



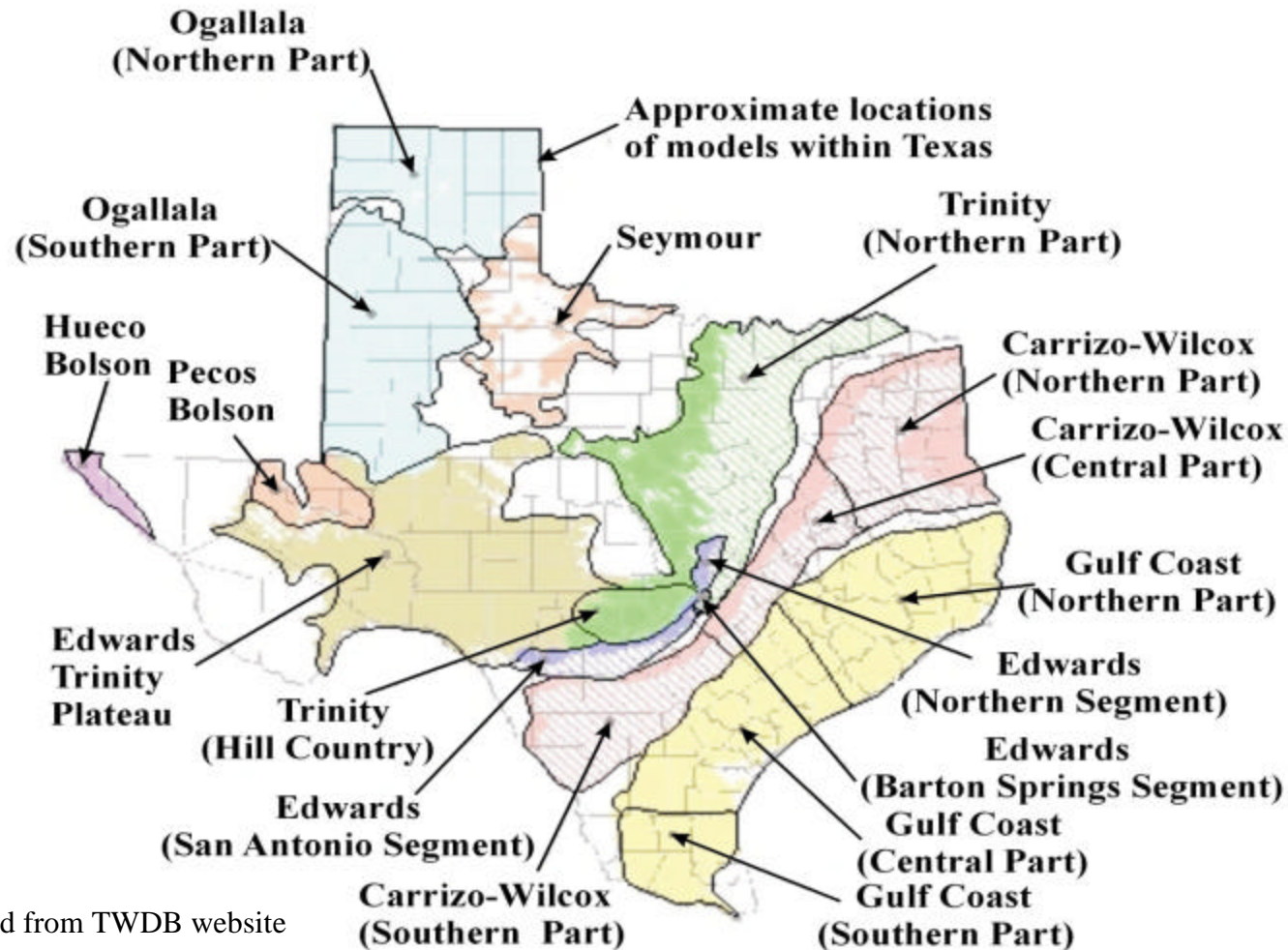
**Quality Scientific Analysis for the
Long Term**

Hydrogeology and Simulation of Ground-Water Flow and Land- Surface Subsidence in the Chicot, Evangeline, and Jasper Aquifers, Houston Area, Texas

Mark C. Kasmarek & Eric W. Strom

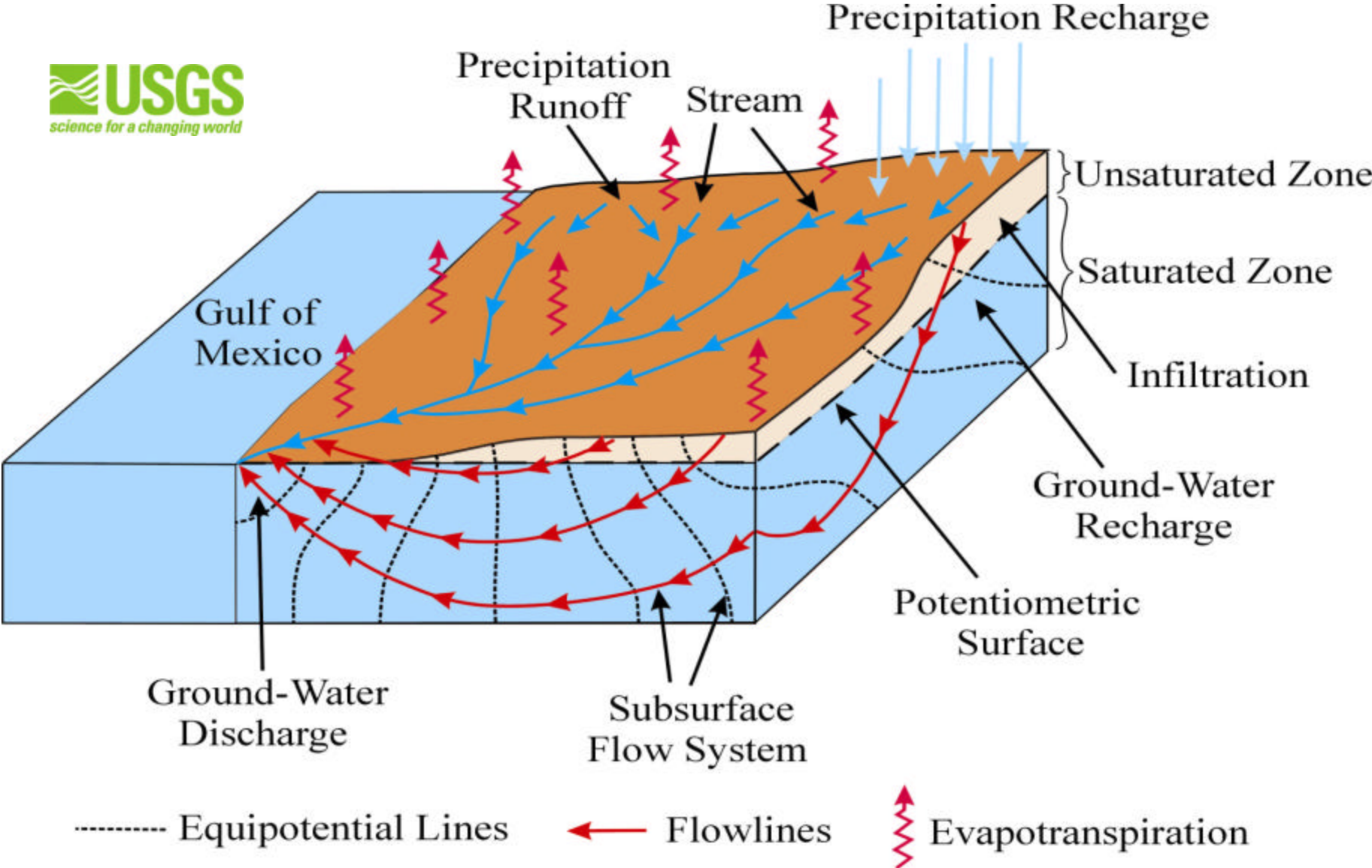
In Cooperation with: Texas Water
Development Board, Harris-
Galveston Coastal Subsidence
District, San Jacinto River Authority,
and the City of Houston

