

Ranking Criteria for NRCS Programs – Fiscal Year 2020

Any applicant may apply for participation in ACEP, EQIP, CSP, or RCPP. The State Conservationist, in consultation with the State Technical Committee and Local Work Groups, has developed the following ranking criteria to prioritize and subsequently fund applications addressing priority natural resource concerns in Arkansas.

The State Conservationist will establish batching periods and select the highest ranked applications for funding, based on applicant eligibility and the NRCS ranking process. In Fiscal Year 2020, NRCS will use the Conservation Assessment Ranking Tool (CART) for all program ranking.

CART is designed to assist NRCS conservation planners as they assess site vulnerability, existing conditions, and identify potential resource concerns on a unit of land. CART results are then used to support conservation planning activities for the client. CART also captures this information to prioritize programs and report outcomes of NRCS investments in conservation.

CART is a decision support system designed to provide a consistent, replicable framework for the conservation planning process based on geospatially referenced information, client provided information, field observations as appropriate, and planner expertise. Site evaluations for existing management and conservation efforts are then compared to the quality criteria threshold to determine what level of conservation effort is needed to address resource concerns on the participant's land.

In general, resource concerns fall into one of three categories for the assessment method used to assess and document a resource concern:

- Client Input/Planner Observation
- Procedural/Deductive
- Predictive

Client Input/Planner Observation: A streamlined list of options will be presented to the planner to document the client input and/or planner observation of present resource concerns. These observations will then be compared to the quality criteria threshold. Most of the Client Input or Planner Observation resource concerns will have a CART system threshold of 50. If the existing condition choice is below 50, then the assessment threshold is not met.

Procedural/Deductive: A large group of the remaining resource concerns fall into this category and usually reference a tool to assist with a determination or have a list of inventory-like criteria in the assessment. Due to the local variability in state tools, these choices will be broad in nature to allow states to more carefully align them with State conditions. As above, many of these have a set threshold of 50, but may have variable thresholds for the same reasons as above.

Predictive: The remaining group of resource concerns are assessed using a type of predictive interactive model simulation. The CART systems attempt to replicate the outcomes related to the assessment threshold being met or not compared to the model outputs. Most of these have variable

thresholds related to the intrinsic site conditions which reflect significant impacts on the model outputs.

After identifying resource concerns and answering existing condition questions, planned conservation practices and activities can be added to the existing condition to determine the state of the management system. Supporting practices may be necessary to support the primary conservation practices and activities and will be identified as necessary, but do not add conservation management points to the total. A comprehensive list of Conservation Practices and Activities offered to address each resource concern by land use is available.

If the client is interested in financial assistance, CART will directly and consistently transfer inventory and assessment information, along with client decisions related to conservation practice adoption, to the ranking tool to avoid duplication, increase prioritization on critical areas based on geospatial priorities and site-specific data, and provide better outcomes and a framework for continuous improvement.

CART will identify applicable financial assistance ranking pools to provide the most advantageous situation for the client and to help planners prioritize workload toward those clients who are most likely to receive funding.

CART ranking criteria will use the following guiding principles:

- Degree of cost-effectiveness of the proposed conservation practices;
- Magnitude of the environmental benefits resulting from the treatment of national priorities;
- Reflecting the level of performance of proposed conservation practices;
- Magnitude of the environmental benefits resulting from the treatment of priority resource concerns reflecting the level of performance of proposed conservation practices;
- Treatment of multiple resource concerns; and
- Compliance with Federal, state, local or tribal regulatory requirements with regards to natural resources.

CART will utilize a set of national ranking templates created by national program managers for all NRCS programs and initiatives. The national ranking templates contain four parameters that will be customized for each program to reflect the national level ranking priorities. The four parameters are:

1. **Land Uses** - NRCS has developed land use designations to be used by planners and modelers at the field and landscape level. Land use modifiers more accurately define the land's actual use and provide another level of specificity and help denote how the land is managed. Land use designations and modifiers are defined in GM180, Part 600 National Planning Procedures Handbook.
2. **Resource Concerns** - An expected degradation of the soil, water, air, plant, or animal resource base to the extent that the sustainability or intended use of the resource is impaired. Because NRCS quantifies or describes resource concerns as part of a comprehensive conservation planning process, that includes client objectives, human and energy resources are considered components of the resource base.

