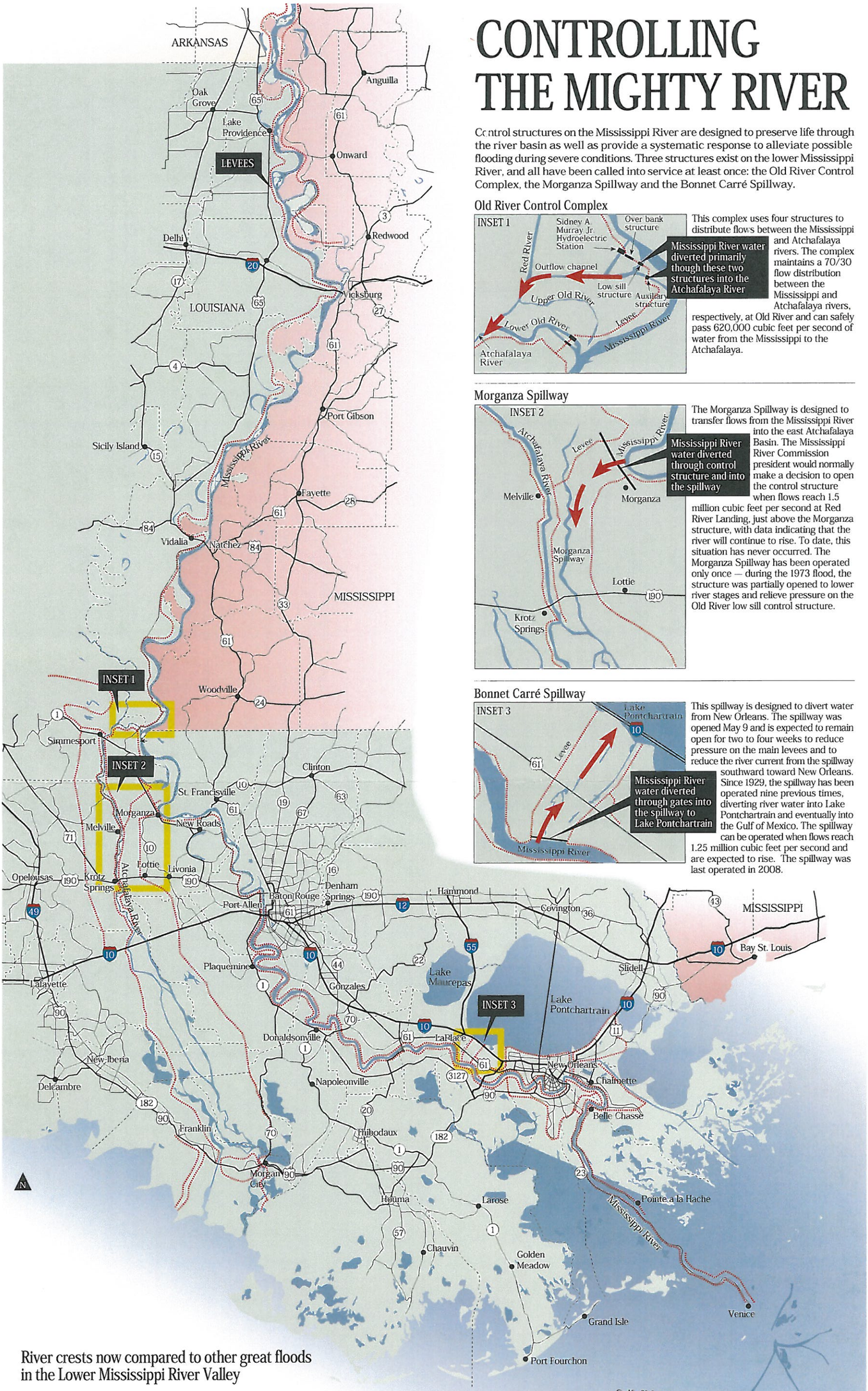
CONTROLLING THE MIGHTY RIVER

Control structures on the Mississippi River are designed to preserve life through the river basin as well as provide a systematic response to alleviate possible flooding during severe conditions. Three structures exist on the lower Mississippi River, and all have been called into service at least once: the Old River Control Complex, the Morganza Spillway and the Bonnet Carré Spillway.



Old River Control Complex

This complex uses four structures to distribute flows between the Mississippi and Atchafalaya rivers. The complex maintains a 70/30 flow distribution between the Mississippi and Atchafalaya rivers, respectively, at Old River and can safely pass 620,000 cubic feet per second of water from the Mississippi to the Atchafalaya.

Morganza Spillway

The Morganza Spillway is designed to transfer flows from the Mississippi River into the east Atchafalaya Basin. The Mississippi River Commission president would normally make a decision to open the control structure when flows reach 1.5 million cubic feet per second at Red River Landing, just above the Morganza structure, with data indicating that the river will continue to rise. To date, this situation has never occurred. The Morganza Spillway has been operated only once — during the 1973 flood, the structure was partially opened to lower river stages and relieve pressure on the Old River low sill control structure.

Bonnet Carré Spillway

This spillway is designed to divert water from New Orleans. The spillway was opened May 9 and is expected to remain open for two to four weeks to reduce pressure on the main levees and to reduce the river current from the spillway southward toward New Orleans. Since 1929, the spillway has been operated nine previous times, diverting river water into Lake Pontchartrain and eventually into the Gulf of Mexico. The spillway can be operated when flows reach 1.25 million cubic feet per second and are expected to rise. The spillway was last operated in 2008.

River crests now compared to other great floods in the Lower Mississippi River Valley

STATION	1927	1937	1973	1997	2008	2011
Cairo	56.40	59.51	55.67	56.20	53.83	61.72
Memphis	45.80	48.70	40.48	42.00	38.00	48.00*
Vicksburg	56.20**	53.20	51.60	49.10	51.00	57.50*
Red River Landing	60.90	58.99	58.20	62.30	60.69	65.50*
Baton Rouge	47.28	44.50	41.60	43.70	43.09	47.50*
New Orleans	21.00	19.10	18.40	16.90	16.88	19.50*

*Forecast crest
**Would have been 62.2 if levees had held

Sources: Mississippi River Commission, U.S. Army Corp. of Engineers, Louisiana Department of Transportation and Development

Advocate graphic