

Wakarusa River, Douglas Co., Kansas
 May 6, 1961

James Robert (son) and Frank Norman Vavra and I made canoe trip down Wakarusa River from Haskell Ave. Bridge to Eudora bridge north of that city. Early morning clear but at about 8:00 A.M. changed abruptly to clouded sky and rain. Areas around Lawrence had severe thundershowers and wind of high velocity. High wind today. Temp at 7:30 A.M. 68°F. River in high water stage about 2 feet from overflow. Last night the river had overflowed into fields at about 5' higher than present level. Waters in creek turbulent and fast flowing. Departed 7:25 A.M. from Haskell Ave. Bridge; R.R. Bridge 7:52; Walnut School suspension bridge 8:16; Coal Creek 8:40; Blue Mounds Bridge 8:55; Highway Bridge (Spring Cr. Bridge) 10:45; Highway 40 bridge 10:45; Eudora Bridge (N. town) 11:15. The mileage from Highway 40 bridge to Eudora 1.4 miles. 2 stops for rain of 10 minutes each between Blue Mounds Bridge + Spring Creek Bridge and 10 minute stop at Highway 40 bridge. The miles covered was 11.9 and the time 2 hours and 50 min (2 hrs 30 min excluding 30 minutes stops). In comparing this trip with last trip we covered 12.3 miles on April 23 in 3 hrs and 45 minutes at 3.6 miles per hour and on this trip of today 2 hrs and 50 min for 11.9 miles at 5.1 miles per hour. It is evident that the river at high flood stage travels at a much greater velocity than at mid-stage or about ^{three} quarters less carrying capacity. There were several conditions that were associated with the river at flood stages. These conditions were experienced when the water level was about 2 feet below overflow stage and most of the water was confined to creek channel. I would imagine that the flow and turbulence of the water would be magnified under these conditions that at the flood stage when the fast moving water would be dispersed onto the bottomlands. This condition will have to be tested when waters are overflowing. Some of the conditions we experienced are as follows: At bends the water flows from main channel through inundated trees on outer bank. These trees receive greater flow pressure than those on inner bend. These bends are hazard-

