Explanation of CPPE Values

The Conservation Practice Physical Effects (CPPE) show the magnitude of the practice's effect on the resource concern assuming the practice is fully functional. Effect values are defined as:

- INCREASE indicates the resource concern becomes greater.
- DECREASE denotes the resource concern diminishes.
- SLIGHT signifies a noticeable but limited increase or decrease in the resource concern commensurate with the potential influence at the site level (e.g., generally no more than a 10 percent change in measurable quantities achievable at the site level).
- SUBSTANTIAL denotes that the practice clearly and markedly increases or decreases the resource concern (e.g., usually more than a 50 percent change at the site level).
- MODERATE describes a condition more than SLIGHT and less than SUBSTANTIAL.
- NO EFFECT indicates that the fully-functioning practice normally causes no change, a negligible change, or a "net" no effect in the resource concern.
- NOT APPLICABLE means the practice normally has no relation to the resource concern.

The following conversion was used to establish the values in the CPPE Matrix:

Effect Values	Value
Substantial Decrease	+5
Mod to Substantial Decrease	+4
Moderate Decrease	+3
Slight to Substantial Decrease	+3
Slight to Mod Decrease	+2
Slight Decrease	+1
Not Applicable	0
No Effect	0
Slight Increase	-1
Slight to Mod Increase	-2
Moderate Increase	-3
Slight to Substantial Increase	-3
Mod to Substantial Increase	-4
Substantial Increase	-5

State Responsibilities

National CPPE matrix values default into each state's CPPE matrix. State Technical Guide Committees are responsible for making any needed changes.

Additional information about the CPPE National Template

CPPE effects and rationale statements were developed in the context of field or conservation management unit application, i.e., the site level, and indicate the general resource effects and level of impact when a particular practice has reached a designed, functional state. Short-term effects immediately after construction, installation, planting, etc. were NOT rated unless the practice characteristically reaches a functional state quickly. Most plant-related practices take from months to a decade or more to become fully functional. Because of varying conditions within regions, states and local areas, many ratings in the National CPPE matrix were expressed as a range, e.g., 'slight to substantial decrease' in a particular resource concern. States and locales are encouraged to refine ratings to improve accuracy for the CPPE.

Other considerations in using the CPPE and refining ratings locally include:

1. Applying a practice on a planning unit may have a substantial effect at the site level that, when assessed at a landscape or watershed level, may be of a lesser degree. Beneficial watershed effects depend on the cumulative impacts of individual practices applied in many places and as part of the resource management systems.
2. The CPPE ratings in the CPPE are for individual practices and, in a few applicable cases, practices that are very closely associated and usually installed concurrently with the practice being rated. It is recognized that practices are seldom installed singly and, when a system of practices is installed, a considerable synergistic effect can occur. Because the effects ratings focus on single practices, system effects and their magnitudes are not part of the CPPE. However, the additive effects of a group of practices could be individually accumulated giving some indication of a general overall effect on pertinent resource concerns. In addition, the consequences of planned systems are determined during the planning/environmental evaluation process and will vary from site to site.
3. Even though not rated in the CPPE, short-term effects are an important aspect of conservation planning particularly when dealing with engineering or construction-type practices that require temporary ground disturbance. Short-term effects of preparing and installing a practice may cause undesired but temporary consequences. Such consequences are usually anticipated and mitigating measures are taken. For example, during site preparation and installation of Grade Stabilization Structure to treat a gully, soil disturbance can be substantial. When such disturbance is near or adjacent to a stream, a moderate to substantial amount of sediment can reach the stream unless mitigating actions are taken. Typically, the entire disturbed area is seeded and mulched shortly after construction to minimize sediment delivery to very low levels. Thus, the amount of sediment from the construction area in the short term is reduced to acceptable, low levels and represents an insignificant amount when compared to the long term sediment production and land wasting if the gully is left untreated.
4. Some practices are difficult to rate because of a counter-productive influence on another condition or offsetting increases and decreases in a resource concern. For example, the application of Upland Wildlife Habitat Management may improve habitat for one group of organisms while adversely affecting habitat for another group. The fact that habitat for a favored species is improved does not make up for the adverse effect on the other species. Another example is demonstrated by the effect of Grazing Land Mechanical Treatment on salinity in groundwater. Even though the practice is designed to improve infiltration which could result in more salts being leached to groundwater, plant growth and vigor is improved resulting in increased water use and diminished leaching. Thus, application of the practice produces both

increasing and decreasing effects that tend to offset each other. Situations as depicted above were rated ‘no effect’ in the CPPE National Template.

5. Many of the effects that, at first glance, would indicate an undesired increase in a resource concern were rated as 'no effect' because agency policy requires an on-site environmental assessment evaluation before the practice is installed requiring mitigating measures to eliminate undesired effects.
6. A number of practices under the leadership of the grazing lands discipline were considered "facilitating" practices, i.e., Fence, 382, and Animal Trails and Walkways, 575. The effects of such practices can only be assessed when used in context with other practices. Thus, many resource concerns were rated as "no effect". Other disciplines do not currently classify practices as "facilitating."