FARMERS’ GUIDE TO CART:
NRCS’S NEW CONSERVATION PLANNING, RESOURCE ASSESSMENT, AND PROGRAM APPLICATION TOOL

NATIONAL SUSTAINABLE AGRICULTURE COALITION
In 2020, NRCS rolled out its new CART – the Conservation Assessment and Ranking Tool. CART provides a framework for conservation planning, assesses the current and future condition of site-specific resource concerns identified by the farmer or landowner, informs the client of program(s) that could help implement their goals, and ranks applications for all farm bill conservation programs other than the Conservation Reserve Program.

CART is part of NRCS’s efforts to streamline conservation planning, program delivery, applications, and contract management; to reduce paperwork and thereby improve service to producers. NRCS staff and agency partners use CART to assist farmers with conservation planning, resource assessment, and program application. It is helpful for farmers to learn about CART and understand its basic features, but they do not necessarily need to learn how to operate the tool on their own.
So, what is in the CART and how does it work?

The CART combines the nine steps of Conservation Planning with NRCS program application and delivery into a single process. The nine steps consist of:

1. Identify problems and opportunities, in which you and your planner identify Resource Concerns (see next page) through field observation and dialogue, with reference to geospatial data such as site location within a critical watershed or wildlife habitat area.

2. Determine objectives based on your goals and selected resource concerns.

3. Inventory resources, including the current condition of the resource concerns selected in Step 1, site specific geospatial information (soil properties, rainfall data, watershed, etc.), and current management and conservation practices.

4. Analyze resource data to assess current condition of each resource concern in relation to a desired level or stewardship threshold defined by science-based planning criteria.

5. Formulate alternatives, identifying new or improved conservation activities that could address resource concerns to attain stewardship thresholds and meet your conservation goals.

6. Evaluate alternatives, using the CART to estimate benefits to resource condition.

7. Make decisions, using CART to convert your selected alternative into a Conservation Plan and program application. CART ranks your application for funding pools within:
   - Environmental Quality Incentives Program (EQIP)
   - Conservation Stewardship Program (CSP)
   - Agricultural Conservation Easement Program (ACEP)
   - Regional Conservation Partnership Program (RCPP)
   - and other NRCS financial assistance programs

8. Implement the plan, using CART to coordinate implementation and provide technical assistance to install and maintain conservation activities for maximum conservation.

9. Evaluate the plan, updating and revising as warranted. CART will monitor efficacy of implementation on resource condition and will update assessment methods as needed.

You want to farm in a way that protects and improves soil, water, wildlife, and other natural resources; builds long term fertility and resilience; and makes a good living for you and your family. Isn’t this what sustainable agriculture is all about?
Resource Concerns

The CART Resource Concern Assessment includes criteria and procedures for assessing the current condition of 47 individual resource concerns in comparison to a “stewardship threshold” of satisfactory resource condition. In Steps 2 through 4 of the CART planning process, client and planner select a subset of the 47 concerns to address in the conservation plan.

Resource concerns are grouped into 17 overarching categories. The categories are:

- Wind and water (sheet and rill) erosion
- Concentrated erosion (ephemeral or classical gully, streambank and shoreline)
- Soil quality limitations (organic matter, soil life, tilth, compaction, etc.)
- Field sediment, nutrient, and pathogen loss to surface or ground water
- Field pesticide loss to surface or ground water
- Salt losses to surface or ground water
- Storage and handling of pollutants (nutrients, pesticides, heavy metals, petroleum, etc.)
- Source water depletion (surface and groundwater, irrigation efficiency)
- Weather resilience (natural moisture excesses or limitations)
- Air quality emissions (particulates, ozone precursors, greenhouse gases, etc.)
- Degraded plant condition (health and productivity, plant community structure)
- Pest pressure (weeds, pests, and diseases of desired vegetation)
- Fire management (wildfire hazard from biomass accumulation)
- Livestock production limitation (feed, forage, water, shelter)
- Terrestrial habitat for wildlife and invertebrates (threatened species, pollinators, etc.)
- Aquatic habitat for fish and wildlife, including water temperature
- Energy use (equipment, facilities, field operations)

How is CART used to inventory resources and identify opportunities for enhanced stewardship?