TWDB Ground-Water Availability Models in Texas

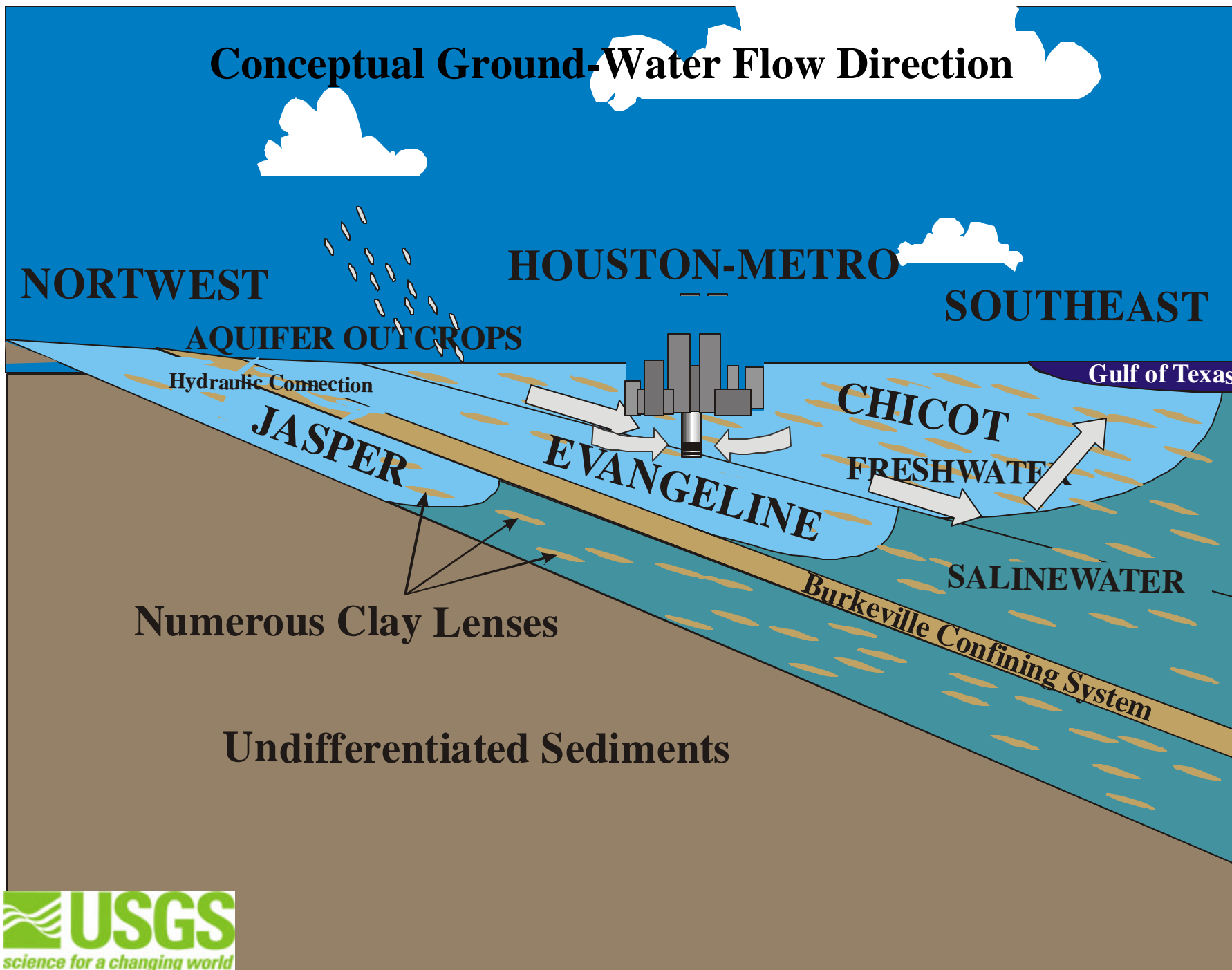


Modified from TWDB website

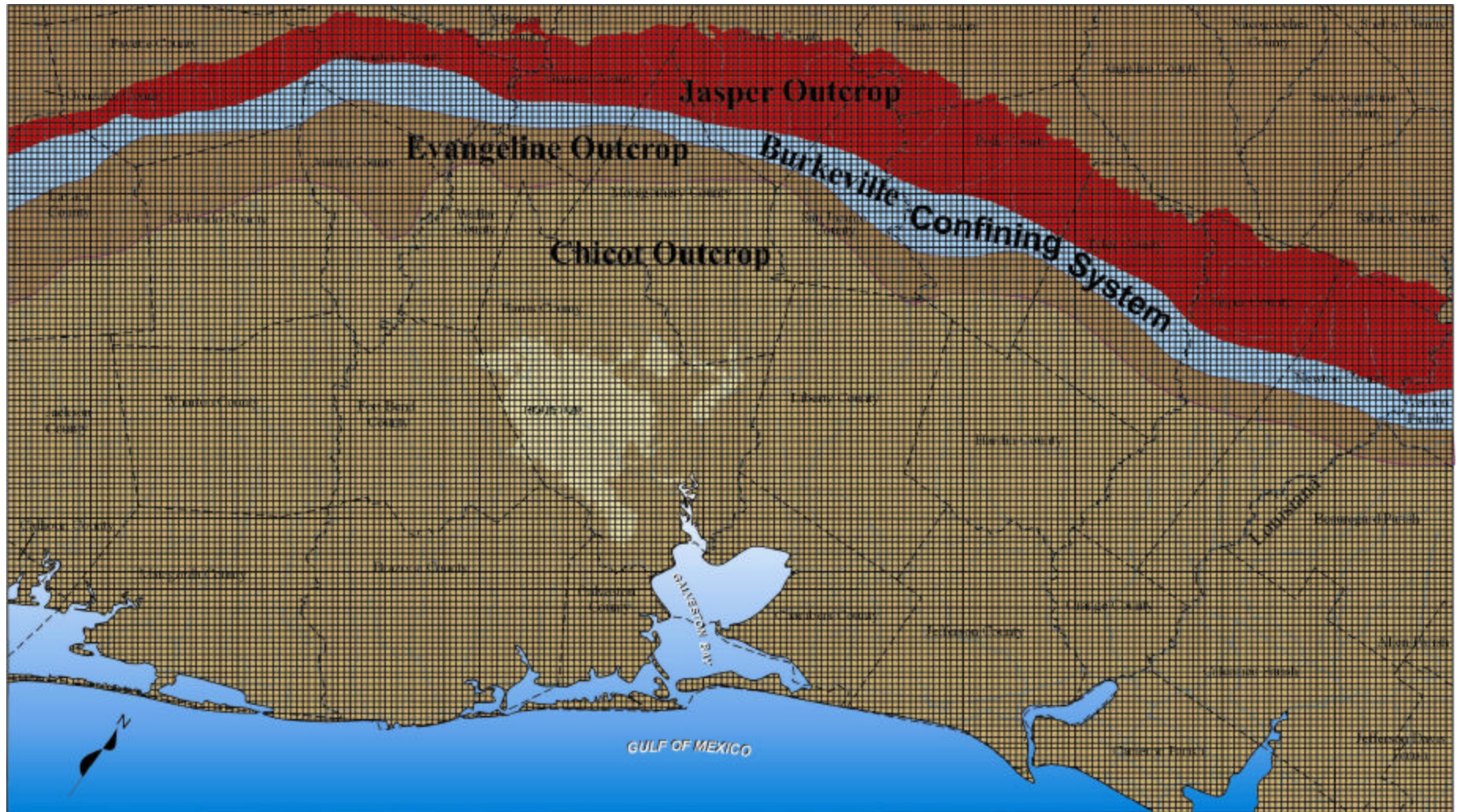
Conceptual Chicot Aquifer Flow System



