Title: Improving Evapotranspiration Estimation Using Remote Sensing Technology

Priority Problem Area: (1)-Integrated Statewide Water Budget

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Objectives:

The specific objectives of this project are:

- 1. To modify the SSEBop model for better estimation of ET in agricultural and riparian vegetation.
- 2. To validate the accuracy of the modified SSEBop model by using results from ground ETand micrometeorological measurements, and REEM generated ET values in New Mexico LRG and MRG.
- 3. Organize a workshop to demonstrate the application of the SSEBop model for regional estimation of ET based on Landsat as well as MODIS images

Progress Report

We have been working on a modified USGS-SSEB model for simplified and low cost estimation of crop water use in New Mexico based on remote sensing technology. Attached are two slides comparing the ET estimates from modified SSEB, measured ET, and ET estimated from REEM model. The first comparison is for pecan in Mesilla Valley and the second comparison is for alfalfa in Middle Rio Grande.