations Mission

- ☐ Emergency Power
- ☐ Debris Removal “Expedited”
- ☐ Commodities
- ☐ Roofing (VOAD’s)
- ☐ Engineering Assessments
- ☐ Liaisons
- ☐ Tech Assistance



USACE Own Mission PL84-99 (State or District Level)

WHAT IS IT: USACE Projects/USACE Navigation Systems.

Disaster Preparation
Emergency Operations
Rehabilitation
Water Assistance
Advance Measures
Hazard Mitigation

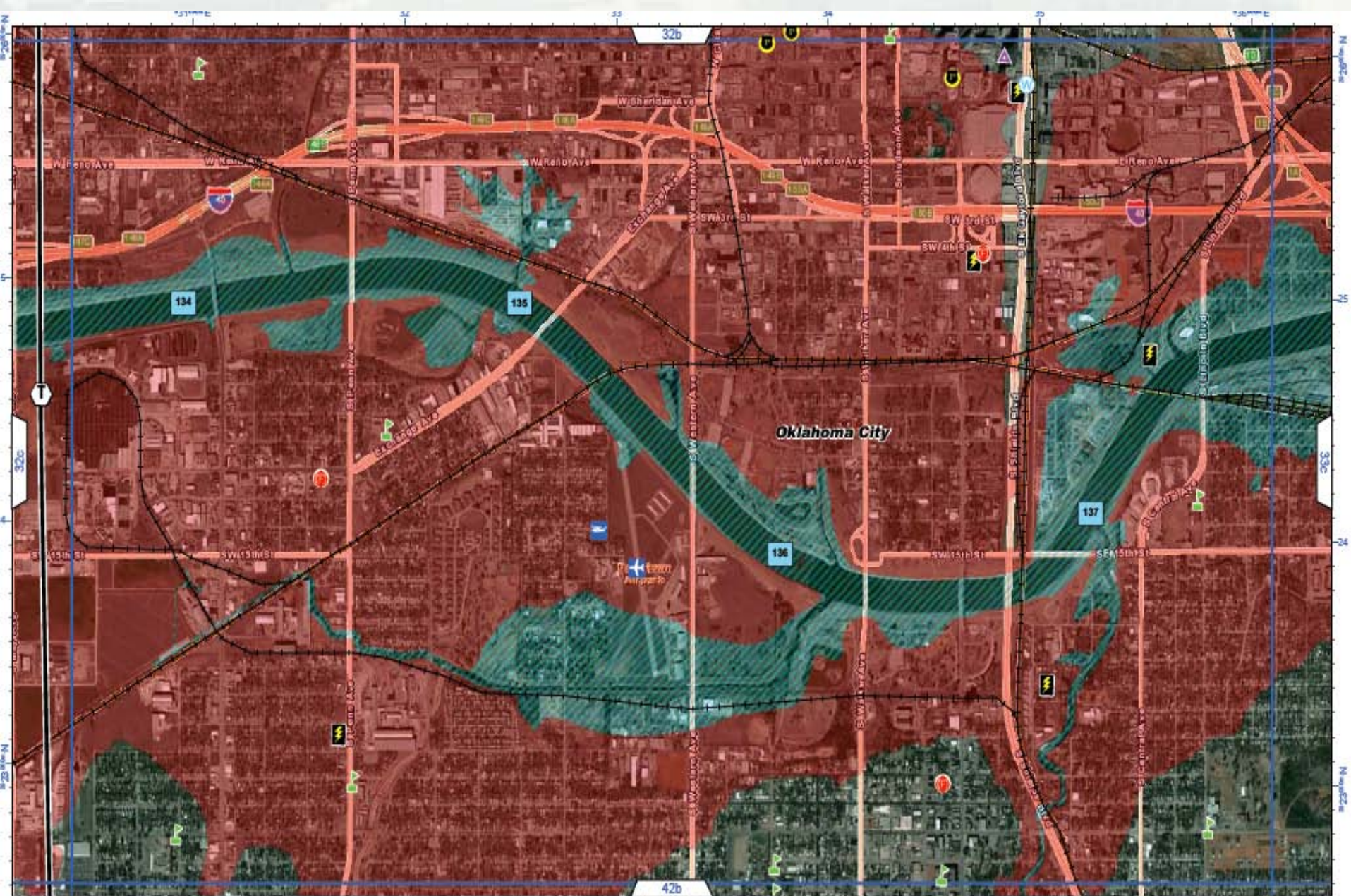


HOW TO ACCESS IT: Directly to the Project/EM/District Engineer

Governor Declared Emergency
Allows action in the event of imminent threat. National Weather Service.
Incident Management Team to the location.
Sandbags, Pumps, Poly etc.
Flood Inundation Area (GIS)
Just in time floodfight training
Liaison Officers (Hydrology, Structural Engineers)
Damage Maps and Decision Support Systems



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USNG Grid Zone 14S
100,000 Meter Grid ID PE
1:15,840 or 1 inch = 1/4 Mile

