A reassessment of the encounter – norm – crowding relationship for reservoir-based recreation

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Abstract — It is generally accepted that recreation capacity decisions rely heavily on an evaluative component, especially those related to crowding. However, there are many unresolved issues in measurement and recreational capacity management arising from such an approach (e.g., Vaske & Donnelley, 2002; Manning, et al., 1999). This paper reviews the research that supports a normative approach and analyzes data from seven reservoirs in the US (California, Arizona, Nevada and Texas; n= 4,682). For each lake similar preference, expectation, and evaluative measurements were obtained. The seven lakes serve a variety of boating interests including daily launch (trailer access), marina slip, and rental boating. For this analysis we compare expectations-based norms and differences in evaluative standards and effect size indicators that are appropriate to boating recreation on these lakes. Separately we also address type of access, craft, and setting specific crowding indicators (e.g. at launch site, on open water). Crowding is measured using the now standard 9-point scale (Vaske & Shelby, 2008). Analyses rely on simple comparative tests: t-test, effect size and ANOVA. Overall, the results show that for reservoir boating there is evidence for a generalized encounter-norm relationship and further demonstrate that self reports of crowding are useful to gauge variation attributable to particular uses and settings. The paper concludes with implications for further development of the notion of carrying capacity and its reliance on crowding measures as robust social indicators useful to boating management decisions

Index Terms — Carrying capacity, recreational capacity management, reservoir-based recreation.

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