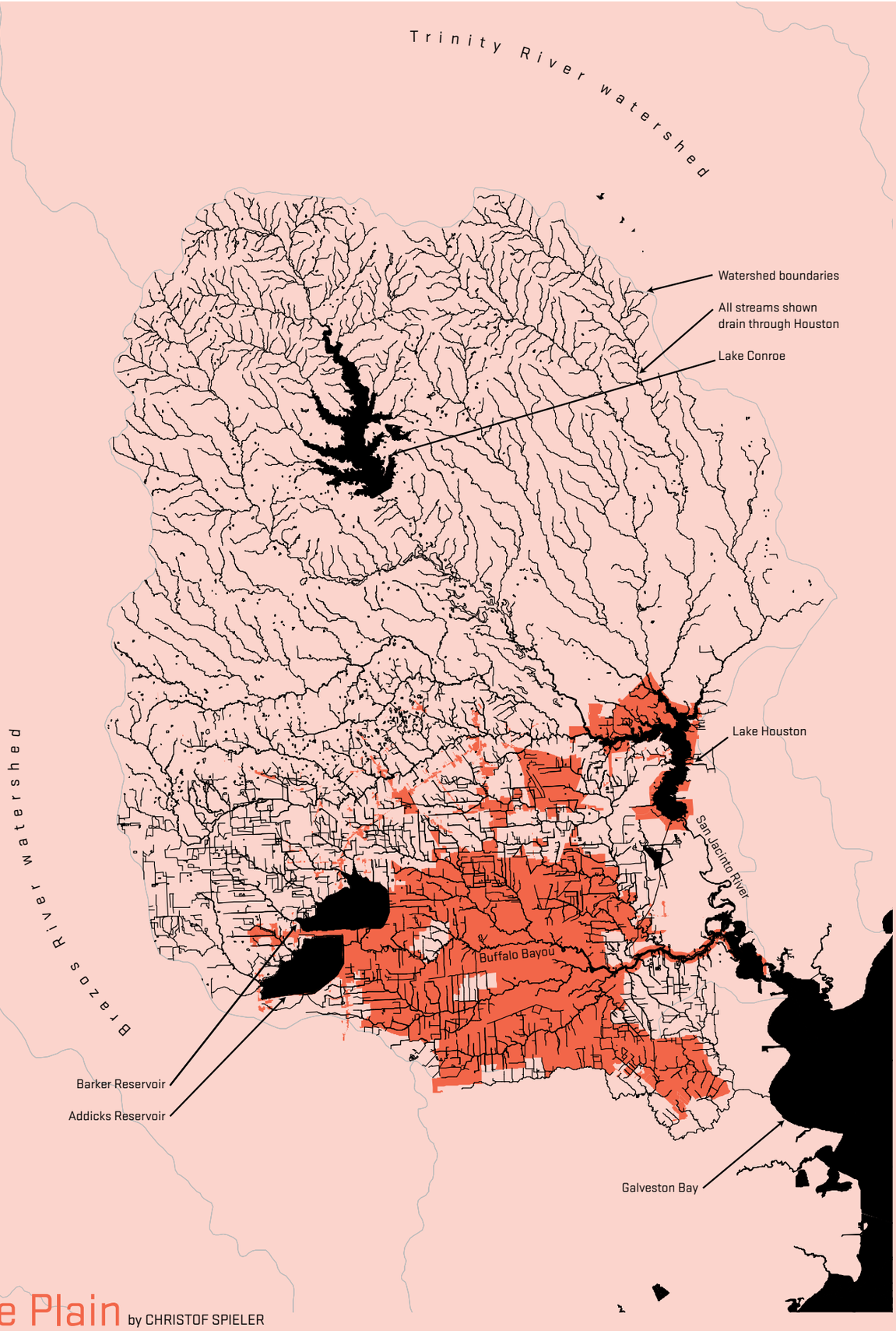


GIS DATA FROM CITY OF HOUSTON (CITY LIMITS), TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (STREAMS AND WATERSHEDS), HARRIS COUNTY FLOOD CONTROL DISTRICT (WATER CHANNELS), BUREAU OF TRANSPORTATION STATISTICS NATIONAL TRANSPORTATION ATLAS DATABASE (WATER BODIES), AND TEXAS WATER DEVELOPMENT BOARD (WATER BODIES.)

# → The Rain on the Plain

by CHRISTOF SPIELER

**Houston's rainfall** patterns are natural. But what happens to the rain when it hits the ground is anything but. In its natural state, the coastal prairie flooded readily, holding water in vegetation and the undulations of the ground and releasing it slowly into lazy bayous.

The bayous have largely been straightened and concrete lined; some have been buried in culverts. The land itself has changed even more dramatically: pavement and roofs shed water quickly, and storm drains hurry it onwards. Water now reaches the bayous more quickly, compressing the water from a single rainstorm into a shorter period and thus raising water levels. Braes Bayou, designed to carry a 100-year flood when West Houston was still farmland, could carry only a 10-year flood when Tropical Storm Allison hit. It's now being widened.

To reduce the load on the bayous, current policy puts emphasis on detention ponds, which hold water and release it slowly just as the prairie once did. Addicks and Barker reservoirs, in the upper reach of Buffalo Bayou, serve the same function.

Most of Houston is drained by the tributaries of Buffalo Bayou, including Sims Bayou, Braes Bayou, White Oak Bayou, and Greens Bayou. The area north of Beltway 8, though, is drained by the San Jacinto River, whose watershed extends as far as Huntsville and Cleveland. Thus, Houston sees not only its own stormwater but that of its upstream neighbors.