ECOLOGICAL SITE DESCRIPTIONS AS A MANAGEMENT TOOL IN SAGEBRUSH ECOSYSTEMS

Summary of a Workshop in Park City UT 23-25 October, 2007

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Ecological Site Descriptions (ESDs) are tools that can be used to describe how land responds to management. In particular, ESDs incorporate the current scientific understanding of ecology to predict how changes in climate and management will affect the soils and vegetation that comprise natural ecosystems. ESDs have been used for a relatively short time and are only being developed for use in some areas in the western U.S. To improve the quality and utility of these potentially valuable tools, the Society for Range Management (SRM) sponsored a workshop in late October in Park City UT to bring together researchers, agency staff and land managers to examine the current state of ESDs for sagebrush ecosystem management and explore ways to improve them.

ESDs are designed to display and provide supporting information for all of the potential plant communities for specific soils. Those soils and plant communities govern the quality of wildlife habitat, watershed conditions, forage production and many other values. In the Park City workshop, participants representing a wide variety of agencies and disciplines identified several refinements to the ESD system and individual ESDs, such as improved information on vegetation structure as an influence of wildlife habitat quality and a broader interpretation of wildlife values associated with specific vegetation and soil combinations.

ESDs with wildlife habitat information are invaluable for planning. While there are many vegetation classification systems, ESDs are the only tool that identifies *potential* and specifies management and/or climate changes necessary to achieve a particular future state. ESDs are also valuable in developing monitoring systems. Descriptions of the indicators of change can be incorporated into monitoring schemes to make interim determinations of the success of management.

All of the participants agreed on several steps that would be necessary to fully implement and utilize a system of ESDs that policy makers and land managers could use to improve decision making. First, political leadership is required to reach an agreement among agencies and interested private sector groups in determining priority areas and applications. Second, within agencies and organizations with relevant expertise, commitments are required to insure the highest quality input is available in a timely manner. Finally, among the researchers and technical staff, a commitment to the time and collaboration to evaluate and integrate the suggestions of the workshop is necessary to insure the best science from a broad range of disciplines is used.

All of these items sound relatively simple, but require the promise and delivery of our most scarce resource, time. There is an astounding amount of information already existing to provide the basis for a credible and useful system of ESDs. However, the evaluation, integration and communication of that information will require a substantial time and intellectual effort. The amount of time should not be underestimated or overpromised.