

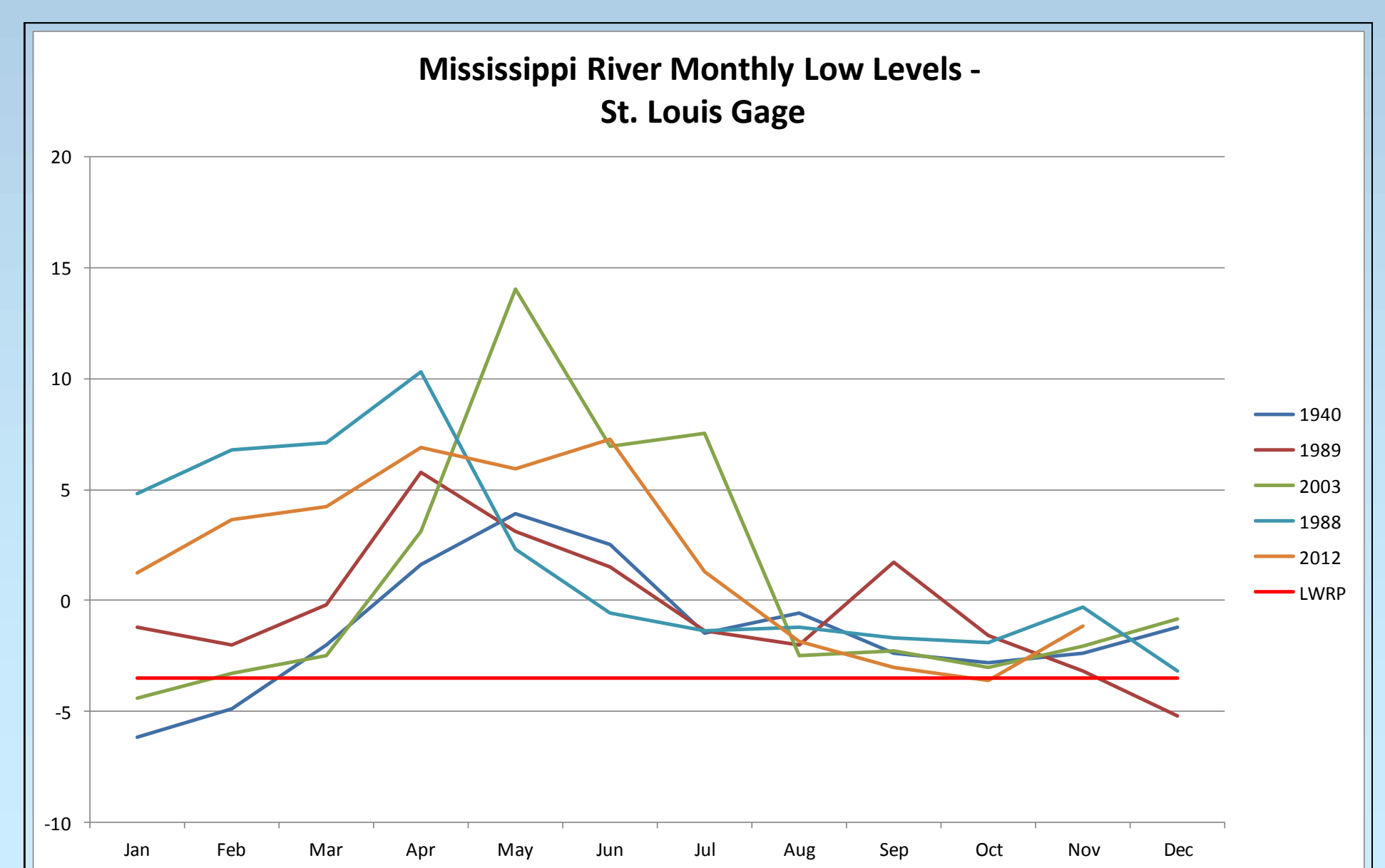
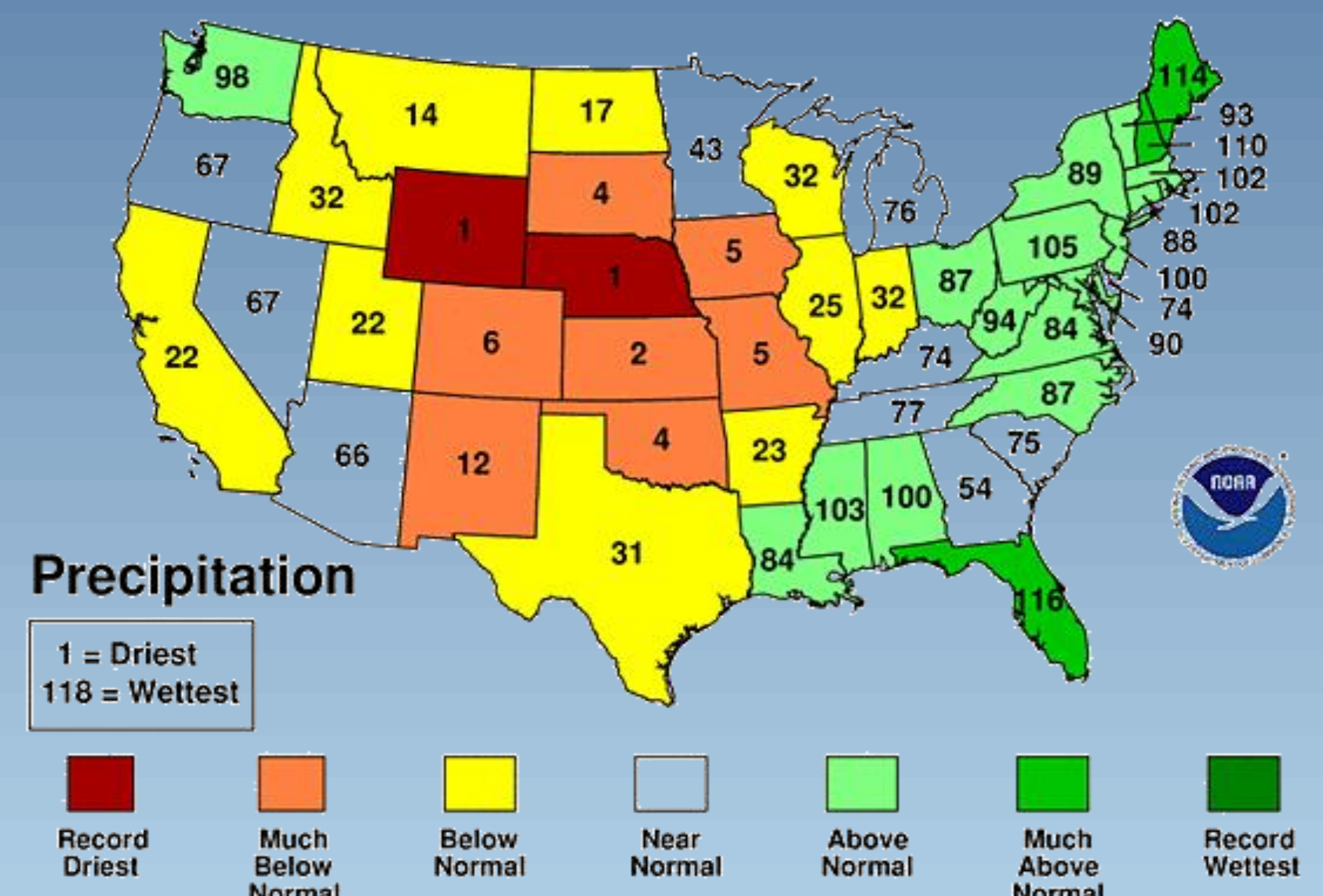
**US Army Corps
of Engineers®**
St. Louis District