0 0.25 0.5 0.75 1 Miles



Study Dam

Canton Lake Dam

National Inventory of Dams (NID) ID: OK10316

Dam Owner: U.S. Army Corps of Engineers

Tulsa District

Section of USGS Quad : 35097-D5 Oklahoma City

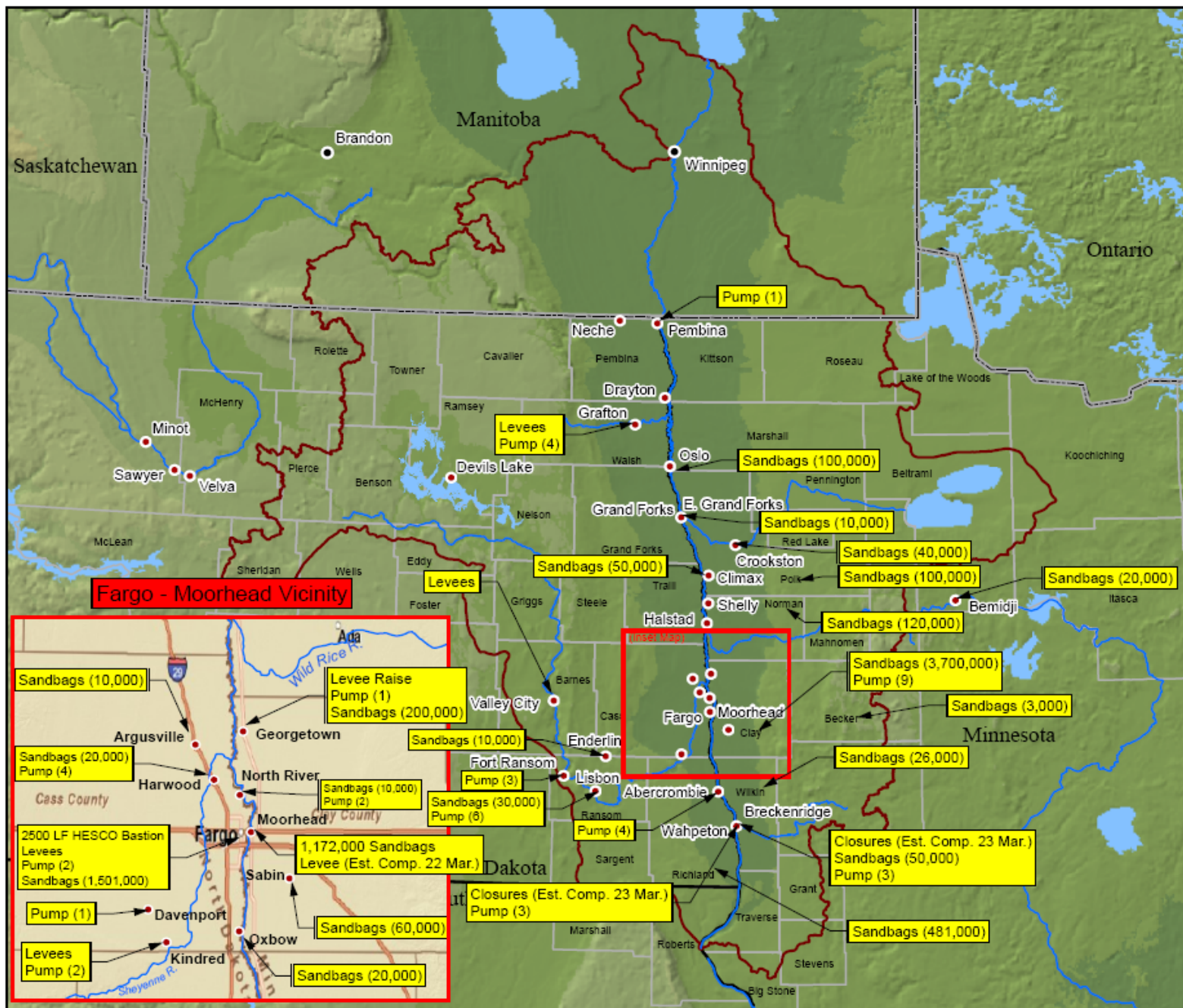
For Official Use Only

SEPTEMBER 2011

32d

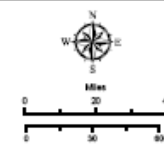
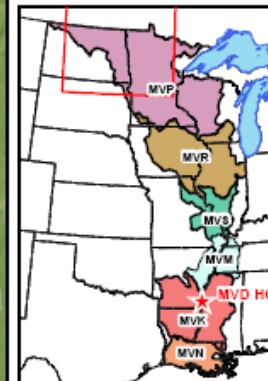
RED RIVER BASIN - MVD SITUATIONAL AWARENESS MAP

26 MAR 2009
@
1400 HRS



LEGEND

- USACE Support
- Basin
- Red River



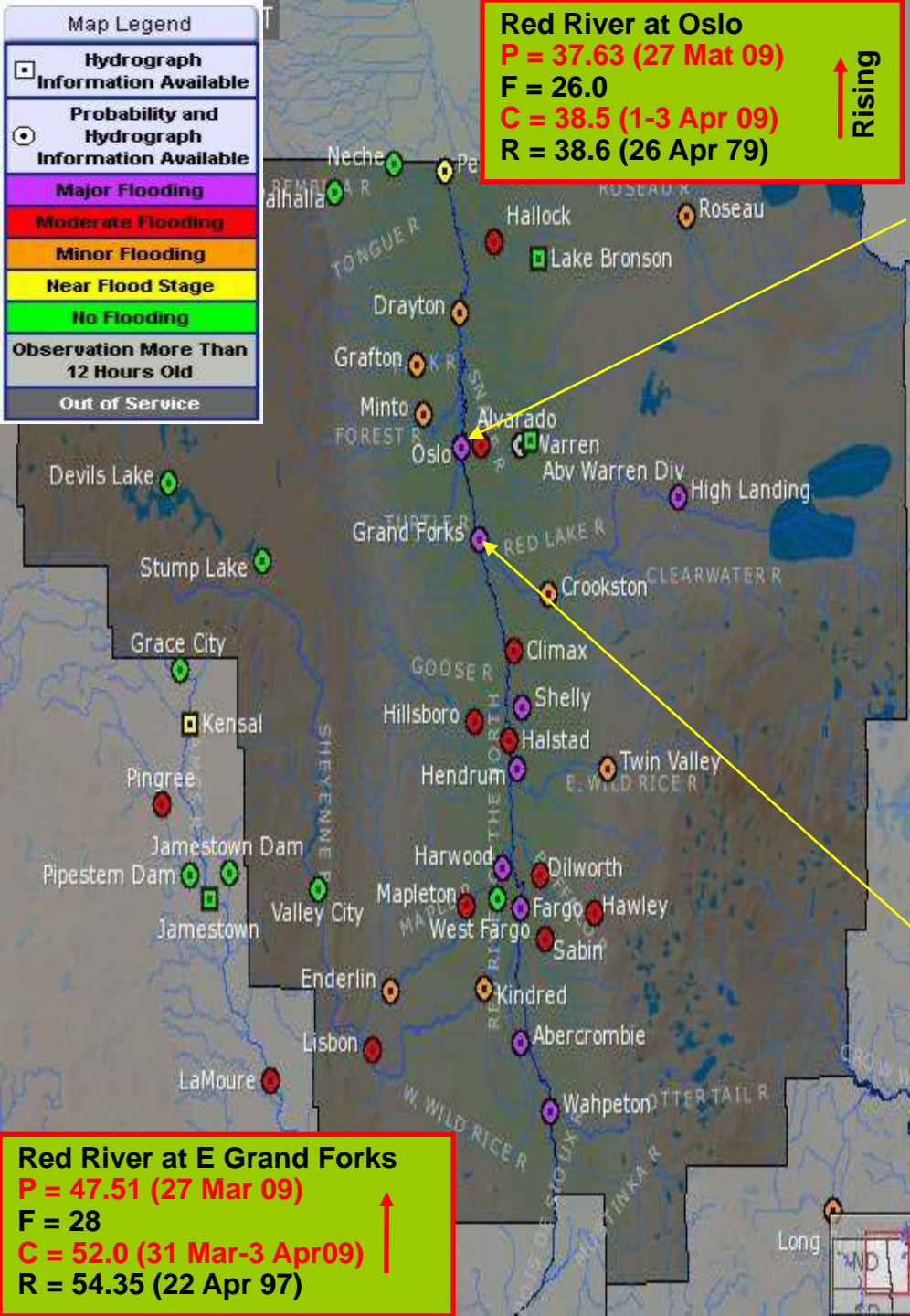
DISCLAIMER: While the United States Army Corps of Engineers, North and South Districts, provides information to the public, it is not intended to be used for any purpose other than informational. The Corps does not warrant the accuracy, reliability, or completeness of any of the data provided herein. The Corps, its officers, agents, employees, or servants, shall not be liable for any damages or losses, including consequential damages, arising from the use of the maps and associated data in reliance upon any information or data provided herein. By using these maps and associated data the user does so at their own risk and without acknowledgment that neither the Corps or its officers, agents, employees or servants, shall be held liable for any damages or losses arising from the use of the maps and associated data. The Corps, its officers, agents, employees or servants, shall not be held liable for any damages or losses arising from the use of the maps and associated data.