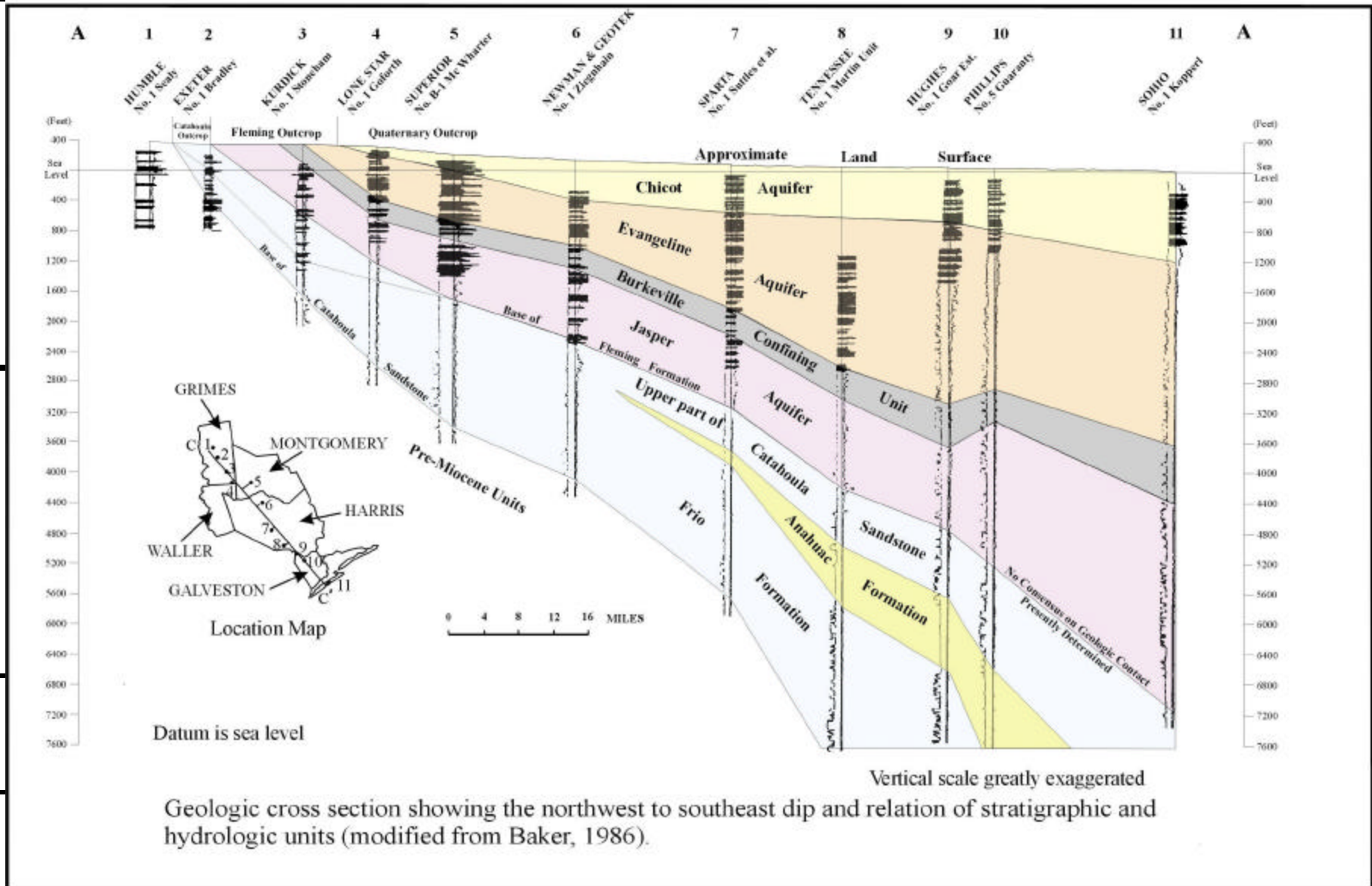
Conceptual Ground-Water Flow Direction

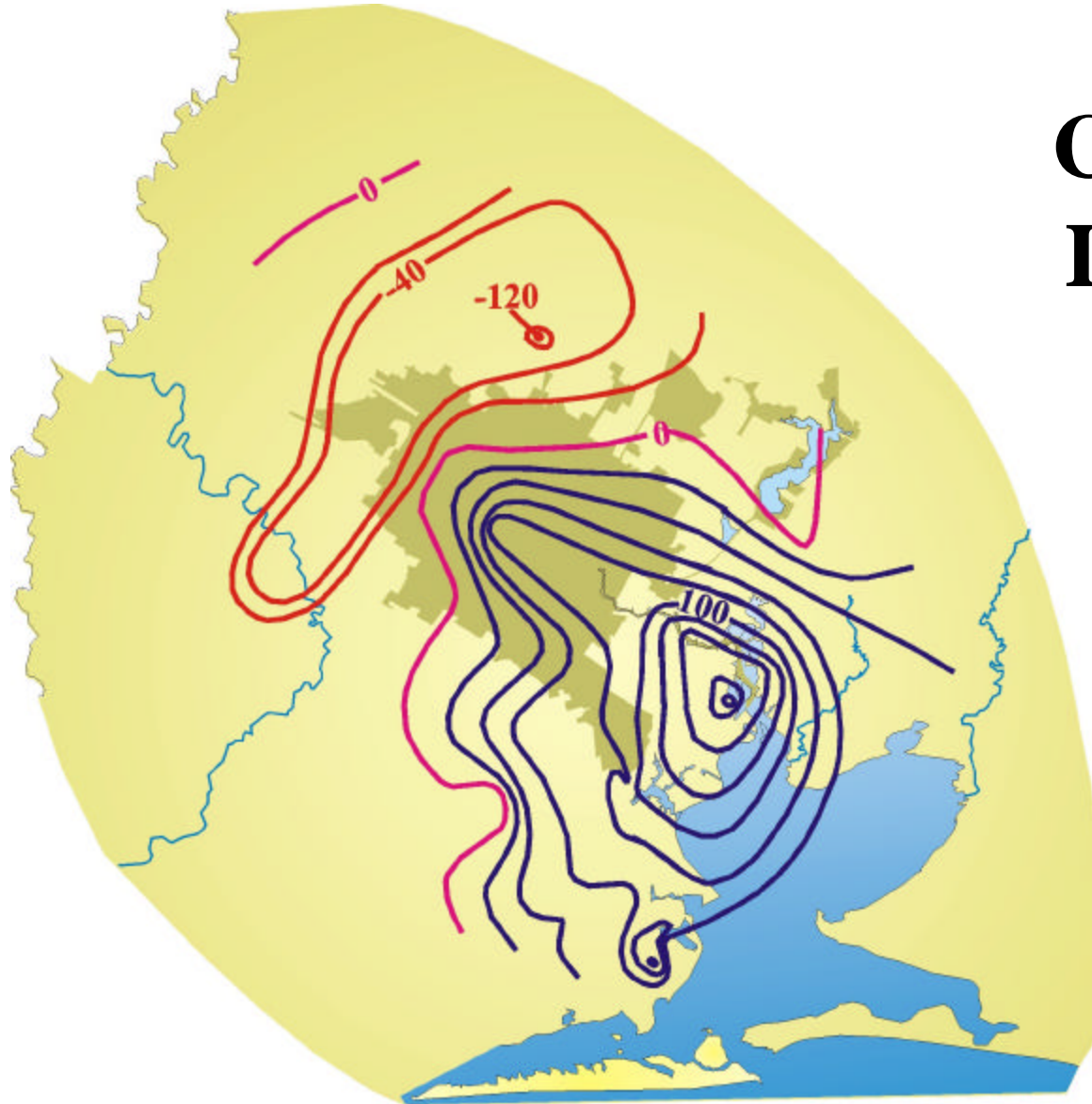


Upper Gulf Coast GAM Grid



Stratigraphic and Hydrologic Sections

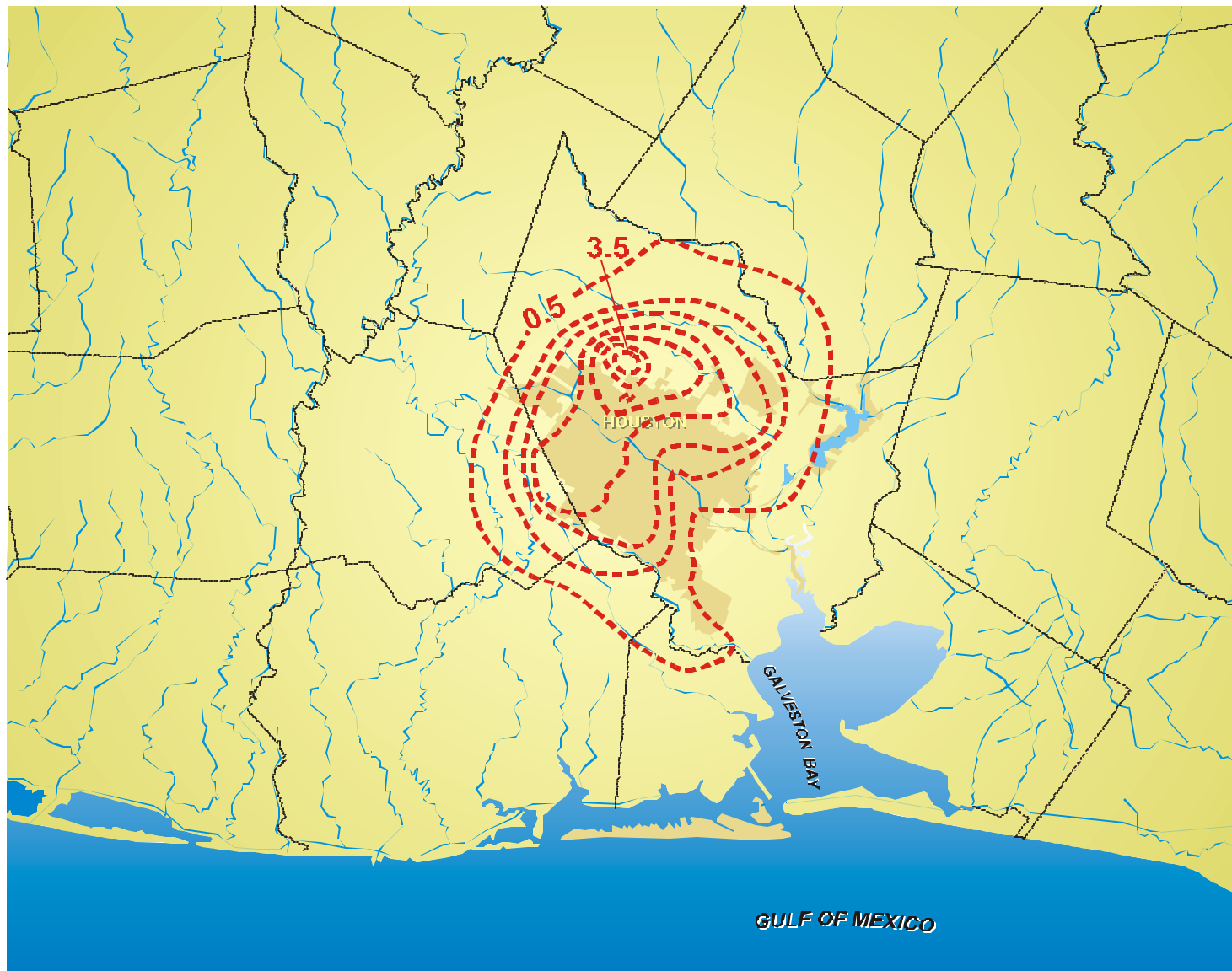