2012 Low-Water Conditions Along the Middle Mississippi River

CONDITIONS LEADING TO DROUGHT

- 3-month rainfall over the middle Mississippi River valley was 8 to 12 inches below normal
- Warmer than normal temperatures
- Exceptional to severe drought conditions over the Missouri, Mississippi & Ohio River Valleys
- 28-day average streamflow compared to historical streamflow much below normal
- Predictions for drought outlook are persistent for several months
- Normally, low water occurs in the fall, so there is potential for several more months of low water conditions

May-October 2012 Statewide Ranks National Climatic Data Center/NESDIS/NOAA



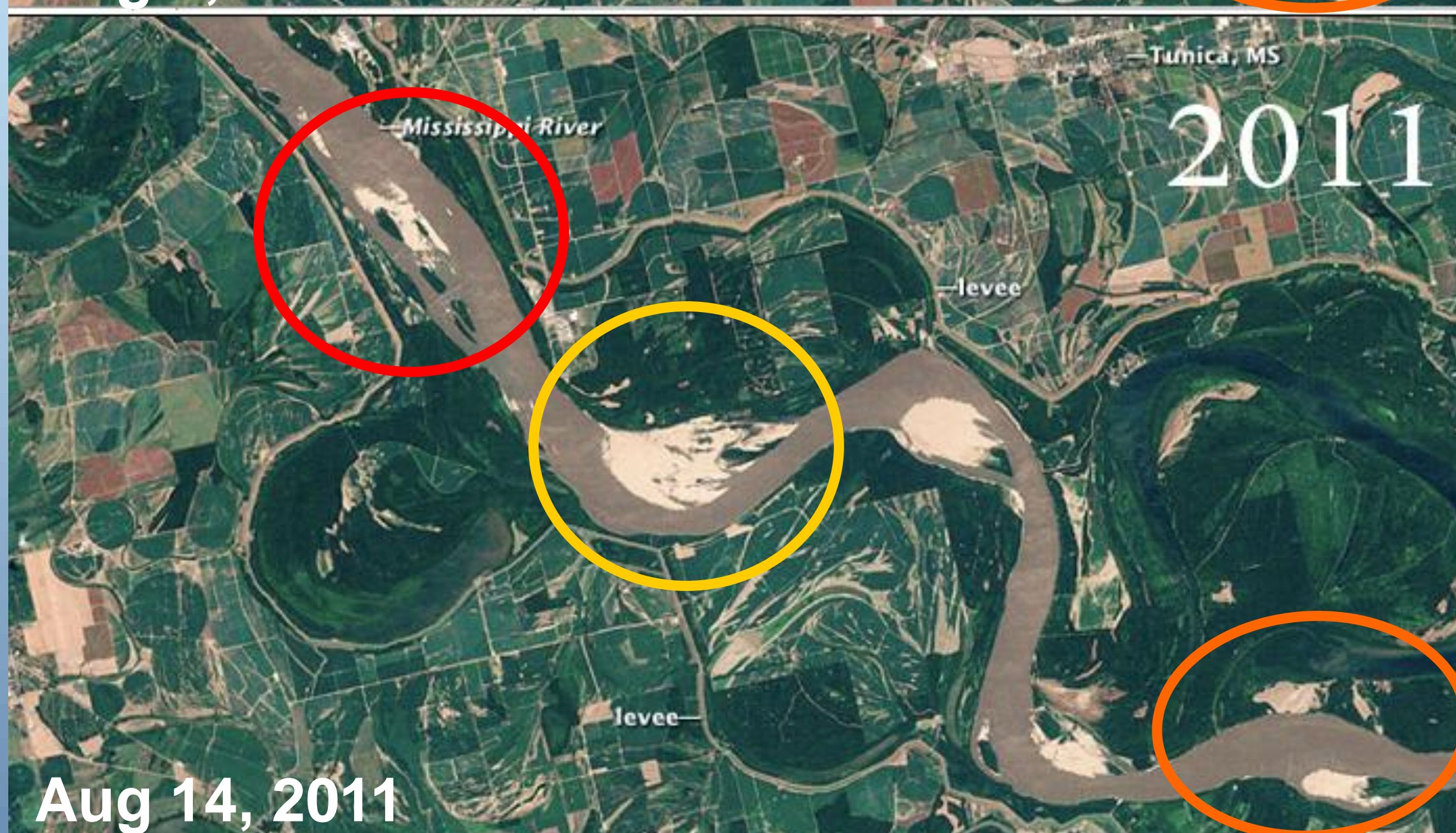
Low Water Records for Mississippi River at St. Louis Gage