St. Paul District
Emergency Management
March Highwater 2009

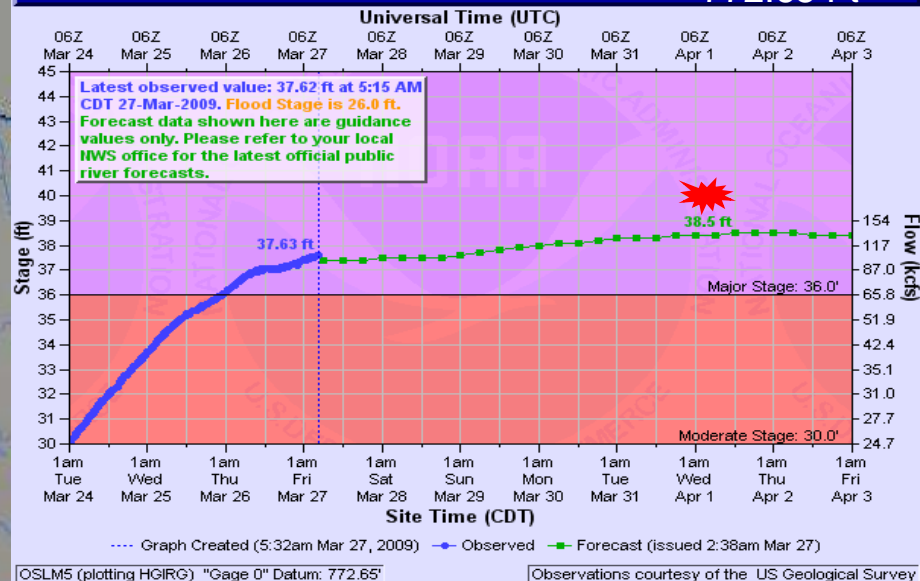
Map Legend
Hydrograph Information Available
Probability and Hydrograph Information Available
Major Flooding
Moderate Flooding
Minor Flooding
Near Flood Stage
No Flooding
Observation More Than 12 Hours Old
Out of Service

Red River at Oslo
P = 37.63 (27 Mar 09)
F = 26.0
C = 38.5 (1-3 Apr 09)
R = 38.6 (26 Apr 79)