NRCS district staff will use CART, in conjunction with a site visit, to evaluate current resource conditions on your farm, including soil erosion, soil health, water quality and quantity, air quality, plant condition, livestock condition, wildlife habitat, and energy use efficiency in farming operations. The condition of each resource concern is evaluated and assigned a point score based on:

- Geospatial analysis data, such as soil type, texture, and other inherent properties; topography and slope; nearby streams and other waters; and critical wildlife habitat.
- Your current practices, including crop rotation, tillage, nutrient and pest management, grazing management, buffer plantings, and other conservation activities.
- On-site observation by you and your planner.

The point score for each resource concern is compared with its stewardship threshold to identify potential problems such as erosion above tolerance level, degraded wildlife habitat, or polluting levels of nutrient or pesticide movement to surface or groundwater. Next, you will identify the best suite of new conservation activities to restore and protect vulnerable resources and meet your stewardship goals. This becomes your conservation plan, for which the CART helps you identify which program(s) best fit your needs.
How does CART rank your program application?

CART ranks program applications based on the following five components:

- **Site vulnerabilities**: the degree to which the current condition of soil, water, and other resources of concern fall below their stewardship thresholds; applications from sites with greater vulnerabilities receive higher ranking points.

- **Planned activities**: ranking points are awarded in proportion to the expected conservation benefits of the new or improved activities in your conservation plan.

- **Resource priorities**: the degree to which the applicant's conservation activities address the State's selected Priority Resource Concerns.¹

- **Program priorities**: priorities determined at the State level, which may include geospatial factors (e.g., site located within a critical watershed) and applicant demographic characteristics (e.g., additional points if the applicant is a beginning farmer or a military veteran).

- **Efficiency score**: ratio of the cost of the proposed contract with the expected conservation benefits; a lower cost-benefit ratio earns higher ranking points.

Ranking components are weighted differently by program. EQIP is designed to address specific resource problems on particular fields, while CSP aims to enhance an existing whole farm conservation system. State NRCS offices, with input from State Technical Committees and local work groups, determine program and resource priorities, and select weighting for ranking components within ranges set at the national level (see Sidebar). The efficiency score is set at 10% nationwide.

<table>
<thead>
<tr>
<th>Weighting Ranges for Ranking Components in CART</th>
<th>EQIP</th>
<th>CSP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site vulnerabilities</td>
<td>25 – 40%</td>
<td>5 – 10%</td>
</tr>
<tr>
<td>Planned activities</td>
<td>20 – 35%</td>
<td>35 – 50%</td>
</tr>
<tr>
<td>Resource priorities</td>
<td>5 – 25%</td>
<td>15 – 35%</td>
</tr>
<tr>
<td>Program priorities</td>
<td>5 – 20%</td>
<td>15 – 35%</td>
</tr>
<tr>
<td>Efficiency score</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>

¹ Some but not all States award resource priority ranking points for both ongoing and new conservation activities for CSP applications. Check with your State NRCS office for state-specific details. NSAC believes all States should do so and is advocating for uniformity in that regard.
Will CART really make conservation planning and program enrollment clearer and easier?

CART was deployed for the first time for the 2020 program signup, during which state NRCS offices negotiated a “learning curve” with the new tool and are working with National Headquarters to fine-tune the tool for future signups.

NSAC will continue to work with NRCS to improve our understanding of CART, and to identify ways in which CART itself might be improved. We are gathering observations on how well the CART process works for program applicants, conservation planners, and NRCS field office staff.

Please give us your input! On-the-ground feedback on farmer successes and problems in working with NRCS field staff using the new CART is vital to the improvement process.

For more information on CART, see the following on-line resources:

- **NRCS of the Future - Conservation Assessment Ranking Tool** (3 pp) – *how CART streamlines the process*

- **Resource Assessment and Conservation Assessment and Ranking Tool** (32-slide powerpoint)
  by Aaron Lauster, 2019 – *conservation planning and application ranking through CART*

- **Conservation Assessment Ranking Tool (CART)** (14-slide powerpoint) –
  *example of conservation planning and application ranking processes.*

- **ATTRA Blog 30: The CART Before the Horse: Understanding Access to Federal Assistance for Conservation Solutions.** Three Webinars on CART presented by NRCS staff, including Overview, the Process, and a Deeper Dive. 

![Image of a hand holding a green plant and a field of crops]