Finding the State Story in the National Lakes Survey Data With an Excel Exploratory Tool

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The National Lakes Assessment (NLA) surveyed over 1200 U.S. lakes in the summer of 2007, evaluating lake quality based on water quality, physical habitat, and indicators of biological and recreational condition. An upcoming national report will summarize survey results primarily at large geographic scales (i.e., nationwide and the nine aggregated Omernik Level 3 ecoregions). All data will be available for states' use. Here we review an approach under development that uses the familiar Excel spreadsheet to focus attention on a single state's condition in comparison to neighboring states designated by the user. All NLA data are included on the spreadsheet. The easy-to-use tool quickly and automatically generates several interpretative summaries, including: weighted statistics; condition maps; weighted continuous distribution plots; weighted estimates of percentage of lakes in particular trophic status or condition category, based on user's choice of thresholds; and a graphic summary of all indicators at a selected lake. The user may also view state or regional conditions summarized by ecoregion, reference designation (a descriptor calculated by national analysis team), or customized designation specified by the user. The audience for this tool would likely include state analysts and managers wishing to visualize and interpret the NLA data at a local scale. We solicit and would appreciate feedback and suggestions regarding this approach.

29th International Symposium of the North American Lake Management Society October 29-31, 2009 Hartford, CT