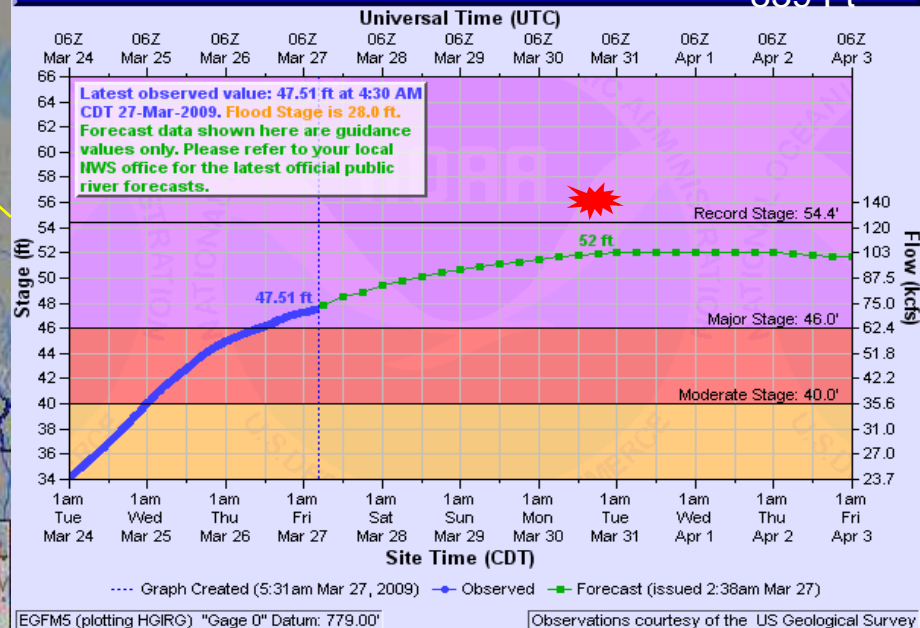
↑ Rising



RED RIVER AT OSLO 772.65 Ft



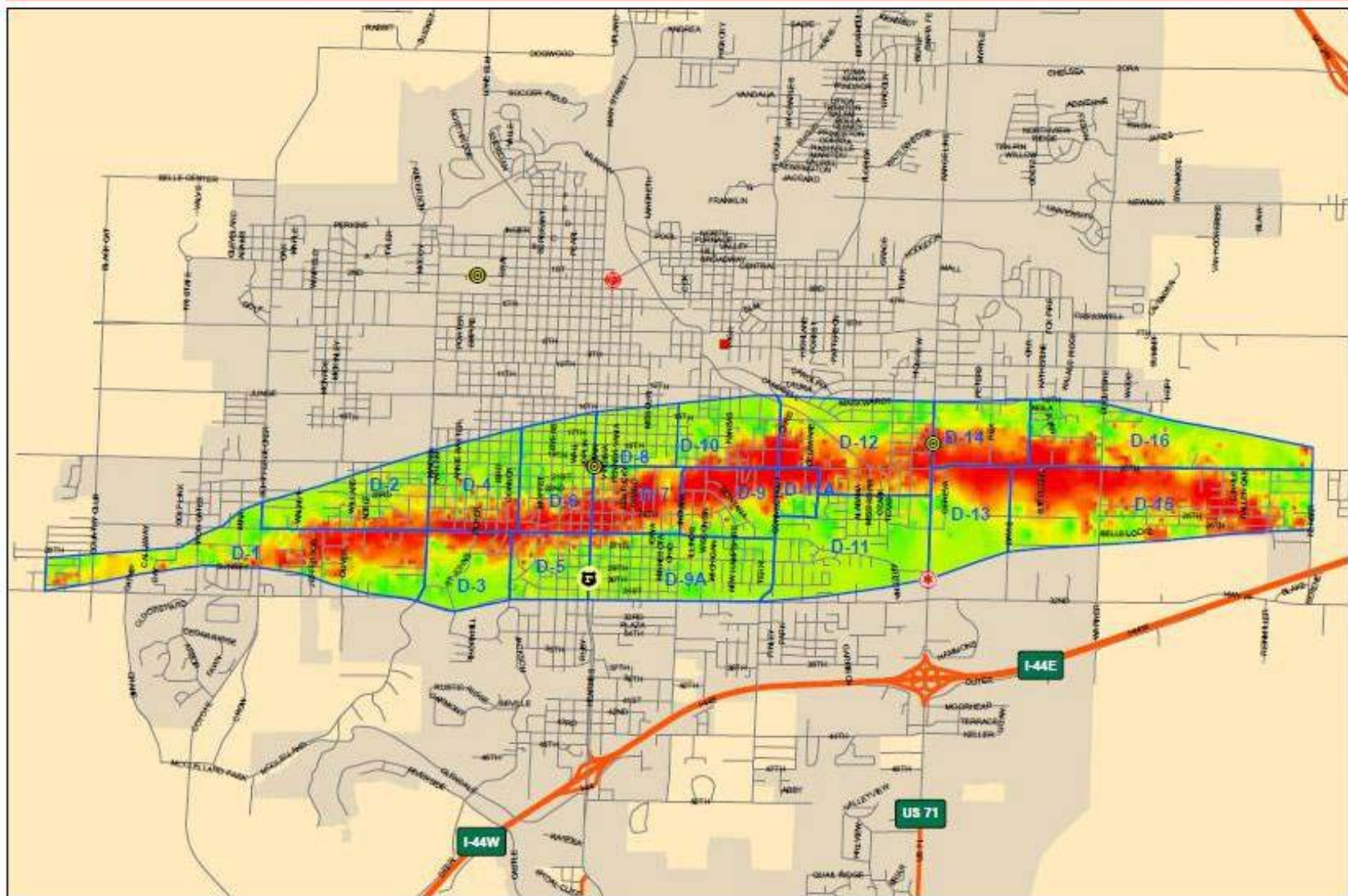
RED RIVER AT EAST GRAND FORKS 839 Ft



Red River at E Grand Forks
P = 47.51 (27 Mar 09)
F = 28
C = 52.0 (31 Mar-3 Apr 09)
R = 54.35 (22 Apr 97)