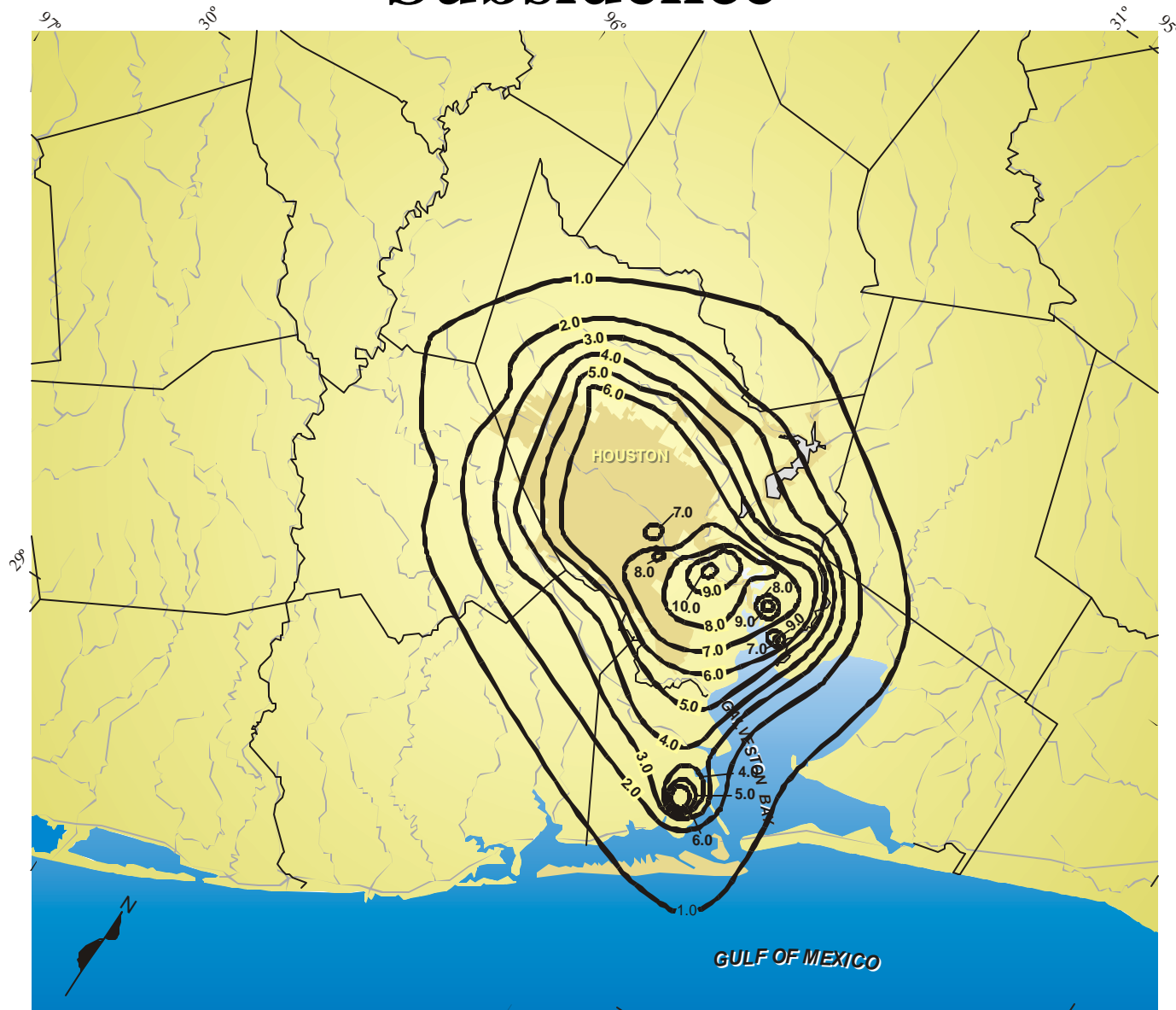
Chicot Water- Level Change Map

1977-1999

1978-1995 Measured Land-Surface Subsidence



1906-1995 Measured Land-Surface Subsidence



