Session: Contributed Papers

Real Time Visualization of Water Quality Data

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Abstract

In the face of large-scale drought and continued pollution, water quality monitoring becomes an important tool for understanding this essential resource. As government agencies, citizen scientists and nonprofit groups realize the value in real-time data to monitor their local water bodies, the importance of low cost, high quality monitoring systems increases. As a master's thesis project in Geography at California State University Long Beach and working collaboratively with the Southern California Coastal Water Research Project (SCCWRP) we are developing a low cost water quality monitoring system to allow researchers to collect, manage store, analyze and visualize water quality data in real time. Such a system could dramatically reduce the time spent to collect and process data for analysis and visualization. In addition to streamlining the data workflow, it would also reduce the overall cost of water quality sensors and deploying research technicians to the field. This will allow researchers and water quality managers to obtain real time information from the field, allowing them to identify import environmental events as they occur. This presentation will detail the system design and report on the current status of the project.