↑ Rising

JOPLIN MISSOURI ESTIMATED STRUCTURE DAMAGE - 1 JUNE 2011



Legend

COMMAND POST OPERATION

- EMS
- Fire
- PW
- Police
- RFD
- TORNADO DIVISION
- CITY BOUNDARY

Structure Damage

- Catastrophic Damage
- Moderate Damage

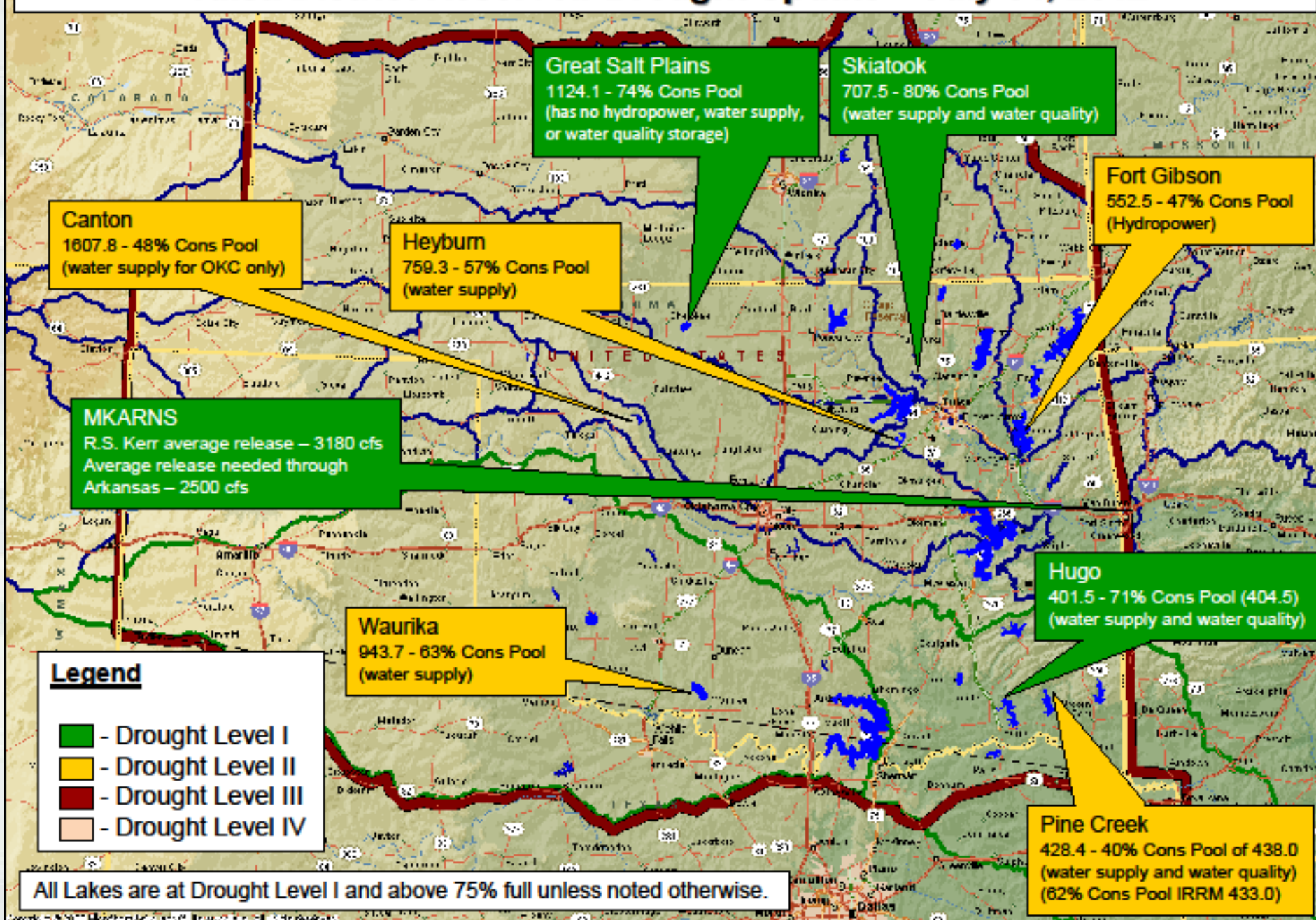
Location Map

DISCLAIMER: While the Joplin Police and Fire Departments, in cooperation with the Joplin City of Engineers, have made every effort to ensure the accuracy of this map, the Joplin Police and Fire Departments do not warrant the accuracy, completeness or reliability of the information contained herein. The Joplin Police and Fire Departments are not responsible for any damage or loss resulting from the use of this map. The Joplin Police and Fire Departments are not responsible for any damage or loss resulting from the use of this map. The Joplin Police and Fire Departments are not responsible for any damage or loss resulting from the use of this map.



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Tulsa District Reservoir Drought Update – July 31, 2012



Hurricane Isaac

22 Million for ESF#3

