Attachment 3 - PG&E SEP Fund, Technical Advisory Committee Discussions

A technical advisory committee was convened to aid in the development and review of proposal materials. This TAC has also served as a forum to discuss water quality impairments and the most effective way of utilizing the funds, given the criteria. Below are discussions related to the practicalities of successful practice implementation.

a) Vegetative treatment systems have the potential to simultaneously reduce pesticide, nutrient and sediment loading in agriculture watersheds. They are one of the primary management practice effective at reducing all three types of pollutants. Additionally, since vegetated treatment systems may be employed in field ditches, as opposed to on the farm field itself, they do not require the grower to take valuable land out of production. Vegetated treatment systems and vegetated waterways are recognized by the farm technical assistance agencies and the State Water Resources Control Board (There is a chapter of the State Non Point Source Implementation Plan devoted to this topic) as a highly recommended practice to improve water quality. The absence of vegetation along waterways may exacerbate water quality problems.

There is currently a major roadblock to implementing vegetated practices. The presence of vegetation on or near the farm fields is perceived as a food safety issue. There are cases where produce that is grown near vegetation cannot be sold. Grower contracts are regulated by industry auditors who evaluate risk (perceived or real) of crop contamination and nearby vegetation is perceived as a risk factor. The rationale is that wildlife using non-crop vegetation could introduce bacteria to the crop or be entrained in the harvesting process. This is a disincentive to installing one of the most effective and practicable off field pollution treatment practice. The PG&E TAC and the larger Central Coast Ag Water Quality Alliance group have identified this problem as a high priority issue. The PG&E TAC recommended to staff that a portion of the funds be directed towards resolving this roadblock to practice implementation.

b)The technical assistance providers often remark that one of the great challenges in aiding growers to improve water quality is the limited data available on practice effectiveness. Although there are a large number of recommended practices available, much of the data collected is from practices implemented in the midwestern United States, where soil, crop and weather patterns are very different. Where there has been data collected within our region, some practices were found to be 30-60% less effective than their stated range. To further complicate matters, crops, cropping practices, soil type and slope across our region are highly variable. The Central Coast Ag Water Quality Alliance has listed data collection associated with practice effectiveness as a high priority.

The TAC has recommended that a larger portion of the monitoring funds be directed towards evaluating practice effectiveness

c) Due to the lack of practice effectiveness data for our region, determining which practices might best reduce pollution requires careful consideration of hydrology, geology, engineering, crop type, weather patterns and several other factors as they relate to different pollution categories. These factors are thought to vary on a number scales ranging from regional, local, and farm-to-farm differences. It is not uncommon for farms with similar crops and soil to respond differently to management practices. Especially in our region, given the variability of soils, slope and crop type, proper site planning is a primary requisite to project success. Implementation of on-farm management practices necessitates the presence of personnel knowledgeable in the aforementioned sciences, and adequate time for performing project scoping, evaluation and design. Much of the cost of implementation is staff time needed to evaluate which practices work best for each situation. Additionally, the number of persons trained and available to perform these tasks is very limited, compared to the number of growers.

The TAC has recommended that a portion of the initial phases of the project funds be devoted towards paying for staff time to perform the necessary project scoping, which is considered standard practice for project implementation.

d) After technical assistance providers have carefully considered the variables associated with each farm plot, management practices are chosen

and implemented. A period of evaluation and adjustment of the project(s) follows selection and implementation, if needed, to ensure the practice is fully meeting its design purpose.

TAC members are recommending to staff that these post practice installation activities be included as part of practice implementation, since these activities represent standard approach to practice implementation.

Regional Board staff have gleaned from these discussions that the most important element to ensure any implementation project will result in water quality improvement is thorough project planning, post project evaluation and implementation adjustments. Because of the complexities of farming and landscape, and the uncertainties of practice effectiveness for Central California, planning and evaluation require considerable time. During the first year of the PG&E grant cycle, proposal will likely focus on proper site evaluations and design. This will ensure that practices implemented will have the maximum benefit to water quality.

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