

THE MID-ATLANTIC REGIONAL WETLAND CONSERVATION EFFECTS ASSESSMENT PROJECT

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Wetlands impart many important ecosystem services, including maintenance of water quality, regulation of the climate and hydrological flows, and enhancement of biodiversity through the provision of food and habitat. The conversion of natural lands to agriculture has led to broad scale historic wetland loss, but current US Department of Agriculture conservation programs and practices seek to replace or ameliorate the ecosystem services lost to agricultural conversion. Wetland restoration can enhance watershed resiliency in the face of land use and climate change, and provide critical ecosystem services that enhance the condition of downstream waters. In addition, restored wetlands can directly influence climate change through the regulation of greenhouse gases and carbon sequestration. In order for the USDA to best allocate funds to improve environmental outcomes, a better understanding of the effects of wetland restoration practices is needed. The Mid-Atlantic Regional (MIAR) Wetland Conservation Effects Assessment Project (Wetland-CEAP) is a regional component of the national Wetland-CEAP which was initiated by the Natural Resources Conservation Service (NRCS) to develop a broad collaborative wetland science foundation that facilitates the production and delivery of scientific results. The MIAR is an interdisciplinary study which brings together scientists from multiple federal agencies and the University of Maryland to study non-tidal palustrine wetlands in the MIAR Coastal Plain, including prior converted croplands (historic wetlands) and natural and restored wetlands. The results and implications of an initial ground based study will be discussed and current efforts to extrapolate this information to a broader spatial and temporal scale via remote sensing and modeling will be described. Project findings are being used to assess and improve the effectiveness of conservation practices and Farm Bill programs affecting wetlands and associated lands in the Mid-Atlantic Coastal Plain. This project encourages future inter-agency cooperation and is an important step towards producing a national model that can be used to support the adaptive management of wetland restoration and enhancement programs.

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