will be intensified due to future business and urban expansion. Additionally, there is the constant and inherent danger to those who presently occupy this

area.

The project proposed by the Corps of Engineers provides for flood and erosion control along the lower 5½ miles of the Big Sioux River in the vicinity of Sioux City, Iowa. In addition, this improvement plan would consist of channel enlargement, bank stabilization and relocation of a portion of the channel. It will include appropriate landscaping measures to provide an improved aesthetic character to the bank areas of the project. The project is fully compatible with authorized improvements and potential basin-wide developments and is economically justified with a benefit-cost ratio of 1.3.

Now that the Missouri River is under control by the system of upstream dams, and the Floyd River is harnessed through Sioux City, eventual completion of the proposed Big Sioux River project would offer further flood pro-

tection for this metropolitan area.

After a review of the plan for this project, the members of the Mississippi Valley Association decided that the Big Sioux River flood control project at Sioux City sould receive top priority and endorsed its authorization at the Association's Annual Meeting held in St. Louis, Missouri in February of this year. Therefore, the Association respectfully requests the members of this Committee to authorize for construction the Big Sioux River Flood Control Project in the vicinity of Sioux City, Iowa.

Next is Clear Creek, Tex.

## CLEAR CREEK, TEX.

Colonel Shaffer. Mr. Chairman, members of the committee, this report is prepared in response to section 209 of the Flood Control Act approved October 23, 1962.

Clear Creek is about 35 miles long and drains an area of about 250 square miles extending from the southern portion of the city of

Houston to the west side of Galveston Bay.

There are no existing Federal flood control projects on Clear Creek. Local interests have constructed flood control improvements on Clear Creek primarily for agricultural use, but they do not afford the degree of flood protection that should be provided for the rapid ubanization occurring adjacent to Clear Creek.

At the present time approximately \$5 million in damages would

result from the occurrence of a standard project flood.

The Chief of Engineers recommends the enlargement and rectification of 31 miles of Clear Creek channel upstream from Clear Lake to Houston.

Local interests have indicated a willingness and ability to meet

all of the local cooperation requirements for the project."

The total estimated Federal cost is \$12.6 million. Annual benefits are estimated at \$2,127,000 with annual costs of \$742,000 giving a benefit-cost ratio of 2.9.

Comments from the State of Texas and other Federal agencies are favorable.

The report is with the Secretary of the Army for transmittal to the Bureau of the Budget for clearance as to its relationship to the program of the President prior to its submission to Congress by the Secretary of the Army.

Mr. Chairman, that concludes my statement.

Mr. Jones. You have on the chart velocity control structure. What

is a velocity control structure?

Colonel Shaffer. Drop structure or some similar structures to keep the stream velocities to a reasonable level to prevent erosion on the banks.