

Title: The Wetland Vegetation Condition Index (WVCI) Toolbox: A Data-Driven Approach to Enhance Wetland Monitoring

Abstract: Monitoring wetland condition over large areas can be challenging, as established field survey methods like the Floristic Quality Assessment (FQA) are often limited by cost, time, and site accessibility. This webinar introduces the Wetland Vegetation Condition Index (WVCI) toolbox, an ArcGIS Pro solution that translates the principles of FQA into a geospatial framework using remotely sensed data to rapidly evaluate ecological conditions at landscape scale. This technical session will demonstrate the: 1) the WVCI Calculator tool, which uses species classification maps and multispectral imagery to generate a quantitative WVCI score of wetland condition, and 2) the WVCI Algorithm Evaluation tool that analyzes the statistical relationship between the remotely sensed WVCI scores and field-collected FQA data. This demonstration is ideal for users seeking a streamlined, data-driven solution to enhance wetland assessment, track restoration performance, and improve project monitoring.

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Bio: Christina Saltus is a Research Geographer with the Environmental Laboratory specializing in remote sensing and geographic information systems (GIS) application to coastal and wetland environments. Christina's current research focuses on the integration of spatially explicit approaches into ecological modeling, geospatial tool development, and environmental impacts assessments for habitat mitigation.