

Watershed Planning with the Facilitator Decision Support System

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Abstract

Interest in managing watersheds is growing rapidly and many new watershed management groups are forming. Often these groups form because of the shared perception of an existing or impending problem. Once watershed groups form however, they can founder because watersheds integrate so many physical, biological, social and economic processes and information is so scarce that it is difficult to know where to start. A software tool called the Facilitator has been developed to help watershed groups develop a plan to address their problems without being paralyzed by the lack of information. The first steps in using the Facilitator are to define the group's objectives and determine what management alternatives are available to achieve those objectives. The next step is to estimate the effects of management on the objectives. Lastly, there is a graphical tool to rank alternatives based on the relative importance of the objectives. An advantage of using the Facilitator is the flexibility to use expert opinion at the initial stages to frame the problem and so determine what additional data to collect and which physical processes to should be modeled. Two examples show how watershed groups used the Facilitator to define alternatives that are then examined in more detail using watershed simulation models. The first example is a cropland watershed with a growing number of hog production units in central Iowa and the second is a primarily grazed watershed in central Queensland.

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