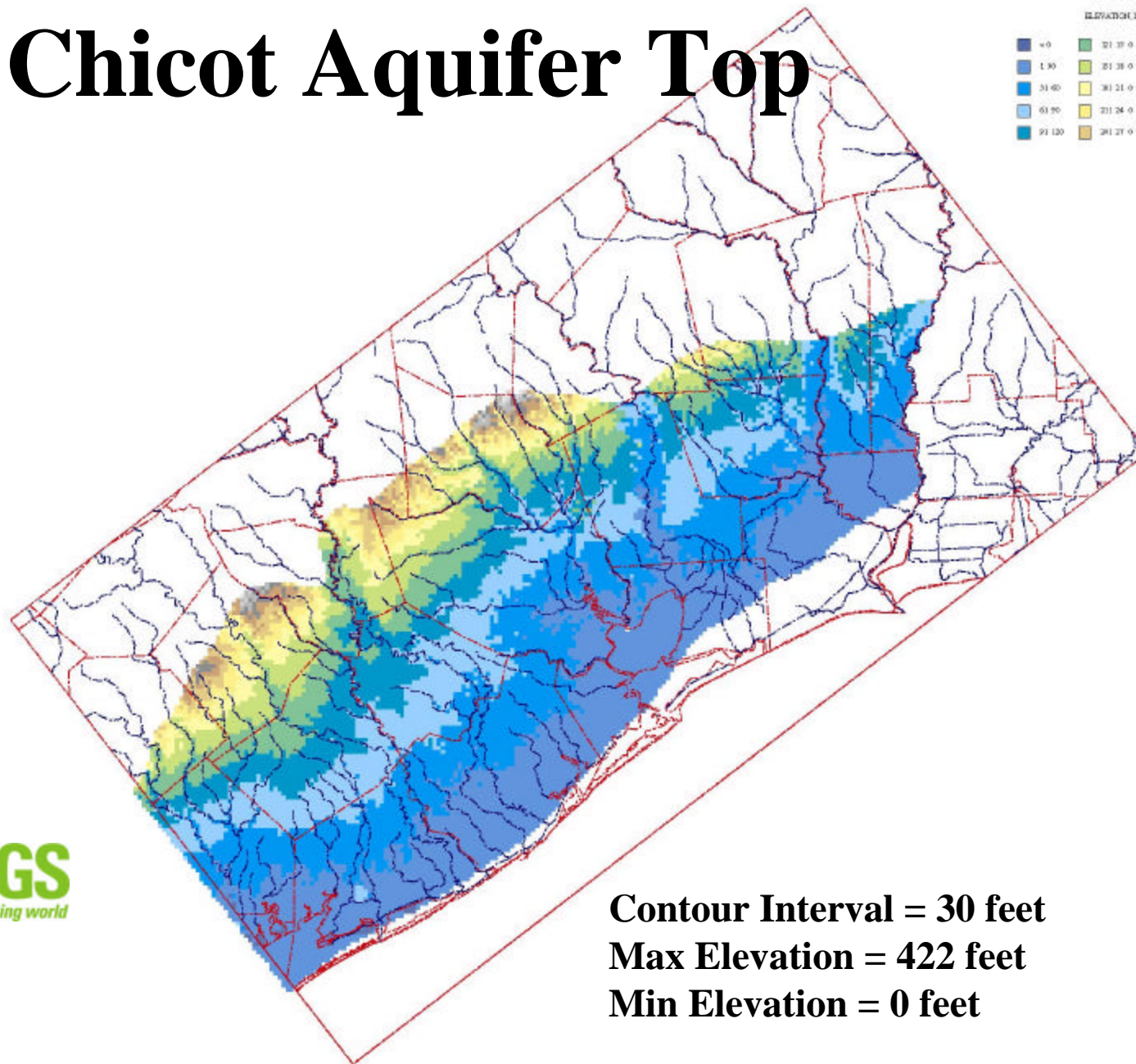
CHTOPGWK1

GAM Chicot Aquifer Top

EXPLANATION

ELEVATION (FEET)

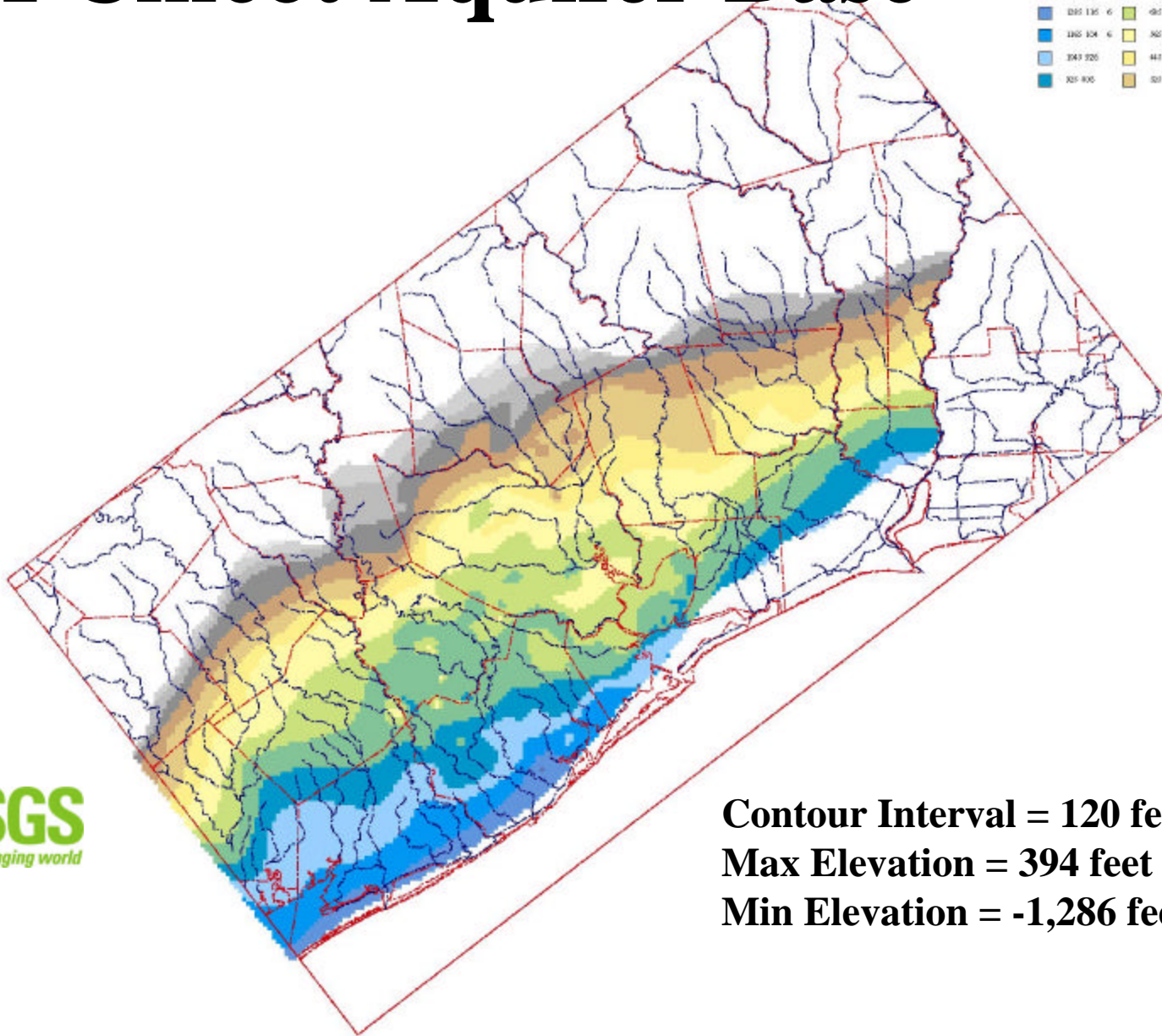
0	2130	2730
30	2160	3030
60	2190	3330
90	2220	3630
120	2250	3930
150	2280	4230



