

mento, Cal., on the Sacramento River; at Carters ranch, Cal., on the Kaweah River; at Piedra, Cal., on the Kings River.

In the California Valley the generally heavy rainfalls were beneficial to crops of grain, while the only damage of consequence was suffered by the Southern Pacific Company by the suspension of traffic and the washing away of tracks and bridges. An estimate of the probable damages sustained, however, is not as yet available.

Rivers of Texas.—Flood stages occurred in the rivers of Texas during the early part of May as follows: Sabine River, at Logansport, La.; Trinity River, Long Lake, Tex.; Liberty, Tex.; Fort Worth, Tex.; Dallas, Tex.; Brazos River, at Washington, Tex.; Rosenberg, Tex.; Hempstead, Tex.; Nueces River, at Cotulla, Tex.; Neches River, at Rockland, Tex.; Guadalupe River, at Victoria, Tex. A report of the floods of Texas during the latter part of April and the first part of May will be found in the April, 1915, REVIEW.

Freshet stages occurred in the rivers of Iowa, Illinois, and Indiana, attended with some slight damages to crops in the lowlands due to the overflowing of small streams. In the vicinity of Springfield, Ill., considerable damage and inconvenience was caused by the overflowing of the Sangamon River, due to unusually excessive rainfall.

The Penobscot River, at West Enfield, Me., reached flood stage on May 2 and 3, with a crest of 12.6 feet on the 2d.

Recapitulation of flood loss.—The greatest damages caused by the floods of May seem to have been sustained in the watersheds of the Arkansas and Red Rivers. The estimated damages in these two river valleys alone exceeds \$2,000,000, while the losses elsewhere over the country, though somewhat more local in extent, will increase the foregoing figures. Since the crest in the Lower Missouri did not occur until the following month, the losses, if any, are not included in the above.

These heavy losses were, in the main, unpreventable, and were sustained largely by the farming, shipping, and transportation interests. The money value of property, mainly live stock, saved by the timely warnings of the Weather Bureau in these two river valleys alone, is conservatively estimated at \$825,000, while in the Tombigbee Valley the saving of live stock is estimated at \$48,000.

Hydrographs for typical points on several principal rivers are shown on Chart I. The stations selected for charting are Keokuk, St. Louis, Memphis, Vicksburg, and New Orleans, on the Mississippi; Cincinnati and Cairo, on the Ohio; Nashville, on the Cumberland; Johnsonville, on the Tennessee; Kansas City, on the Missouri; Little Rock, on the Arkansas; and Shreveport, on the Red.

MEAN LAKE LEVELS DURING MAY, 1915.

By UNITED STATES LAKE SURVEY.

[Dated: Detroit, Mich., June 5, 1915.]

The following data are reported in the "Notice to Mariners" of the above date:

Data.	Lakes.			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during May, 1915:				
Above mean sea level at New York.....	Feet. 601.65	Feet. 579.64	Feet. 571.69	Feet. 245.15
Above or below—				
Mean stage of April, 1915.....	+0.31	+0.16	+0.24	+0.11
Mean stage of May, 1914.....	-0.58	-0.68	-1.21	-1.80
Average stage for May, last 10 years...	-0.30	-1.07	-1.12	-1.76
Highest recorded May stage.....	-1.40	-3.88	-2.73	-3.80
Lowest recorded May stage.....	+0.83	+0.08	+0.33	+0.19
Probable change during June, 1915.....	+0.3	+0.3	+0.2	+0.1