**\$200,000.00 GIS Emergency
Support Function (ESF) #3
Support**



Mission Details

[Return](#)

Mission Information

Originator Name: Shantelle Dunn

Originator Position: Parish Plaquemines

Mission Number: 94-113551848

Mission Lead: Disaster Recovery- JFO

Mission Status: At Branch Manager

Per Guy Laigast, Plaquemines Parish Government

Detailed Description of Request:

Structural Assessment Team - requesting Corps of Engineers Structural Safety Assessment Team for Plaquemines to assess structural integrity of public (PA) and residential (IA) property. Approximate number or structures, to be determined.

This request is to occur for the entire Plaquemines Parish east bank and Jesuit Bend South on westbank.

Attachment:

Date/Time Required: 09/05/2012 12:00:00

Priority: High (6-12 hours)

Point of Contact Information

Name: Ken Dugas0

Agency: Plaquemines Parish Government

Phone Number: 504-912-597

Alternate Phone Number:

Email: ken_dugas@plaqueminesparish.com

Comments

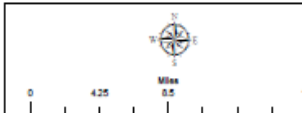
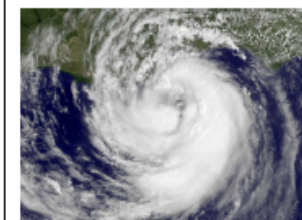
[\[Add Comments\]](#)



