SECTION V– CONSERVATION EFFECTS INTRODUCTION

SECTION V – CONSERVATION PRACTICES PHYSICAL EFFECTS

Disclaimer

CPPE effects and rationale statements have been 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 shortly after construction, installation, planting, etc. are NOT rated. 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 Nebraska CPPE template are expressed as a range, e.g., 'slight to substantial improvement' in a particular resource concern. States and locales are encouraged to refine ratings to improve accuracy for CPPEs developed for an entire state or a particular Common Resource Area.

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 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 and not only the direct, but also indirect and cumulative effects 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 sediment production and land wasting if the gully is left untreated. Keep in mind that

sometimes even short term, low level impacts may not be acceptable when considering effects to things like endangered and threatened species,

4. Some practices are difficult to rate because of a counter-productive influence on another condition or offsetting worsening and improvement 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 worsening and improving effects that tend to offset each other. Situations as depicted above were rated ‘neutral’ with a rationale statement explaining the circumstances.

5. Many of the effects that, at first glance, would indicate an undesired worsening in a resource concern were rated as 'neutral' because agency policy requires an on-site environmental evaluation before the practice is installed requiring mitigating measures to eliminate undesired effects. Typically, the rationale statement for the ‘neutral’ rating explains such circumstances.

6. A number of practices under the leadership of the grazing lands discipline are 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 are rated as "neutral" with further explanation in the adjacent rationale column. Other disciplines do not currently classify practices as "facilitating."