Contour Interval = 30 feet
Max Elevation = 422 feet
Min Elevation = 0 feet

CHBASEGWK1

AM Chicot Aquifer Base

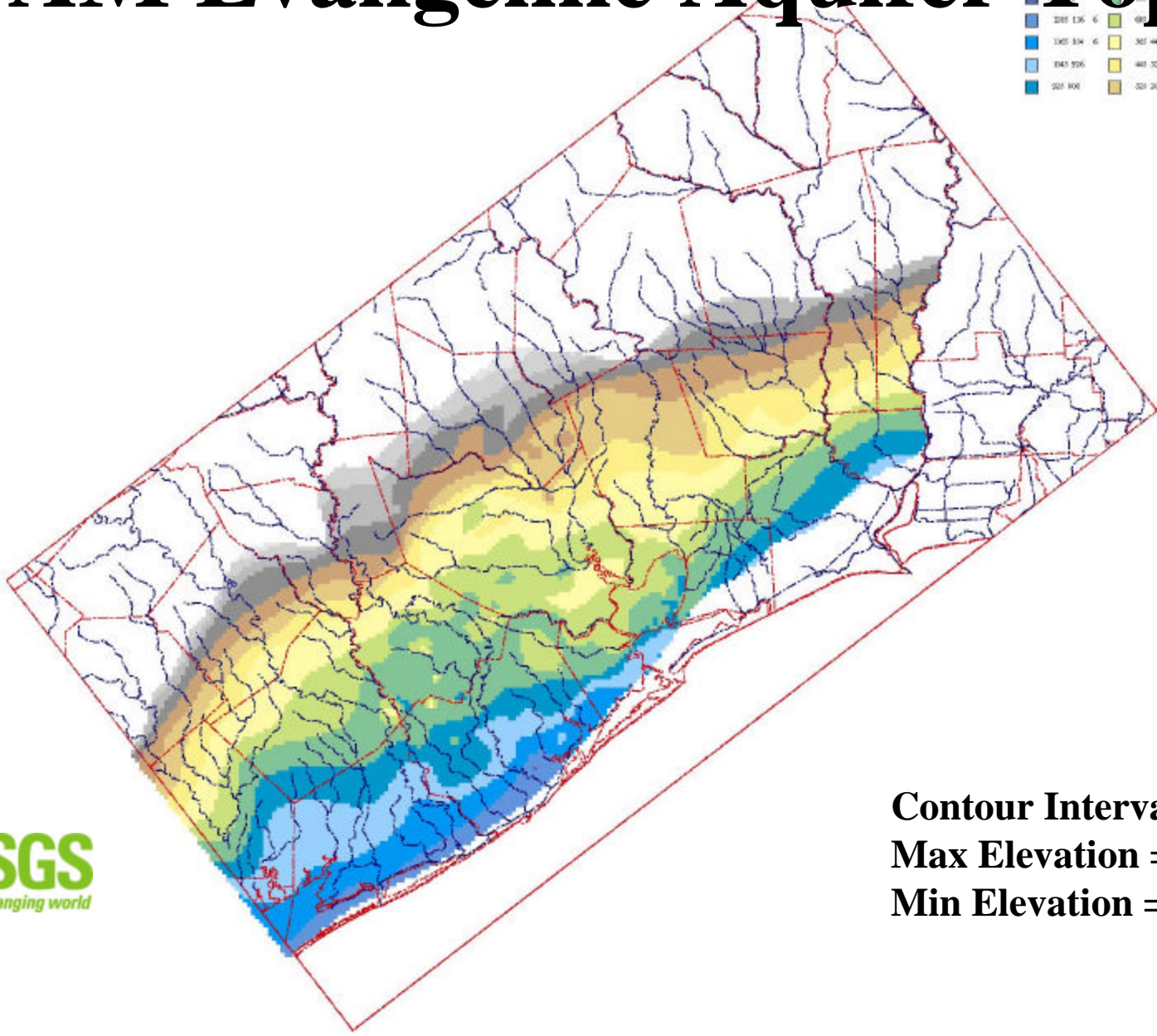


Contour Interval = 120 feet
Max Elevation = 394 feet
Min Elevation = -1,286 feet

GAM Evangeline Aquifer Top

CHBASEGWK1

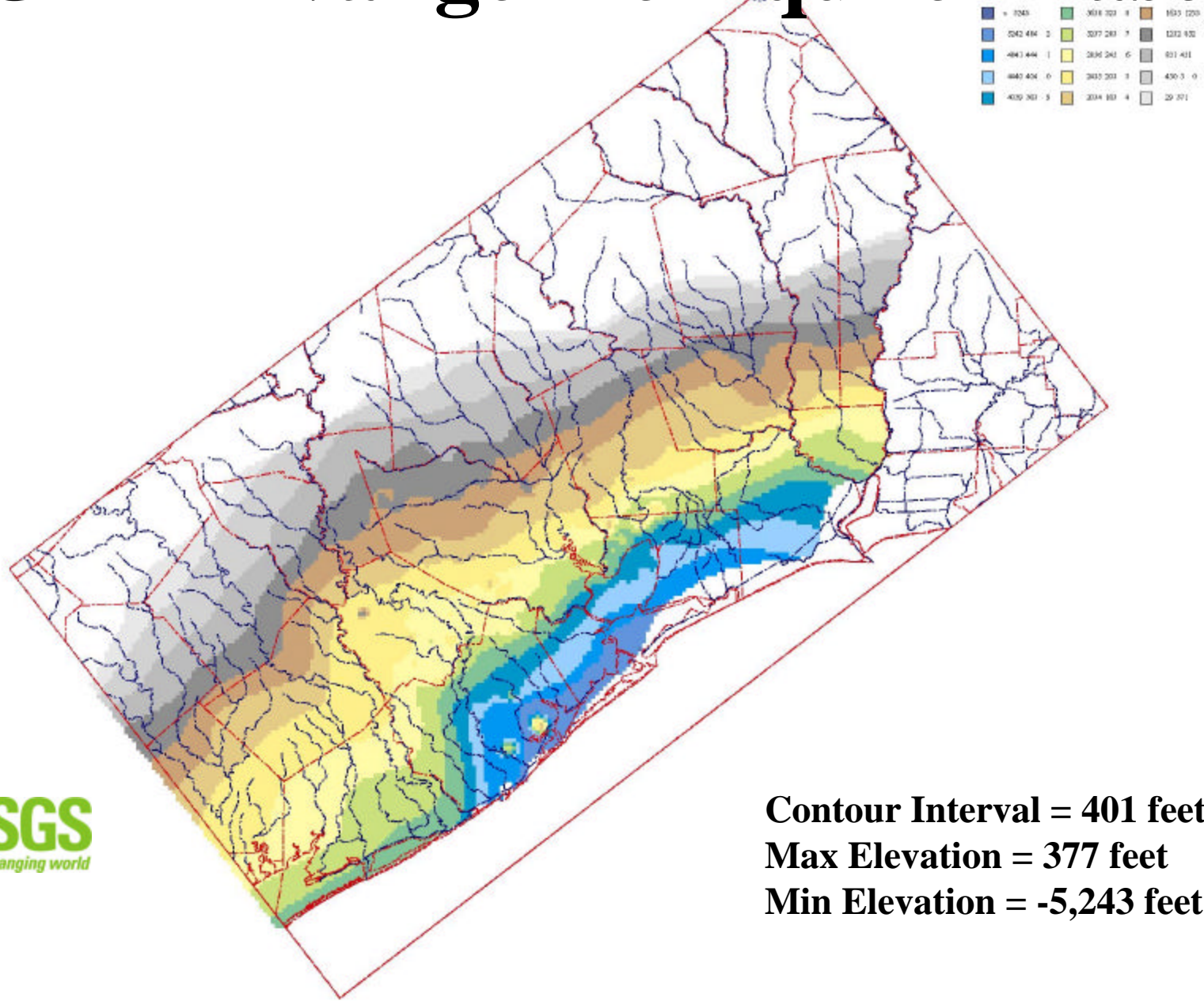
EXPLANATION	
200 8 4	200 8 4
200 136 6	200 136 6
200 134 6	200 134 6
200 206	200 206
200 808	200 808
200 136 6	200 136 6
200 134 6	200 134 6
200 206	200 206
200 808	200 808
200 136 6	200 136 6
200 134 6	200 134 6
200 206	200 206
200 808	200 808



