Section V
Conservation Practice Physical Effects (CPPE)

The effects of conservation planning are displayed in subjective detail in the conservation plan and are based on experience and available technical information. Each natural resource may have multiple problems associated with it. The effects of practices may be greater if they are associated with a land use change. Onsite effects of practices are generally greater than offsite. The further away from the problem or treatment the lesser the effect.

The key question that should be asked when reviewing conservation effects is "If this practice is applied, what effect will it have not only on the target problem, but also on all other resource problems?"

Conservation Practice Physical Effects Matrix

The CPPE matrix summarizes each conservation practice's effects on natural resource concerns. The major effects of a single conservation practice on resource problems are identified. An interdisciplinary team identified the effects. The purpose of these matrices is to help the planner develop and maintain a strong awareness of the effects of conservation practices on all the basic natural resources.

The conservation effects were classified in one of the following forms, followed by additional information for clarity:

-5 = Significant Increase
-4 = Moderate to Significant Increase
-3 = Moderate Increase
-2 = Slight to Moderate Increase
-1 = Slight Increase

Blank = Insignificant or Neutral
1 = Slight Decrease
2 = Slight to Moderate Decrease
3 = Moderate Decrease
4 = Moderate to Significant Decrease
5 = Significant Decrease

A decrease or increase in the problem indicates the effect the installed practice has on the resource problem. For example, a practice may *moderately decrease* an erosion problem and *slightly increase* a water quality problem.

In the CPPE matrix the conservation practices are listed at the top of each column and resource problems are found at each row. The effect the conservation practice has on the resource problem is found at the intersection of the column and row.

The practice is assumed to be installed according to standards in Section IV, and that there is a current problem with the resource and the resource problem can be addressed by the installation of a conservation practice. The matrices address broad, general effects that may be expected from the practice application.

The effects shown in the matrices in Section V may need to be adjusted to reflect site specific conditions for a given practice. Use the following guidelines when developing site specific effects:

- Evaluate each practice for the effect it will have on the area being planned (i.e., a field or a CMU) and not the effect on the immediate area surrounding installation.

- Assume all practices will be installed according to practice standards in Section IV of the FOTG.

- Do not "reach" for effects. Not all practices have an effect on all possible problems associated with each resource.

- The CPPE assumes that the practice is not part of a conservation system and that each practice is applied independently of others.

- Assume that the practice being evaluated is not presently applied.

- Practices are evaluated based on fields or CMUs that result from planning decisions.

- When a land use change is considered, evaluate practices needed to change the land use against present conditions. Evaluate practices necessary to manage the new land use against expected future conditions.

The planner needs to recognize the effect of applying conservation practices in order to select combinations of practices that solve the identified or predictable problems without creating new problems. In addition, secondary benefits should be identified. The effects concept is applicable for formulation and evaluation of RMS options for specific fields, conservation management units, or other planning areas. It can also be used to assist in development of FOTG guidance documents and to explain resource problems and potential solutions to the decisionmaker and to others.

Note: File Conservation Practices Physical Effects Matrix following this page.