

3. For category D in the Gretna-Altona area a consulting firm was employed to provide an estimate of damages. These estimates were developed on the basis of detailed studies of the 1969 and 1970 floods in the Aux Marais River Basin and on the basis of the Royal Commission Report.
4. For category D in the Red River area damages were estimated by transferring unit values, on a per acre basis, from the Gretna-Altona estimates.

More detail on the derivation of specific estimates is provided in the footnotes to Tables 2 and 4. A study on agricultural damages in the Gretna-Altona area was prepared for the Review Committee by Stow Associates, Carman, Manitoba.

#### 2.2.3.2 Red River Area

Estimates of potential flood damages from selected floods in the Red River area are detailed in Table 2. These estimates reflect 1972 prices and levels of development assuming the channel conditions and flood control works in existence in 1958.

Since 1958, ring dykes have been constructed to protect urban centres in the Red River area. These ring dykes provide protection from floods up to and including a flood of the magnitude of the 1950 flood. Many farm properties have been provided protection in the form of pads and levees. The farm pads and levees provide no protection against damage to farm crops; however, it was estimated that they will prevent 80% of all other agricultural damages from all floods