

## **2012 Fire Impact Report**

### **Events**

The damage caused by the fire was just the beginning of issues for the Property Owners Association (POA). The fire eliminated the majority of natural vegetation needed to absorb rain and left a layer of burn residue. Subsequent rains have washed this residue as well as other soil, timber and rock debris down the hillsides. Without anything to stop the water it gathers in volume and speed creating a formidable force. We have had two significant rains and other rains of less volume as of 8/1/2012. We have learned that the severity of the rain does relate to damage impact but that even minor rains can bring significant surprises.

### **Situation**

Those that are not in the canyon witnessing the events may not understand what happens when it rains. At first it is fairly innocuous but as it rains the hills begin to shed the water. With no place to go but downhill and no obstacles it gains in volume and begins to carry material with it. When it reaches the bottom it at times can be raging and begins to fill the bar ditches. When it reaches the culverts they may or may not be able to handle the volume or may become clogged with material. If either or both happens the water will flow over the road dumping material and eroding the road itself. We have had meadows filled with debris-choked water up to 18 inches deep, and in the lower canyon boulders are large as 5 feet were carried in the flow.

Since the start our focus has been to do all we can to mitigate/prevent damage to the roads. Our belief has been that these actions to preserve road integrity would prevent even more significant actions and expenditures in the future. It is our belief (and hope) that we have continually gained on the issues and that each subsequent rain will bring smaller issues and create less damage because of actions taken.

## **Actions Taken**

The advice of the National Resources Conservation Service (NCRS) has been that that it would be impossible to stop the flow and that owners could only divert and channel the flood to protect structures and roadways. The Association is taking such action to efficiently direct water along ditches and through culverts to protect roadways. As they existed, ditches and culverts have not had the capacity to handle the exceptional volumes of water and debris that we have experienced. We have focused on keeping the bar ditches in functional form, keeping the culverts clear and of course clearing the roads.

In this process we have had to move significant material from the road and bar ditches. We have replaced three culverts which were hopelessly clogged with new larger ones. In addition we have dug up and eliminated four culverts in driveways on private property and established bar ditches where they were. We did this because these culverts were continually clogging and causing road damage. We have also placed two culverts in positions where there was a new need.

As indicated earlier each new rain brings new issues but they are getting incrementally smaller.

## **Future Actions/Open Issues**

Our efforts so far have been in triage mode. We think that we will be in this mode through next spring. We have not done anything cosmetic nor have we attempted to bring any damage back to original condition. We anticipate that this work will be done next summer at the earliest when we feel that we are through the damage cycle. That phase will consist of three efforts. We will replace homeowner culverts which have been dug up, we will re-establish bar ditches and finally we will repair road damage including new surface material in a significant number of areas. Working with NRCS, owners on the black side may consider re-vegetation efforts after the monsoon floods and just prior to winter, when seeding will be effective. In addition significant damage has been to ponds on private property. These ponds serve as sources of water for both wildlife and grazing and the issue of potential reclamation will need to be addressed.

## **Financial Impact**

The costs have been significant. At the time of the annual meeting we will have spent approximately \$30,500 in damage control on roads. It is expected that there will be another \$10,000 dollars needed through the damage cycle. It is estimated that the phase that will involve reconstruction that approximately \$27,500 will be needed.