U.S. DEPARTMENT OF THE INTERIOR U.S. GEOLOGICAL SURVEY In cooperation with the SCIENTIFIC INVESTIGATIONS MAP 3031 **≊USGS** HARRIS-GALVESTON SUBSIDENCE DISTRICT, Approximate water-level changes, Evangeline aquifer, 1990-2008-SHEET 9 OF 17 CITY OF HOUSTON, Kasmarek, M.C., and Houston, N.A., 2008, Water-level altitudes 2008 and water-level changes FORT BEND SUBSIDENCE DISTRICT, AND in the Chicot, Evangeline, and Jasper aquifers and compaction 1973-2007 in the Chicot and Evangeline aquifers, Houston-Galveston region, Texas LONE STAR GROUNDWATER CONSERVATION DISTRICT 95°15' 95°30' EXPLANATION TEXAS -20-Line of equal water-level rise-Intervals 20 and 40 feet Study area 🔨 95°45 WALKER COUNTY -20 ____ Line of equal water-level decline --Interval 20 feet 30°45' Line of zero water-level change 75 30°45 190 Boundary of study area WEST FORK LOCATION MAP Updip limit of Evangeline aquifer (Baker, 1979) HUNTSVILLE 30 Note: This change map was created by contouring the set of mapped point values computed 156 as the difference in water-level altitude at each point (well) for which a water-level-altitude measurement was made in 2008 and the water-level altitude at that point on a gridded surface LAKE of the 1990 water-level-altitude map (Kasmarek, 1997, sheet 2). Gridded-surface values for 1990 rather than actual measured values were used to LIVINGSTON YTV! 20 45 MONTGOMERY COUNT Lake 30 compute differences (mapped point values) because many of the wells measured in 1990 COL P) were no longer available for measurement in 2008. Thus using the gridded surface yielded 95 many more point values than would have been available using the subset of wells GRIMES COUNTY FM 1375 ACIN 150 measured in both 2008 and 1990. For the subset of wells measured in both 2008 and 1990, the mapped point values used were the differences in measured water levels between 2008 and 1990 30°30 Creek rather than the differences between 2008 measured values and 1990 gridded-surface values-although the 1990 measured and gridded values are equal for the majority of BRAIC 30°30 points and very close for most others. OSCOUNT

59

20 6-20

)-20

AKE

HOUSTON

140 40 SHELDON

RESERVOI

CHANNELVIEVO

22

40

HUMBLE

GALENA

PARK

100

VV.

LAKE CONROE

CONROE

FORK

45

ouston Pk

(Z)

WEST UNIVERSITY

610

180 HOUSTON

BELLAIRE

ALDINE

10

State

105

105

30°1

BRATOS

JUSTIN COL

S

6

29°45'

1774

WALLER COUNTY

1488

290

20

90

10

FORT BEND

COUNTY

-80

100

-120

О

59

787

105

94°45'

30°15

61

10

COUNTY

COUNTY

94°30'

29°45'

65

146

TRINITS

LIBERTY

CHAMBERS

RIVER

EM

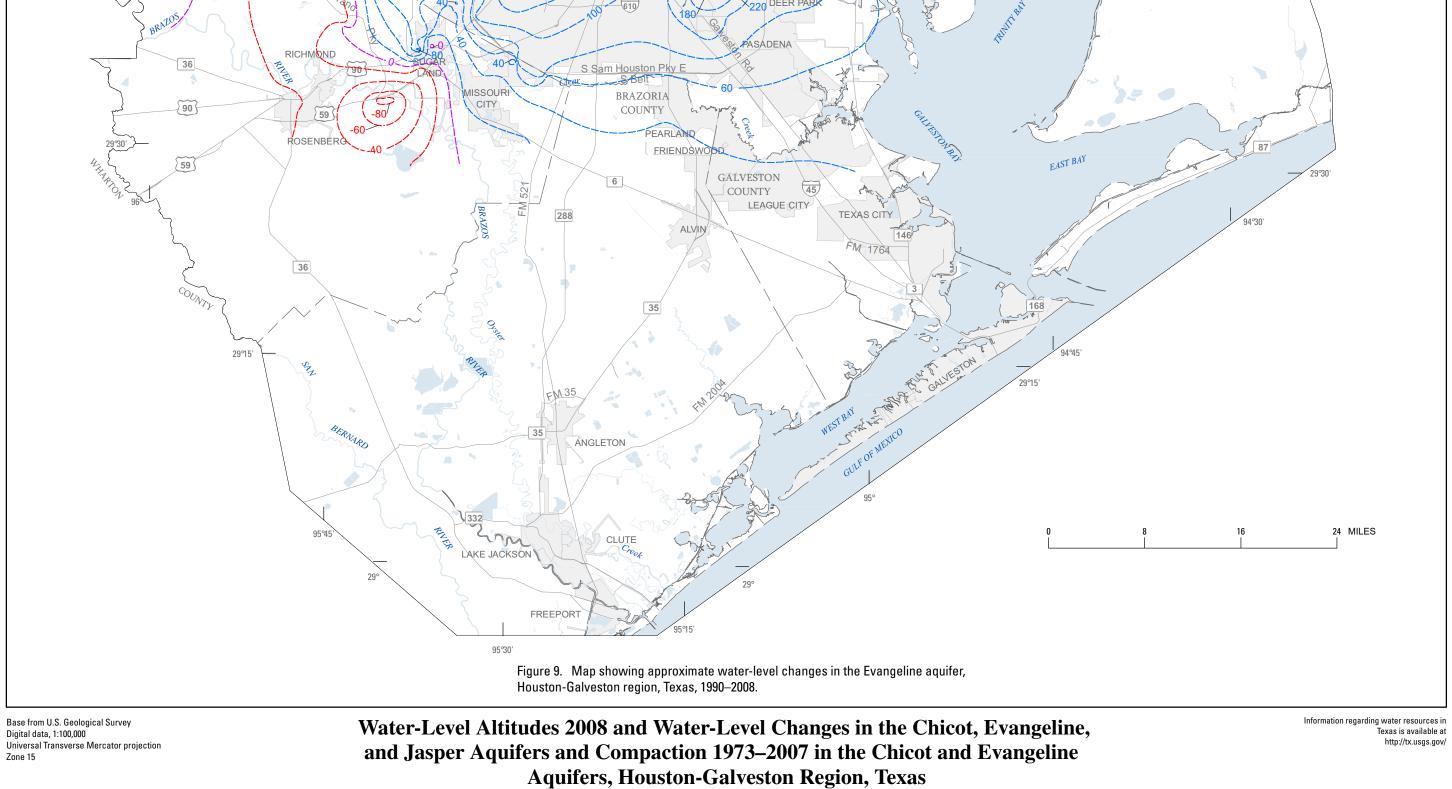
321

146

EM 1960

BAYTOWN

90



By Mark C. Kasmarek and Natalie A. Houston