

ENV Report 18 - *Effects of Rec. Boating: Traffic Allocation and Forecasting Model* by Bruce Carlson, Steven M. Bartell, and Kym Rouse-Campbel

ABSTRACT

The purposes of this report are to (1) quantitatively characterize in a detailed manner the present recreational boating use of the UMRS and IW by developing a recreational traffic allocation model; and (2) estimate future changes in recreational boating on the river system for the period 2000-2050 by using the allocation model to project or forecast future recreational traffic. This report develops a set of assumptions based on available information from past studies of recreational boating on the UMRS, supplemented with professional judgment from resource professionals most familiar with these activities. Associated risk and uncertainty exercises have been undertaken to highlight the factors that have the most sensitivity on the results. Initial estimates of increases in recreational boating were based on the assumption of unconstrained growth population growth in the UMR-IW region. Alternate recreational boating projections were developed to account for other possible future scenarios of factors affecting growth in boating. The allocation model process is based on highly aggregated data that quantify the total number of trips per year across all pools and recreational vessel categories on the UMRS and IW. The model development process continued by successively disaggregating the annual, whole-system numbers to allocations by pool, by vessel category, to vessels per day, and finally, to within-pool daily use projections for each vessel class for the baseline condition (i.e., year 2000).