

BEAR CREEK, SOUTH PLATTE RIVER, COLO.

Colonel SHAFFER. Mr. Chairman and members of the committee, this report concerns the flood problem on Bear Creek, a tributary joining the South Platte River near Denver, Colo., in response to a resolution from the Senate Public Works Committee.

Typical floods in the Bear Creek Basin are of the flash type occurring from intense rainfall where the steep terrain produces rapid concentration of runoff and high velocity flow. There are no existing flood control improvements in the basin.

The Chief of Engineers recommends construction of a reservoir on Bear Creek at the Mount Carbon site about 8 miles upstream from the mouth, for flood control, recreation, and fish and wildlife enhancement. The multiple purpose reservoir would consist of an earthfill dam about 143 feet high with a crest length of about 4,000 feet.

The total estimated cost is \$32,617,000 of which \$32,314,000 is Federal and \$303,000 is the initial non-Federal cost. The annual charges are \$1,423,000 and the annual benefits are \$3,227,000. The benefit-cost ratio is 2.3.

Local interests are required to repay one-half of the separable costs allocated to recreation, presently estimated at \$1,917,000; bear all costs of operation, maintenance, and replacements of recreation lands and facilities; obtain the water needed for the recreation pool; hold and save from water rights claims; prevent encroachment on flow carrying capacity of channels below the reservoir; inform affected interests that the project does not provide complete protection; and provide guidance and leadership in flood plain management.

The comments of the State and Federal agencies are favorable.

The report is under review by the Bureau of the Budget prior to transmission to the Congress by the Secretary of the Army.

Mr. Chairman, this completes my statement.

Mr. JONES. Mr. Edmondson?

Mr. EDMONDSON. Mr. Chairman, I have a question. It is about your figure on damage prevention which is given at \$2,412,000 annual benefits when you have shown an average annual flood damage at \$930,000.

Would you explain that particular figure, please?

Colonel SHAFFER. Yes, sir, the benefits annually are estimated at \$2,412,000 for flood control or approximately 75 percent and recreation benefits of \$815,000, 25 percent of the benefits.

Now, of the flood control benefits, 29 percent relates to existing development and 46 percent relates to future development.

Mr. EDMONDSON. What you are really estimating is that you are going to have development of industry and so on in the flood plain.

Colonel SHAFFER. Yes, sir.

Mr. EDMONDSON. And that by preventing damage to industrial development that is not yet in place you are going to increase your annual flood benefit, flood prevention, is that it?

Colonel SHAFFER. Yes, sir.

Mr. CLAUSEN. If the gentleman will yield, this as you know, is one of the projects that the gentleman from Oklahoma and our committee visited and it has been brought to my attention that this very thing that you made reference to in that there will be industrial development once the project is in place, we are going through with some rather grandiose plans out there and it would be rather interesting.