## MAYLAY PASTURE IMPROVEMENT

#04-022

## FINAL REPORT

520 235-8582

## EAST EAGLE ALLOTMENT APACHE – SITGREAVES NATIONAL FOREST

FEB 21, 2002 TO JUNE 30, 2004

This project consisted of the development of a livestock-wildlife watering system to improve watershed conditions and reduce water turbidity of Upper Eagle Creek. This new water system is part of the Upper Eagle Creek Restoration Project (UECRP). In conjunction with this project, funds from Arizona Water Protection Fund were used to complete the San Carlos – East Eagle Boundary Fence and The Steer Pasture Water Development by June of 2004.

This project consisted of drilling a well in the Maylay Pasture 500 feet. Water was reached at 445 feet and pumps 3 gallons per minute. The well is run by a gas generator and fills an 8800 gallon fiberglass storage tank. The water goes to three troughs in the Maylay pasture. The first two are 8X4X2 and the last one is 10X8X2. A surplus line was installed to drain into Cowhead tank. An 8X8 steel building was constructed to protect the well and generator from livestock and wildlife.

As a result of the boundary fence project and the Maylay Pasture water system being completed, the UECRP is almost complete. The San Carlos Reservation livestock no longer trespass. The water troughs will provide dispersed watering sources for the migrating Elk this fall. This pasture is in its third year of drought and third year of fire closure. By July, the two dirt tanks are dangerously low for the wildlife and this system will prevent loss of wildlife during the drought. Every other year, this pasture is utilized by livestock and the system will guarantee reduction of trampling of vegetation on the landscape, thereby reducing erosion and turbidity of Eagle Creek.

Monitoring plots, cluster and photo points were set up in July of 2003 in the Maylay Pasture. This will allow the permittee and USFS to monitor Maylay Pasture for improvement as a result of the water system. All points were gps, photoed and plotted on the map. As part of the entire UECRP, ASU is taking fish sample in the Creek every June and the FS has set us TES points near Eagle Creek and T Walks. The monitoring will be done annually, every 3 years and every 5 years depending on the type of monitoring.

Reports will be available from the Clifton District Forest Office upon request.

Dennis Ingham, Forest Service Geologist for Albuquerque, New Mexico came out twice to the site. He located the drill site, and recertified when drilling went over 200ft. Ray Cueto, a local driller with 40 years experience drilled the well. Twig Winkle, a local rancher (2 hour drive) and Gary Ely designed and supervised the system. Kent Ellett and Tom Palmer, with the Clifton Ranger District advised on the project. Jim Allen, Sun Pumps in Safford gave assistant and staff from Edlebrook in Animas, NM helped with pipe advice. Selinda Border, ADWR and Rich Gilinski, ex game warden rode the project and inputted advice also.

This project had many complications and success. Sharing one fuser with all the ranchers in the valley makes in complicated to schedule, let alone locate. Since most ranchers are ½ hour to two hours apart with no phones. Finding the correct department on San Carlos Reservation to issue a permit to bring the well drilling equipment across the reservation and have a floating permit for the crew to leave when necessary. Scheduling a 5 hour trip from Clifton to bring the tanks and troughs across the reservation, when road conditions are unknown, makes it necessary for two trips (2 full days). Forest Service Closures in three years because of fire and some was starting as early as April. Forest Service change of staff and on fires delays permits and designs.

The delays from Forest Service, however gave us an opportunity to run cattle on the Baseline water system and learn the best methods for floats, fusing, pipe and installation. The overwhelming support from local ranchers, local business, and agency personnel to make the projects a success was great. The ability to order large quantity of pipe for both projects was a huge cost savings.

This project has the potential to expand more watering troughs in the Maylay Pasture, or even bring water to neighboring pastures. To complete the UECRP, the springs under the Mogollon Rim need cleaning out. To enhance the forest, thinning of the juniper and smaller trees will help Maylay Pasture in the future.

As a result of these projects with the UECRP, Gary and Darcy Ely have joined the Upper Eagle Creek Watershed Association with the local residents and permittee's to help better the entire watershed. Sharing knowledge and experience with everyone in the community has brought about a progressive change in the Eagle Creek Valley.

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