

where, in this study, only the number of visits was related to water level. Combining equations (24) and (17) gives an estimate of economic value relating to water level:

$$\begin{aligned} & \text{Annual} \\ & \text{Economic Value} = (\$59.91) (-3,962,699.23 + 81,219.81 W_L) \end{aligned}$$

where \$59.91 is the estimated average value per visit as obtained in a previous section. Thus, annual economic value for a water level of 54.06 feet is estimated at \$25.6 million, while at 61.57 feet it is approximately \$62.2 million. The estimated relationship indicates that no economic value would be forthcoming, due to zero visits, at a water level as low as 48.79 feet above sea level.<sup>18</sup>

To obtain estimates of value for each time period it is necessary to utilize the demand curve for the time period, and that portion of Equation (23) pertaining to the particular time period. If no relationship to water is desired, then the above relationship to water level can be ignored and data in Table 13 can be applied directly to obtain total values from the demand relationship. The total annual value to visiting recreationists for 1970 was estimated as:

$$(\$59.91) (479,260) = \$28.7 \text{ million}$$

## SUMMARY AND CONCLUSIONS

Many levels of government are involved in providing recreational opportunities. These opportunities range from small city parks to the extensive national forest system. The funding of these recreation sites, provided from taxes or the sponsoring governmental body, must compete with funds needed for many other services. For this reason, a great deal of interest has been placed in the measurement of economic values of outdoor recreation.

It was the purpose of this bulletin to present procedures for estimating the value of outdoor recreation and apply these to the Kissimmee River Basin. In addition, the impact of variations in water level on recreational values was derived.

Demand for recreation, in the absence of an efficient market was estimated by observing the amounts recreationists spend in order to participate in a recreational experience.

<sup>18</sup>The lowest water level observed on Lake Tohopekaliga during an extreme drawdown was 47.72 feet, thus, the above estimates seem reasonable, since recreational activity was at a minimum.