In response to your Work Request of 17 August 1964, we have derived the following preliminary approximations:

a. Storage in the amount of 134,000 acre-feet is required in the Sauk River Reservoir to control a 100-year flood to 180,000 c.f.s. at Mt. Vernon.

b. A 30-year flood, requiring 130,000 acre-feet of storage in Sauk River Reservoir, is the maximum flood that can be controlled to 120,000 c.f.s. at Mt. Vernon.

c. A 10-year flood, requiring 77,000 acre-feet of storage in the Sauk River Reservoir, is the maximum flood that can be controlled to 91,000 c.f.s. at Mt. Vernon.