3. **Practices** - A specific treatment, such as a structural or vegetative measure, or management technique, commonly used to meet specific needs in planning and implementing conservation, for which standards and specifications have been developed.
4. **Ranking Component Weights** – A set of five components that comprise the ranking score for an individual assessed practice schedule. The components include vulnerability, planned practice points, program priorities, resource priorities, and efficiency. The points for vulnerability, planned practice points, and efficiency are garnered from the assessment portion of CART.

Arkansas created state specific ranking pools from the parameters established in the national ranking templates for each program. Ranking pool customization allows states to focus funding on priority resource concerns and initiatives identified in consultation with the State Technical Committee and Local Work Groups.

Each ranking pool contain a set of questions that includes the following sections – applicability, category, program questions, and resource questions. Program participants will be considered for funding in all applicable ranking pools by program. This will allow more opportunities for participants to receive financial assistance.

CART Ranking Pools are customized to incorporate locally led input and will evaluate the participant’s assessed practice schedule for five main areas:

1. **Vulnerability** - Site vulnerability is determined by subtracting the existing condition and existing practice scores from the thresholds.
2. **Planned Practice Effects** - The planned practice score will be based on the sum of the planned practice on that land unit which address the resource concern. These two scores will be weighted by a ranking pool to address the resource concerns prioritized by that ranking pool.
3. **Resource Priorities** - National and State Program Priorities are set through the Farm Bill, Secretary and Chief Priorities and Locally Led Input from Local Work Groups and State Technical Committee which address land and resource considerations.
4. **Program Priorities** - National and State Program Priorities are set through the Farm Bill, Secretary and Chief Priorities and Locally Led Input from Local Work Groups and State Technical Committee which address program purposes.
5. **Cost Efficiency** – Summation of Planned Practice Points divided by the log of the summation of Average Practice Cost.

The 2018 Farm Bill requires that NRCS dedicate financial assistance dollars towards the following:

- Livestock – 50%
- Source Water Protection – 10%
- Wildlife – 10%
- Socially Disadvantaged Farmers or Ranchers – 5%
- Beginning Farmers or Ranchers – 5%

The following table lists the resource concerns NRCS utilizes during the Conservation Planning process.

SWAPA	Resource Concern Category	Resource Concern	
Soil	<i>Wind and water erosion</i>	Sheet and rill erosion	
		Wind erosion	
	<i>Concentrated erosion</i>	Ephemeral gully erosion	
		Classic gully erosion	
		Bank erosion from streams, shorelines or water conveyance channels	
	<i>Soil quality limitations</i>	Subsidence	
		Compaction	
		Organic matter depletion	
		Concentration of salts or other chemicals	
		Soil organism habitat loss or degradation	
		Aggregate instability	
	Water	<i>Weather resilience</i>	Ponding and flooding
			Seasonal high-water table
			Seeps
Drifted snow			
Naturally available moisture use			
<i>Source water depletion</i>		Surface water depletion	
		Groundwater depletion	
		Inefficient irrigation water use	
<i>Field sediment, nutrient and pathogen loss</i>		Nutrients transported to surface water	
		Nutrients transported to groundwater	
		Pathogens and chemicals from manure, biosolids or compost applications transported to surface water	
		Sediment transported to surface water	
<i>Field Pesticide loss</i>		Pesticides transported to surface water	
		Pesticides transported to groundwater	
<i>Storage and handling of pollutants</i>		Nutrients transported to surface water	
		Nutrients transported to groundwater	
		Petroleum, heavy metals and other pollutants transported to surface water	
		Petroleum, heavy metals and other pollutants transported to groundwater	
<i>Salt losses to water</i>		Salts transported to surface water	
		Salts transported to groundwater	

SWAPA	Resource Concern Category	Resource Concern
Air	<i>Air quality emissions</i>	Emissions of particulate matter (PM) and PM precursors
		Emissions of greenhouse gases - GHGs
		Emissions of ozone precursors
		Objectionable odor
		Emissions of airborne reactive nitrogen
Plants	<i>Pest pressure</i>	Plant pest pressure
	<i>Degraded plant condition</i>	Plant productivity and health
		Plant structure and composition
	<i>Fire management</i>	Wildfire hazard from biomass accumulation
Animals	<i>Livestock production limitation</i>	Feed and forage balance
		Inadequate livestock shelter
		Inadequate livestock water quantity, quality and distribution
	<i>Terrestrial habitat</i>	Terrestrial habitat for wildlife and invertebrates
	<i>Aquatic habitat</i>	Aquatic habitat for fish and other organisms
		Elevated water temperature
Energy	<i>Inefficient energy use</i>	Energy efficiency of equipment and facilities
		Energy efficiency of farming/ranching practices and field operations