Construction materials and methods conformed to the best engineering standards of that day, but we now know that such methods and materials have not stood the test of time. In the older sections of the project, we are faced with obsolescence and deterioration of many structures, and much of the early canal and lateral lining needs to be replaced or repaired.

Frost action, cloudbursts, other climatic conditions and just old age have damaged these old structures and canal and lateral linings. Because of these old and inadequate structures, Midvale has a continual repair problem and a very high maintenance cost to absorb.

In this day and age when it is so important to beneficially use all available water, it is a shame to admit the loss or waste of this valuable resource. Nevertheless, old and inadequate structures and unlined canal and laterals cause a tremendous water loss. The Midvale Irrigation District has lost 830,251 acre-feet of water through seepage and evaporation from 1962 through 1966. This is a startling statement, but it is sadly true.

In 1966, the Midvale Irrigation District diverted 328,116 acre-feet of water from the Wind River at Diversion Dam. Only 124,012 acre-feet was actually delivered to the farms in the Midvale Irrigation District. This is a water loss of 204,104 acre-feet through the irrigation distribution system as a result of seepage and evaporation.

Approximately two-thirds of the water diverted from the Wind River into the irrigation system was lost before it got to the farms in 1966. Much of this loss, of course, is caused by evaporation but it is estimated that the water loss could be reduced 38 percent to 52 percent if the canal and laterals were lined and if the structures did not leak.

The board of commissioners of the Midvale Irrigation District has been acutely aware of this water loss and we have prepared a table showing the actual amount of water diverted from the Wind River into the irrigation distribution system at Diversion Dam, the amount of acre-feet of water actually delivered to the Midvale farms and the amount of water loss due to seepage and evaporation. These figures cover the years 1962 through 1966. I would like to have this water loss table entered into the record at the end of my statement.

In addition to the water loss problem, the lack of proper canal and lateral lining and leaky structures aggravate the seep problems in the district, rendering many irrigable acres unproductive.

The irrigation distribution system that serves the Midvale Irrigation District transports water over many miles in order to serve over 45,000 irrigable acres within the district. The district maintains 54.64 miles of main canals and 223.37 miles of laterals for a total of 278.01 miles in the entire system.

There are 335 structures along the main canals and there are a total of 3,530 structures located along the laterals. It has been estimated that the cost of canal and lateral lining and structure repair and replacement in the district would run approximately $4.5 million. This protective work needs to be started as soon as possible.

The upper end of the irrigation distribution system is known as the Wyoming Canal First Division. It begins at Diversion Dam where the water from the Wind River is diverted into the Wyoming Canal. At Diversion Dam itself, all 10 gates of the dam need lagging and should