M. G. HINDERLIDER STATE ENGINEER C. C. HEZMALHALCH



STATE OF COLORADO ENGINEERING DEPARTMENT DENVER

January 7, 1941

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L. T. BURGESS CHIEF HYDROGRAPHER

CHIEF CLERK & DRAFTSMAN

W. T. BLIGHT

Mr. George S. Knapp Republican River Compact Commissioner Topeka, Kansas

Mr. R. H. Willis Republican River Compact Commissioner Bridgeport, Nebraska

Gentlemen:

This will acknowledge receipt this date of Mr. Knapp's letter of January 6th, advising of the impracticability of holding the next meeting of the Commission at Topeka on the 13th on account of his inability to obtain hotel reservations at that time. Insofar as I know, the date of January 15th for the next meeting will be agreeable to me. A meeting of our Colorado Water Conservation Board occurs on that date, but I feel that I can take care of my part of the program by letter.

I am also in receipt of letter from Mr. Willis transmitting a revised tabulation of water supply in the Republican River basin and extract from Mr. Tilley's paper, presented at the Irrigation Convention at McCook on December 9, 1940.

As soon as the comments of Commissioner Knapp on the preliminary preparation of the mimutes of the last meeting at Lincoln have been received, I will consolidate all the views in a final draft of the mimutes and forward to each of you gentlemen.

On my return from Lincoln last week, I drove up the Frenchman valley from Culbertson to the Colorado-Nebraska stateline, where the Frenchman valley crosses the stateline. At that point I found the semblance of a natural water

course, but no evidence of water at this time nor within recent months. The channel for several miles is covered with a dense growth of vegetation, but with no trees. Upon inquiry of two old residents at the stateline, I was informed by one that at periods of very unusual rain fall some water passes across the stateline; and by the other party that, although he had been a resident there and a large land owner for thirteen years, he did not recall any material amount small of water ever having passed over the stateline, and that the/channel of the stream is normally dry for several miles down into Nebraska. The first appearance of live water occurs several miles east of the stateline.

I then drove south along the stateline to Wray on the North Fork of the Republican to ascertain if what is designated on the government maps as Red Willow Creek, heading in Colorado, has an outlet across the stateline. The area south from Frenchman valley to Wray consists entirely of the sandhills country, and there is no evidence of any water course across the stateline between the Frenchman valley and at a point about one mile north of Wray, where a small stream known as Rush Creek out of Colorado enters the north fork of the Republican just below Laird. At the time of my inspection, this stream, which obviously heads in the sandhills, was flowing about 2 cubic feet per second. The stream channel is not to exceed from 5 to 10 feet in width. There was evidence, however, of water having recently been in the creek to a depth of about 4 feet.

From these observations, I am convinced that there is no material contribution of surface water from Colorado areas from the north boundary of the drainage basin down Republican River/to Wray. There is no irrigation in that area by irrigation systems other than thru storage in a few small reservoirs, and by means of pumping plants. Obviously, the rainfall in that area which is not dissipated thru evaporation and plant transpiration contributes to the underground water

supplies, which in turn may contribute in some measure to stream flow accretions east of the stateline.

As a result of these observations, it is my present feeling that the water supplies of this particular drainage area in Colorado, whatever they may be in amount, should be allocated to Colorado.

I have discussed briefly with Senator Ragan the tentative allocations of water out of the south fork of the Republican to Colorado, but he desires to give this matter further study before expressing any views or definitely committing himself. I hope to have a definite statement from him before the next conference of the Commission.

Very truly yours,

MCH: EP

Republican River Compact Commissioner