

**MEETING:** JOINT AQUATIC SCIENCES MEETING, PORTLAND, OREGON, MAY 2014

**ANTICIPATED SESSION:** 102 – ASSESSING THE ECOLOGICAL CONDITION OF WETLANDS AT THE NATIONAL, REGIONAL, AND STATE SCALES: RESULTS FROM THE NATIONAL WETLAND CONDITION ASSESSMENT AND ASSOCIATED STUDIES

**TITLE:** EVALUATING VEGETATION IN THE NATIONAL WETLAND CONDITION ASSESSMENT

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**ABSTRACT:**

Vegetation is a key biotic indicator of wetland ecological condition and forms a critical element of the USEPA 2011 National Wetland Condition Assessment. Data describing plant species composition and abundance, vegetation structure, and ground surface characteristics were collected in 2011 from 1,138 (974 probability, and 164 hand-picked) 0.5 ha wetland assessment areas across the contiguous United States. Sites represent 7 USFWS Status and Trends wetland classes. Three approaches are used to evaluate vegetation and develop vegetation indicators of condition: 1) floristic quality assessment, 2) a vegetation multi-metric index (MMI) of condition, and 3) non-native plant species metrics. In preparation for these analyses, we compiled or developed Coefficients of Conservatism (CC) and determined native status for the 13,000 plant taxa-state pairs observed in the NWCA. We developed and screened 538 candidate vegetation metrics to determine the best metric set for inclusion in the vegetation MMI. We discuss results of the floristic quality analysis (e.g., floristic quality index: mean=21, range=0-52), the MMI development process, and the status of alien species (e.g., relative alien/cryptogenic cover: mean=13%, range = 0-100%) across the NWCA.

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