Contour Interval = 120 feet
Max Elevation = 394 feet
Min Elevation = -1,286

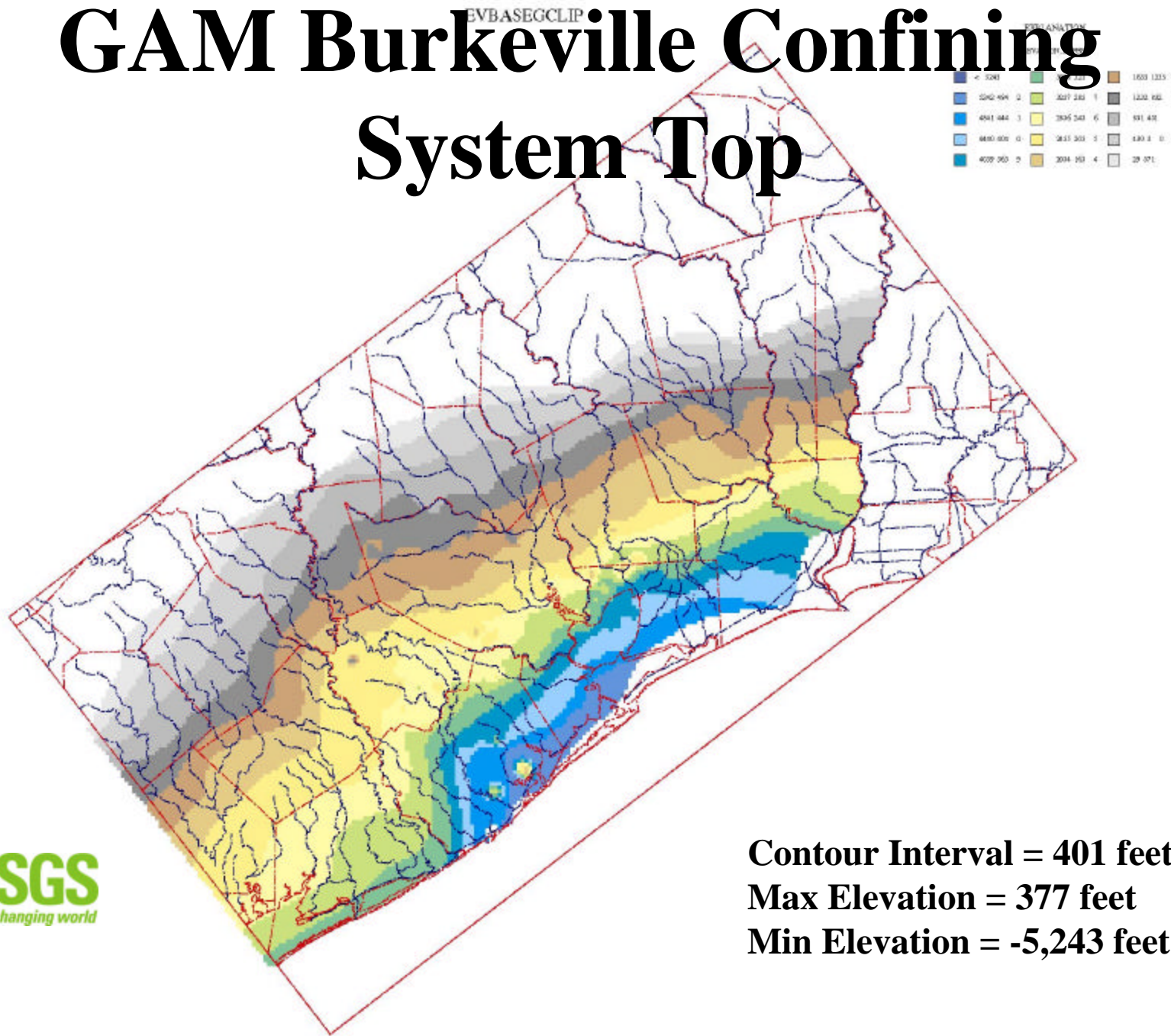


GAM Evangeline Aquifer Base



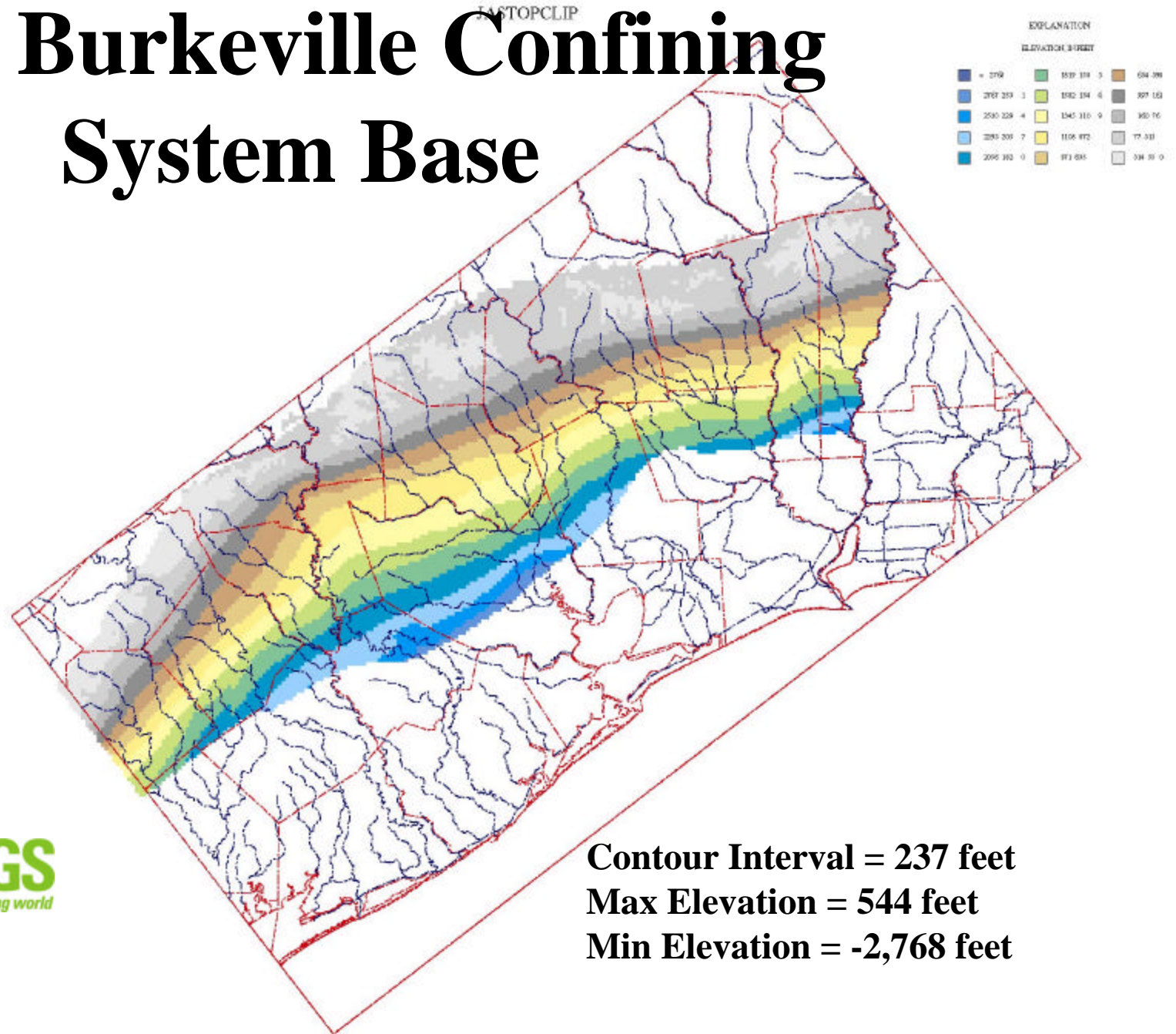
Contour Interval = 401 feet
Max Elevation = 377 feet
Min Elevation = -5,243 feet