POD Name	POD Parish	POD Address	POD City	POD State	POD Zip Code	POD Manager Name	POD Manage Phone
Ascension Leamann Center	Ascension Parish	100 Clay ST	Donaldsonville	LA	70346	McCool	(318) 794-6181
Assumption Leblanc Payless Spur 70 - Plattenville	Assumption Parish	260 Hwy 70 Spur	Plattenville	La	70393	Peltier, Chad	(318) 794-6174
Jefferson Butch Duhe Playground	Jefferson Parish	1710 10th St.	Kenner	LA	70062	Boston, Richard	(318) 794-5978
Jefferson Helen Cox High School	Jefferson Parish	2200 Lapalco Blvd.	Harvey	LA	70058	Smith, Evan	(318) 794-5948
Jefferson Alario Center	Jefferson Parish	2000 Segnette Blvd.	Westwego	LA	70094	Boston	(318) 794-5915
Jefferson First Parish Court	Jefferson Parish	920 David Dr	Metairie	LA	70003	Landry, Nicholas	(318) 794-5975
Jefferson Harahan City Hall	Jefferson Parish	6437 Jefferson Hwy.	Harahan	LA	70123	SGT Dill Jousha	(337) 378-4583
Lafourche - 5 - Our Lady of Prompt Succor Church	Lafourche Parish	723 North Bayou Dr	Golden Meadow	LA		SGT Herkender Kyle	(601) 826-7900
Lafourche - 3 - Holy Savior Catholic Church	Lafourche Parish	612 Main St.	Lockport	LA		SSG Walker Robert	(504) 908-6898
Lafourche - 2 - Lafourche Ag Center	Lafourche Parish	101 Texas St.	Raceland	LA		SSG Joe Jeske	(318) 794-6138
Orleans Tad Gormley Stadium TYPE III	Orleans Parish	4400 Dauphine St	New Orleans	LA		SSG ALEN RILEY	(318) 623-9585
Orleans Milne Boy Home TYPE III	Orleans Parish	730 Vesparian Blvd.	Algiers	LA	70114	SSG CODY WARD	(318) 623-9585
Orleans Joe Brown Park TYPE III	Orleans Parish	5291 Read Blvd	New Orleans	LA		SSG JEREMY SPITLER	(318) 623-9585
Plaquemines NSA JRB	Plaquemines Parish	400 Russell Ave, Bldg 31 Poydras Junction Hwy 46/Hwy 39	Belle Chasse	LA	70037	Kenneth Holifield	(504) 610-6761
St. Bernard Poydras POD	St. Bernard Parish	46/Hwy 39	St. Bernard	LA	70082	Ronald Gaspard	(504) 913-0192
St. Bernard Chalmette Pod	St. Bernard Parish	8333 W Judge Perez Dr.	Chalmette	LA	70043	Ronald Gaspard	(504) 913-0192
St. James Eastbank 4 - Scared Heart Church	St. James Parish	615 East Main Street	Gramercy	La	70052	SGT Johnson Trenton	(318) 332-8515
St John The Baptist - St John-01	St. John The Baptist Parish	400 Ory Dr.	LaPlace	LA	70068	SSG Marquez	(337) 501-3987
Terrebonne Montegut Fire Department	Terrebonne Parish	346 Civic Center Blvd	Houma	LA	70360	Jessie Leblanc	(318) 794-6120
Terrebonne Grand Caillou Fire Station	Terrebonne Parish	346 Civic Center Blvd	Houma	LA	70360	Joe Jeske	(318) 794-6138
Terrebonne Houma Civic Center	Terrebonne Parish	346 Civic Center Blvd	Houma	LA	70360	Shawn Gaudet	
Terrebonne Ward 7 Community Center	Terrebonne Parish	346 Civic Center Blvd	Houma	LA	70360	Robert Leblanc	(318) 794-6232
Terrebonne - Dularge Fire Station	Terrebonne Parish	346 Civic Center Blvd	Houma	LA	70360		



@
1600 HRS

[illegible][illegible]Mississippi Valley Division—MVM
Emergency Management
Hurricane Isaac - 29 Aug 2012



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GIS Key Execution Elements During Disaster

- ☐ **Decision Support – We have this and need to do that.**
- ☐ **Be in the area of operations.**
- ☐ **Attend the State EOC Meetings.**
- ☐ **Attend the IMAT or ISB Meetings.**
- ☐ **Link up with the ESF#3 Team or Assistant Team Leader.**
- ☐ **Simpler is better.**



Questions



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