- (1) -6.10 ft on 01/16/1940
- (2) -5.70 ft on 01/26/1963
- (3) -5.60 ft on 01/01/1964
- (4) -5.32 ft on 12/26/1989
- (5) -5.00 ft on 12/12/1937
- (6) -4.60 ft on 12/29/1933
- (7) -4.50 ft on 01/16/2003
- (8) -3.80 ft on 01/01/1990
- (9) -3.62 ft on 10/10/2012
- (10) -3.53 ft on 12/08/2005
- (11) -3.20 ft on 12/18/1988

LWRP = Low Water Reference Plane: a hydraulic reference based on a stage-duration profile



Aug 8, 2012

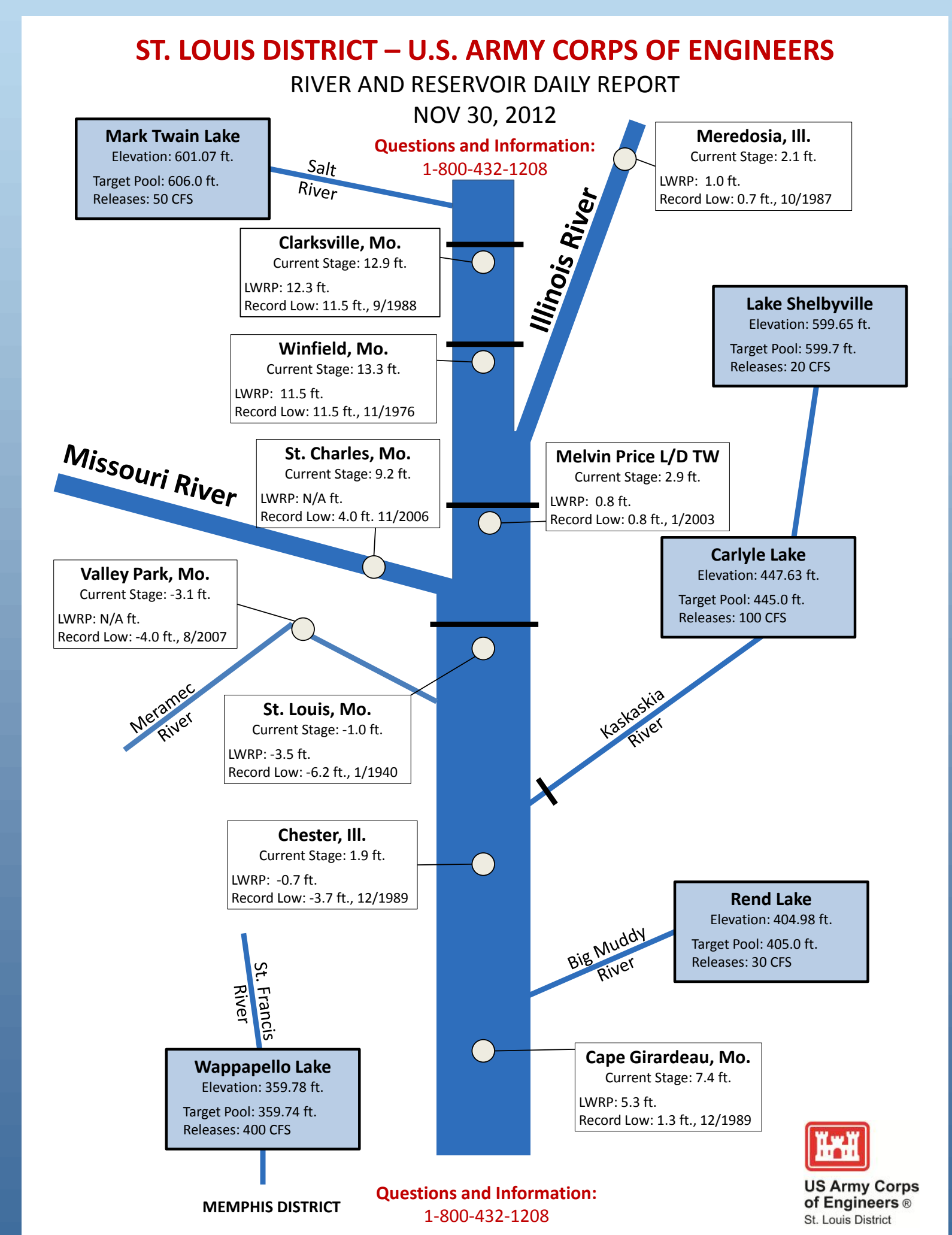


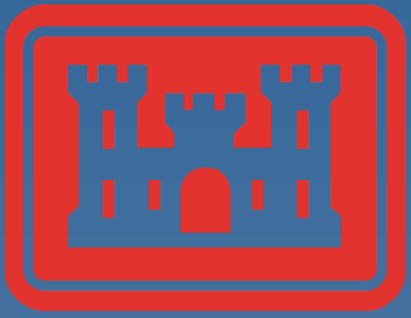
Aug 14, 2011

Image Comparison Between August 2011 and August 2012 Lower Mississippi River

Information Resources:
<http://mvs-wc.mvs.usace.army.mil/>
<http://www.ncdc.noaa.gov/>
<http://earthobservatory.nasa.gov/>

RIVER REPORT





**US Army Corps
of Engineers®**

St. Louis District

2012 Low-Water Impacts Along the Middle Mississippi River

The St. Louis District covers roughly 28,000 square miles of Illinois and Missouri at the crossroads of three major river systems: the Illinois, Mississippi and Missouri. The District supports water resource development and provides engineering and technical services to improve the safety, economy and quality of life of the region and nation.

NAVIGATION

- Between 50-60% of total U.S. corn and 30-45% of total U.S. soybean exports travel along the Mississippi River
- In 1988 almost 90% of St Louis flows came out of the Missouri River
- St Louis is the largest agricultural port in the nation
- Without sufficient water in St. Louis Harbor, the entire upper Midwest could be cut off from the Port of New Orleans and the rest of the river system
- 1988 drought was estimated to have cost navigation industry approximately \$1 billion



Dredge Potter

WHAT'S NEXT?

- Critical reach during 2012 drought conditions is the Mississippi River between St. Louis and Cairo, IL
- U.S. Army Corps of Engineers continues to dredge the river 24 hours per day to maintain the channel
- Mid-December activities include Lock 27 main chamber closure for repairs (through Mar 2013)
- Rock pinnacle blasting and removal is currently scheduled for February-March 2013
- Maintain constant communication with U.S. Coast Guard and stakeholders to inform them of channel conditions
- Provide a safe and reliable river channel as conditions allow
- Take advantage of low water conditions to make long-term channel improvements
- 2013 forecast indicates continued water challenges (see map at right)