GAM Burkeville Confining System Top



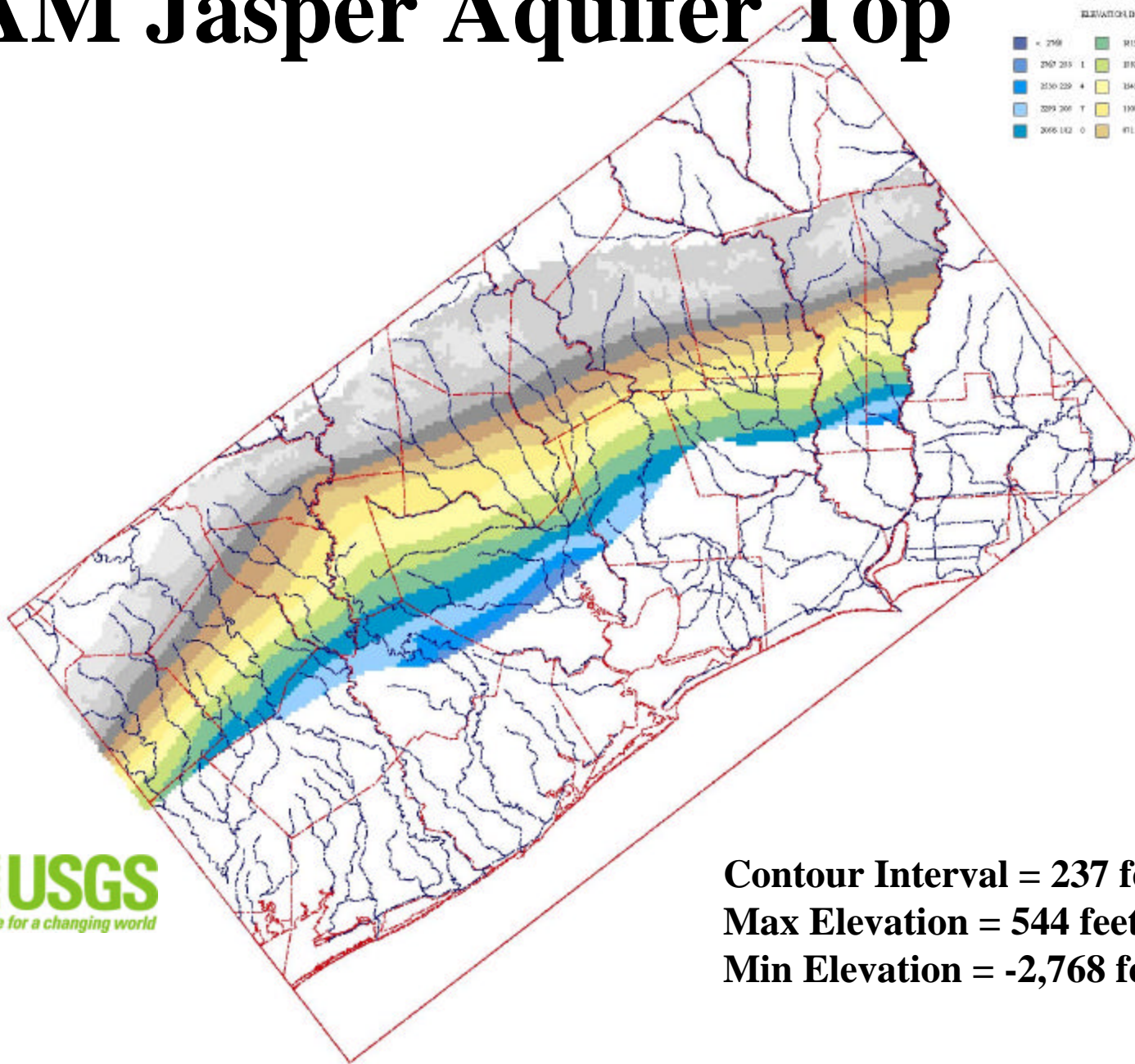
Contour Interval = 401 feet
Max Elevation = 377 feet
Min Elevation = -5,243 feet

GAM Burkeville Confining System Base



GAM Jasper Aquifer Top

JASTOPCLIP



Contour Interval = 237 feet
Max Elevation = 544 feet
Min Elevation = -2,768 feet

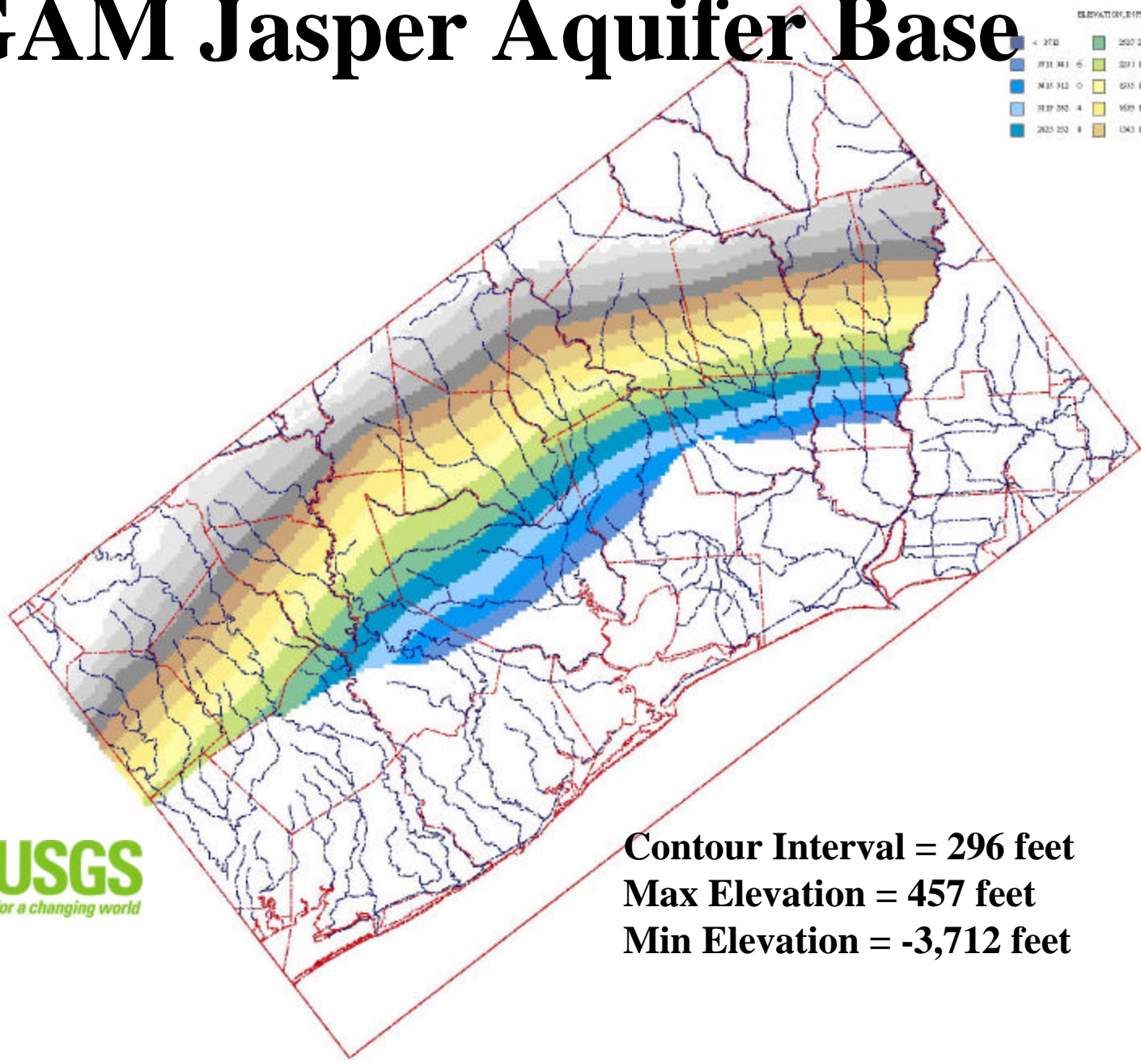
JASBASGCLIP

GAM Jasper Aquifer Base

EXPLANATION

ELEVATION, E: FEET

< 2712	2527 222 2	1641 222
2712 241 6	2271 235 6	171 426
2412 312 6	2235 204 6	455 285
312 282 4	2025 134 4	129 13 6
282 252 8	1943 84 8	157 40 2



Contour Interval = 296 feet
Max Elevation = 457 feet
Min Elevation = -3,712 feet

Upper Gulf Coast GAM Aquifer Outcrops



ATTENDANCE LIST
NORTHERN GULF COAST SAF
SECOND QUATERLY MEETING
AUGUST 2, 2001, HOUSTON

Name		Affiliation
R.G. Cousins		Consultant
Joe Broadus		USGS
Robert Gabrysch		Hydrologist Consultant
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Jun Chang		City of Houston
Mark Kaczmarek		USGS
Ali Chowdhury		TWDB