ABSTRACT FOR INVITED SESSION FOR THE SWS-PNW CHAPTER 2015 MEETING "THE 2011 NATIONAL WETLAND CONDITION ASSESSMENT: TECHNICAL UNDERPINNINGS AND RESULTS"

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The first-ever National Wetland Condition Assessment (NWCA) was conducted in 2011 by the US Environmental Protection Agency (USEPA) and its federal and state partners, using a survey design allowing extrapolation of results to national and regional scales. At each of 1138 locations across the contiguous US, vegetation, algae, soil, water chemistry, and hydrologic data were collected. Ecological condition was assessed in relation to a disturbance gradient anchored by least (reference) and most disturbed sites and identified using chemical, physical, and biological indices based on site-level data. A vegetation multimetric index (VMMI) was developed as an indicator of condition, and included four metrics: a floristic quality assessment index, relative importance of native plants, number of disturbance-tolerant plant species, and relative cover of native monocots. Potential stressors to condition were identified and incorporated into four indices of hydrologic alteration, two indices of physical alteration, a soil heavy metal index, and a nonnative plant indicator. These indices were used to quantify national and regional stressor extent, and their associated relative and attributable risk. Approximately 48±6% of the national wetland area was found to be in good condition and 32±6% in poor condition as defined by the VMMI. Nationally, 19% of wetland area had high or very high stress related to nonnative plants. Vegetation removal, hardening, and ditching stressors had the greatest national extent of wetland area under high stress, affecting 23-27% of the Nation's wetland area. Additional results of regional condition, relative risk, and attributable risk will be presented with a focus on the Western US. The report on the 2011 NWCA is scheduled for completion in 2015. The 2016 NWCA will build on 2011 results and initiate our ability to report on trends in addition to status. This abstract does not necessarily reflect USEPA policy.