



United States
Department of
Agriculture

Forest
Service

Tonto
National
Forest

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Reply To: 2520-6

Date: August 6, 1991

Subject: Brushiest Allotment, Riparian Concerns

To: District Ranger, Globe

On July 19, 1991, Lew Myers, SO Riparian Manager, Dr. Bob Ohmart, ASU, Jeff Burgess, concerned user, Larry Widner, Globe District Ranger, and Marcus Crosswhite, Globe District Wildlife Technician met on the Brushiest Allotment to review concerns expressed by Jeff regarding riparian conditions.

Jeff visited the area during the spring of 1990, and was not happy with riparian conditions he observed on the West Fork of Pinto Creek. He expressed his concerns in writing, then met with Larry and Karrol Braddock, Globe District Range Staff. It was explained to Jeff that the three-pasture rest-rotation system was implemented in 1985, and that some improvement in allotment conditions is believed to have occurred. Larry has also emphasized that 1990 was a drought year, and that the heavy use resulting from those conditions may not be typical. He has also emphasized his concern for minimizing the extent of fencing and other range improvements within the Superstition Wilderness (level B management).

The purpose of the July 19th field review was to examine Pinto Creek, specifically Jeff's area of concern, and to ascertain what information we could about response to the management system.

The lower West Fork of Pinto Creek is a highly confined channel, with little or no floodplain development in places. The channel also has a moderate gradient and a cobble substrate. With this channel, frequent scouring will largely dictate the character of the riparian community. We suspect that the potential community will be dominated by a sycamore-ash woodland, with Bonpland willow and herbaceous species being only locally important. Herbaceous species will be best represented in overflow channels and other limited sites where deposition occurs. The potential community will be dominated largely by younger age-classes of trees, over the long term, due to frequent scouring. It is also likely that ash will assume more dominance than at present.

Several major floods appear to have scoured the channel during the past 5-10 years, but a fair population of sycamore persists. Bonpland willow, California buckthorn, ash, hackberry and herbaceous species are presently minor components of the composition. Moderately heavy browsing use was noted on sycamore and ash, which are low in palatability for livestock. Very heavy usage was noted on willow, hackberry, and buckthorn. Herbaceous riparian species seem to have responded little if at all to the system, though scouring/deposition would mask the response somewhat.





Based on these observations, it seems unlikely that a timely riparian species response will occur with the existing grazing system. The principal limiting factors in the grazing system are (1) the long, 6 month duration grazing treatments, (2) the May through October grazing treatment encompasses the hot season, a period during which livestock use is most intensive in riparian areas resulting in damaging levels of use on woody species, (3) the May-October grazing treatment will result in a lack of herbaceous cover to trap sediment during the "monsoon season." and, (4) a lack of planning for adjustments during drought periods to avoid riparian damage.

We believe that a timely riparian response to grazing management would be characterized by better response from willow, ash, buckthorn, and herbaceous species such as knotgrass (*Paspalum distichum*), scouring rush (*Equisetum* sp), columbine (*Aquilegia* sp), and rush (*Cyperus* sp). While the observed section of the W.F. of Pinto Creek may not be responding at the desired level, it is apparent that this represents only a small portion of the riparian area within the allotment. A field review of watershed and riparian conditions in Haunted Canyon, Rock Creek, Wood Creek, Spencer Creek, Campaign Creek, and Bear Thicket Creek is needed.

Implementation of the three-pasture rest rotation system was a good start toward improving watershed conditions. It must be emphasized that watershed condition will dictate the ultimate level of riparian recovery. Portions of the watershed viewed from Pinto Creek appeared to have good groundcover and herbaceous species vigor.

While there does appear to be a need to modify the grazing system, to better meet riparian requirements on Pinto Creek, we should have a better knowledge of riparian, watershed, and wilderness conditions and issues on the entire allotment before proposing any changes. Though the permittee is willing to complete fencing in the Rock Creek Pasture to isolate a small section of Pinto Creek, lets be sure that we are able to devote our limited capabilities towards best meeting the needs of the entire allotment before we pursue new projects.





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We suggest that the inter-disciplinary team approach already started be continued to further consider the issues on the allotment, and to develop ideas for fine-tuning of the livestock management. We will attempt to obtain advance copies of the wetlands-riparian inventory maps from our contractor prior to the September field trip. We are also available to assist the District in completing riparian inventories on key portions of some riparian sites, and in establishing a monitoring program on the allotment, though our capability is pretty limited.


for JAMES L. KIMBALL
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cc:

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