MULTIPLE RIVER USES

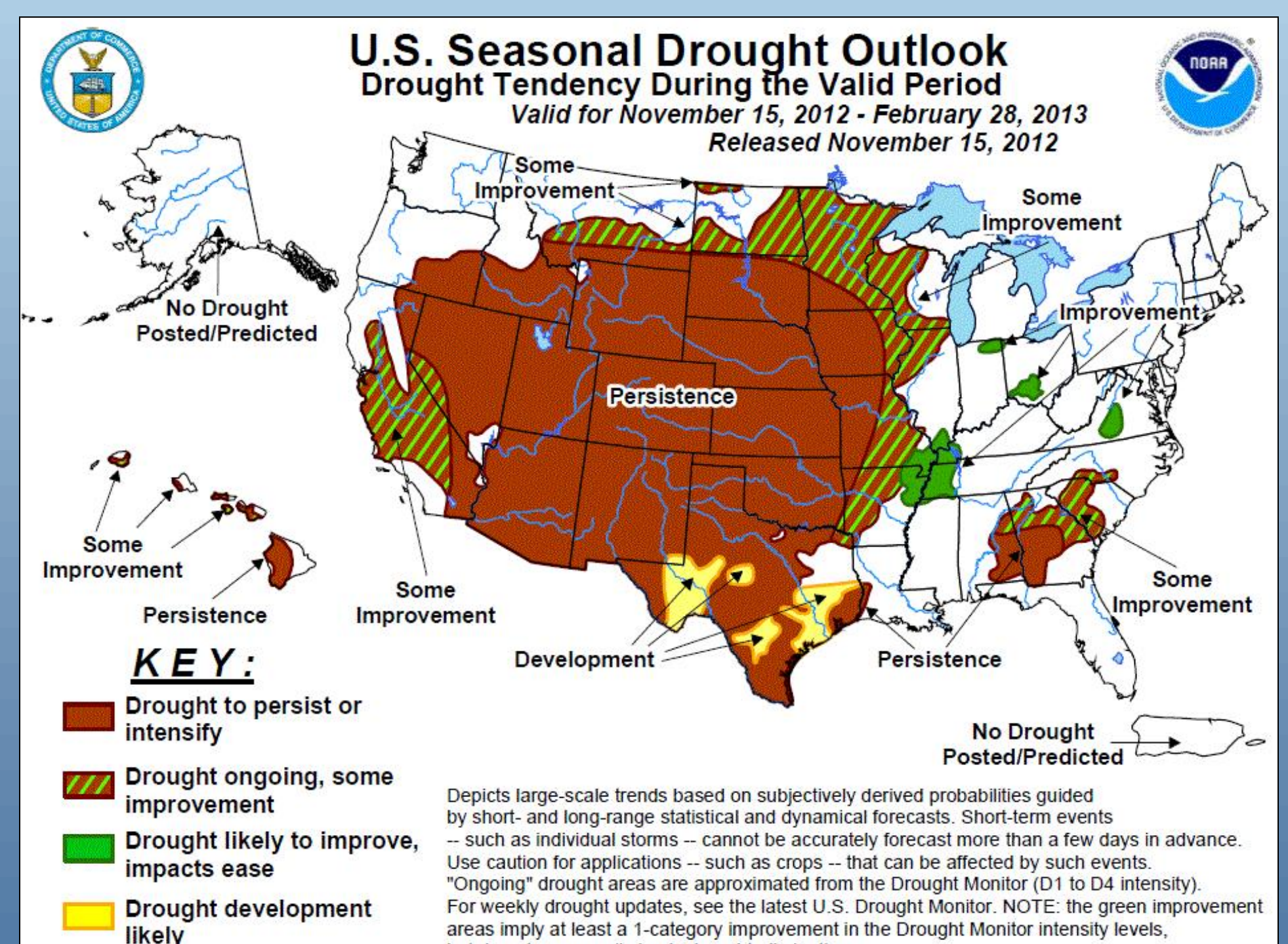
Mississippi River waters are used for a multitude of river interests:

- Navigation
- Water supply
- Erosion control
- Environmental habitat
- Recreation

The Corps must consider all of these uses when making water resources decisions.

Mississippi River channel surveys are performed daily to monitor the river bottom for problem areas.

The River Training Structure program has provided more efficient channel navigation and required less dredging than during similar conditions in 1988/1989.



For More Information:

<http://www.mvs.usace.army.mil/navigation1/surveys.html>
<http://www.mvs-wc.mvs.usace.army.mil>