TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE STATE OF COLORADO NATURAL RESOURCES CONSERVATION SERVICE

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To: All Colorado Area, Field and SCD Offices

From: Jason W. Peel
Irrigation Water Management Specialist

Appropriate Use of the Farm Irrigation Rating Index (FIRI) version 1.2 and the Colorado Modified FIRI Index (CO449-JS-2)

The FIRI process is a planning and evaluation tool that uses multiple factors to compare the relative effect of a change to management, field condition, irrigation type, or irrigation method. A numeric value selected for each factor subjectively represents conditions associated with each factor; a calculated index value reflects the cumulative effect of those conditions. Implementation of various practices can result in changes to the conditions represented by those factors, and change the overall index value. The FIRI process has the greatest validity in assessing the relative effect of change; it does not quantitatively or semi-quantitatively calculate the quantity or volume of water used for irrigation.

A comparison of relative index values during the planning process helps agricultural producers choose between alternative practices or types of change that could be used to achieve conservation goals and objectives. A comparison of plans developed using the FIRI process helps to establish implementation priorities.

There are several differences between the Farm Irrigation Rating Index (FIRI) and the Colorado Modified Farm Irrigation Rating Index (CO449-JS-2). The two processes provide similar information to the producer to assist in planning and decision making, but some of the underlying assumptions are treated differently. The FIRI process takes a farm-wide approach, incorporating multiple fields over an entire crop rotation. The Colorado Modified FIRI is intended to assess an individual field for a single cropping season. Index values generated by these processes are not interchangeable between the methodologies.