**Embracing the Digital Environment**

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**ASA Section:** Land Management and Conservation

**Oral Session:** Land Management and Conservation General Oral

**Format:** Oral - Topical Session

**Keywords:** general and oral

**Session Description:** This is a general oral session for the Land Management and Conservation Section.

**Option 1: Increasing the efficiency and consistency of NRCS field-level conservation plan development using a decision support system (CART)**

**Option 2: CART: Leveraging geospatial data and decision support for more efficient NRCS conservation planning**

**Michael Robotham, Jason Nemecek, and Aaron Lauster**

**USDA-NRCS**

The USDA Natural Resources Conservation Service (NRCS) provides technical and financial assistance to support the implementation of conservation activities on private lands. Authorized funding for conservation financial assistance continues to grow. However, agency staffing remains has remained steady for the past several years. This combination of increasing workload and level staffing has provided a powerful incentive to explore avenues to increase efficiency and continue to provide high quality customer service. In addition, internal audits have shown that this increased workload is contributing to a decrease in consistency across the nation. Concurrently, the increasing availability of geospatially referenced natural resource data (e.g. soil, climate, vegetation) and the expansion of computing resources and web services provide the opportunity to get more data into the hands of field-based planners to help support and inform their discussions with landowners. Through the development of the Conservation Assessment and Ranking Tool (CART) NRCS has begun the process of joining the wealth of geospatially-referenced data with site-specific information provide by the landowner within a decision support system (DSS) framework. This computer-based tool will assist NRCS conservation planners to identify the most likely resource concerns associated with the landscape and farm operation and the suite of potentially applicable conservation practices. This information will help agency staff to work more efficiently and effectively with landowners to determine the most appropriate mix of conservation activities that will meet landowner objectives while addressing the relevant natural resource concerns. We believe that this informed interaction will lead to wider acceptance of conservation planning recommendations and increased adoption of conservation management practices on the ground. This presentation will discuss the overall CART framework with a focus on how NRCS is using it to better leverage digital capabilities now and in the future to address the resource management challenges faced by private landowners.