

the area under the curve. The average annual benefit is equal to the difference between the average annual damage with and without the Pembilier Dam, ie: the area between the two curves in each figure.

The average annual damages for both areas and the average annual benefit with the Pembilier Dam is summarized by damage category in Table 6.

2.2.5 Increase in Benefits Resulting from Growth

To be consistent with the U.S. Corps of Engineers' approach to estimating benefits, an estimate of the increase in the average annual benefit associated with increases in the damage potential resulting from economic growth in the two areas was prepared. To prepare these estimates it was necessary to make a number of assumptions as follows:

- (1) that the project would be in operation by 1980,
- (2) that the increase in future benefits would be in the same proportion to future damages as was estimated for past floods,
- (3) that future construction of roads, bridges, railroads and other utilities would be limited and would be designed to avoid flood damage.
- (4) that growth in the various damage categories over the period 1972 to 1980 would be as follows:

Categories A (Urban) & E (Agricultural Property) = 3%
Categories B (Utilities & Railroads) & C (Government) = 0%
(see assumption 3)
Category D (Loss of Income & Extra Costs) - 27%