

# Conservation Measurement Tool

## Conservation Performance Scoring

**The Conservation Measurement Tool (CMT) will be utilized to evaluate CSP applications using a point based system for environmental benefits. The tool evaluates existing and proposed additional activities. The tool will treat all applicants fairly, scoring their current and planned environmental performance and generating conservation performance points that will be used for stewardship eligibility determinations, application ranking, and payment purposes. Below is an explanation of the key CMT scoring principals:**

- All scoring of the relative environmental impact of inventory questions and additional activities (enhancements and conservation practices) is based on Conservation Practice Physical Effects scoring tables -5 to +5 scoring system.
- Each inventory question and additional activity is scored against 7 macro-resource concerns plus energy. Each of the macro-resource concerns is further broken down into micro-resource concerns for a total of 27 micro-resource concerns. (The 7 resource concerns plus energy along with the micro-resource concerns are a subset of the total number of resource concerns that NRCS considers when conducting conservation planning.) These resource concerns were chosen as best representing the significant resource issues on working lands and as being readily quantifiable.
- The tool is size neutral. All operations despite the size of the operation have the potential to score a similar number of existing activity conservation performance points for each land use.
- Each land use is evaluated separately.
- The scoring process used in CMT involves generating conservation performance points for determining stewardship threshold levels met, conservation performance ranking score, and annual payment.

The following is an explanation of the scoring process used in CMT.

### **A. Annual Payment - Conservation Performance Points**

- Conservation performance points are calculated for existing and additional conservation activities for each land use.
- If an applicant has chosen to implement the Resource Conserving Crop Rotation, the points associated with this activity are subtracted from the cropland additional activity conservation performance points because this activity has a separate payment structure.
- A split-rate annual payment structure will be used to provide separate existing and additional activity payments based on existing and additional conservation performance points.

Below is an explanation on variables that impact the outcomes from CMT.

#### **1. Existing Activity Points**

- *Weighting*

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- Cropland and pastureland micro resource concern totals for each rotation or mixture are weighted based on the acreage that each rotation or mixture makes up of the total acreage for that land use.
- Forest land is treated separately and simply totaled up by micro-resource concern.
- Air quality and energy points are spread over each land use and then weighted by the acreage of each land use.
- Water points are spread over each land use that has water and then weighted by the acreage of each land use.
- *Size Neutral Normalization*
  - For applications that have multiple land uses, the macro-resource total points are multiplied by the percentage of that land use of the total number of acres. These adjusted values are utilized in the ranking score calculations only.
- *Adjusted by the Potential Maximum Points*
  - Existing activity points are also adjusted by the potential maximum points that are available to an applicant. If an applicant answers “No” to certain questions, the points associated with these questions and any sub-questions are removed from the potential maximum score for the relevant land use(s). For example, if there are no water bodies or water courses on the eligible land, then the points associated with these water questions are not included in the potential number of points that can be accrued.

Existing activity conservation performance points are calculated by resource concern for each land use by dividing the actual existing activity points by the potential existing activity points and multiplying by 100. Existing activity conservation performance points are compared to stewardship threshold values established by land use for each resource concern to determine if minimum stewardship eligibility requirements are met. The stewardship thresholds were established by using the CMT on a number of sample farms that had been evaluated by professional conservationists for the level of conservation on the farm. The threshold values were matched to farms that were judged to be meeting but not exceeding a good level of conservation stewardship.

## **2. Additional Activity Points (enhancements, conservation practices, research and demonstrations, pilot projects and resource conserving crop rotations)**

- *Normalization*
  - The points are normalized so that the maximum points for any additional activity is about 20.
  - Since it is impossible to predict exactly what on-farm research and demonstrations or pilots will be undertaken by applicants the average

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points from all enhancements was chosen to represent the points for these 2 activities.

- *Calculated by Years of Benefits Generated*
  - The points for each additional activity are determined by the number of years it is scheduled and the percentage of the total applicable amount that is scheduled. Applicants can schedule conservation practices during years 2 through 5 of their contract period. Applicants can schedule enhancements, research and demonstration, pilot projects, and resource conserving crop rotations starting in years 1 to 3 of their contract period. They can also schedule the amount of the additional activity they plan to install. The earlier in the contract period and the greater the amount of the additional activity they schedule, the greater the number of additional activity conservation performance points they accrue.
  
- *Adjusted by the Potential Maximum Points*
  - The potential number of points available from additional activities for each land use is based on the average of the points for all additional activities times a multiplier for each land use. The multipliers are used to account for the different number of activities available for each land use.

Additional activity conservation performance points are calculated by resource concern for each land use by dividing the actual additional activity points by the potential additional activity points and multiplying by 100.

### **B. Conservation Performance Ranking Score**

The conservation performance ranking score is used to determine the priority of funding for an applicant within a ranking pool. Applicants will be funded starting with the highest score and working down the list until acres and/or funds are exhausted.

The performance ranking score is based on 4 factors:

1. The level of conservation treatment on all applicable priority resource concerns at the time of application.
2. The degree to which the proposed conservation treatment on applicable priority resource concerns increases conservation performance.
3. The number of priority resource concerns proposed to be treated to meet or exceed stewardship thresholds by the end of the contract.
4. The extent to which other resource concerns, in addition to priority resource concerns, will be addressed to meet or exceed stewardship thresholds by the end of the contract.

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Factor 1 is determined by the following process:

A = The sum of the existing activity conservation performance points for all priority resource concerns for all land uses in the application.

B = The sum of all potential existing activity conservation performance points of all priority resource concerns for all land uses in the application.

$$\text{Factor 1 score} = (A/B) \times 1000$$

Factor 2 is determined by the following process:

C = The sum of all additional activity conservation performance points for all priority resource concerns for all land uses in the application.

D = The sum of all potential additional activity conservation performance points for all priority resource concerns for all land uses in the application.

$$\text{Factor 2 score} = (C/D) \times 1000$$

Factor 3 is determined by the following process:

E = The number of priority resource concerns that the applicant agrees to meet during the contract period.

F = The sum of the number of priority resource concerns (3 to 5) in the ranking pool.

$$\text{Factor 3 score} = (E/F) \times 1000$$

Factor 4 is determined by the following process for each land use:

G = For non-priority resource concerns that are met at time of application or the applicant agrees to meet during the contract period, sum of all additional activity conservation performance points.

H = For non-priority resource concerns that are met at time of application or the applicant agrees to meet during the contract period, sum of all potential additional activity conservation performance points.

$$\text{Factor 4 score} = (G/H) \times 1000$$

Each ranking score factor is multiplied by a weighting factor. The weighting factor is currently set at 25% for each factor.

The final ranking score is the sum of the weighted factors for 1, 2, 3, and 4.