

Southern Sandoval County Arroyo Flood Control Authority 2002 Report of Activities

Background

In 1999, the Southern Sandoval County Arroyo Flood Control Authority (SSCAFCA) and the New Mexico Plant Materials Center (NMPMC) Natural Resources Conservation Service (NRCS) initiated a project to rehabilitate disturbed areas. The project site is located adjacent to the Rio Rancho Flood Diversion Channel in Rio Rancho, NM and involves two areas: Y-Channel and Area B. Using native species transplants, various revegetation techniques are being evaluated. (See the 1999 SSCAFACA Project Report).

Y-Channel and Area B Evaluation

On November 27, 2002, I evaluated the Y-Channel and Area B project. I visually inspected these two areas for the survival and growth rates of the transplants. These sites did not receive any irrigation in 2002, and they showed evidence of wind and water erosion. Very little native vegetation has been established on these two sites.

The transplants at the Y-Channel site had a very limited survival rate. The following species were surviving but have put on only limited growth since they were planted: Sumac, Seepwillow, Rabbitbrush, Desert Willow, Sage and Wolfberry. Only two Wolfberry plants were alive, and the remaining species had averaged a 20% survival rate.



Y-Channel – Seepwillow

The transplants at the Area B site also had very limited survival and growth. The following species are surviving: Wolfberry, Saltbush, Sand Sage and Fringed Sage. Of the surviving plants, the Saltbush appears to be doing the best. The survival rate of the transplants at Area B has averaged about 15%. These plants have become established and have a good chance to mature and reproduce.



Fourwing Saltbush – Site B

Discussion

Revegetating disturbed sites using native vegetation in areas that receive a limited amount of moisture continues to be a challenge. Since the inception of Y-Channel and Area B project in 1999, the NMPMC has been evaluating a new planting methodology using tall pot transplant material. (See the attached report on the use of tall pot technology by the NMPMC). This technology was developed to help establish plants in areas with limited rainfall and in areas where water is not readily available for irrigation.

Another technique that possibly could help to reduce erosion is using a summer annual cover crop to produce vegetative mulch. This mulch would provide protection from wind erosion in order to establish a seeding of native species. The rabbit problem is still a major concern, and any attempt at reseeding could be hampered by the rabbit population.



Area B – Sagebrush



Area B – Rabbitbrush

Currently the NMPMC is evaluating a species of native grass that apparently is not part of the preferred diet of many animal species. This and other native species that are not readily eaten by herbivores can be part of a continuing effort to re-establish a native ground cover to disturbed areas, especially in Rio Rancho and its surrounding areas.

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