## ACEQUIA DE LA PUEBLA

2013 ANNUAL MEETING

### THE ACEQUIA'S FIRST DESAGUE



This is the acequia's first, and probably the most crucial, desague. In the 2011 flood, the desague was filled with mud, rock and debris. This desague is a few hundred feet from the presa (diversion) on the Santa Cruz River. The river brings large amounts of sand into the acequia during normal operation, so functioning desagues are critical.

# ACEQUIA MADRE PARTIALLY FILLED WITH SEDIMENT FROM THE 2011 FLOOD



This is the Acequia Madre which is much larger than the Llano or the Sitio. In this area, the acequia was filled-in with sediment for over a mile, possibly two miles.

#### **ACEQUIA FILLED-IN WITH SEDIMENT IN 2011**



Note the upper left corner of the photo where the acequia is completely covered. The acequia bank on the far side is eroded from the water and mud which spilled over the acequia bank. The bank was completely washed away and the acequia cement liner was hanging in mid-air. Luckily, the cement liner did not collapse.

# ACEQUIA FILLED-IN WITH SEDIMENT AND BANK ERODED FROM FLOODING



The acequia is in the foreground. It is completely filled-in with mud. The acequia bank is eroded from water and mud spilling over it's side.

#### **ERODED ACEQUIA BANK FROM 2011 FLOOD**



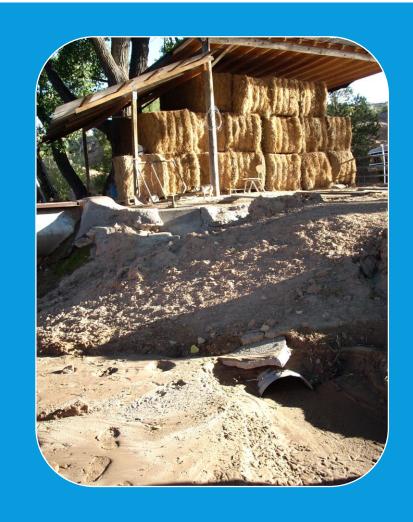
The acequia's bank has eroded from the intense flow of mud and water. Note the steep drop on the eroded side of the bank. This drop-off is approximately 20 feet. With the bank eroded, the acequia was literally suspended in air. Thankfully, the cement liner held; if it would have broken, we would have had a major problem.

# FILLED-IN ACEQUIA AND BRIDGE RESTING ON CEMENT LINER



This section of the acequia is partially filled-in with sediment. The bridge seen at the top of the slide is resting on the cement liner.

## DESAGUE BURIED IN SEDIMENT



This is the acequia's second desague. The cano is buried in sediment due to a blocked arroyo. As a result, the desague was inoperable. Functioning desagues are critical to keeping the acequia clean.

### THERE'S AN ACEQUIA UNDER THAT MUD!



The acequia can be seen at the top of the slide, between the two men. The acequia is also in the foreground, completely covered by sediment. At this location, an arroyo is responsible for the filling in the acequia.

## WHERE'S THE ACEQUIA?



This is the same location as the previous slide. The acequia is right there, in the middle of the slide, but you wouldn't know it.

# TRACK HOE CLEANING ACEQUIA AFTER 2013 FLOODING



A Track Hoe was hired to clean many areas of the acequia after the 2013 flood. Due to very dry conditions this summer, many native plants and grasses were absent in the dry lands of the BLM. The result was an immense amount of sediment was contained in the flood waters from the arroyos on

#### ACEQUIA FLOWS UNDER A CEMENT BRIDGE



The acequia is filled with sediment from the 2011 flood. The acequia is a dirt ditch in this location. Two brothers cleaned this cano which was packed with rock and mud. It took several hours to complete the job.

## DOUBLE CANOS FILLED WITH SEDIMENT



This is the area called the 'Double Canos'. Here the acequia was filled with mud and debris from the 2011 flood. We discovered a desague at this location which had been purposely blocked. Once it was cleaned out, the mayordomo was able to use it to keep the acequia clean.

#### DESAGUE BLOCKED FOR MANY YEARS



This desague was blocked for many years. After cleaning the desague, a resident in the area blocked it again. The Commissioners met with the neighbors and were able to stop the destructive activity.

#### **DESAGUE FILLED-IN WITH SEDIMENT**



This desague is filled to the top with mud from the 2011 flood. Santa Fe County helped clean the acequia and the desagues and they also reconstructed the eroded acequia bank. SFC worked for several weeks on the acequia. One parciante rented a track hoe, at his own expense, and cleaned the parts of the acequia. Much of the cleaning was done by hand.

## SEDIMENT IN THE ACEQUIA MADRE



This sediment in the acequia is a result of the 2013 flood. Art employed the track hoe to remove as much of the sediment as possible from the acequia.

## SEDIMENT FROM THE 2013 FLOOD



Along with the sediment in the acequia from the 2013 flood, notice the piles of dirt on the acequia bank. Dirt piling up along the acequia bank is becoming an ever increasing problem. Our by-laws state that our members are responsible for keeping their acequia sections free of trash and other obstructions (Article 6, Section 1)

## MAYORDOMO KEEPS THE DESAGUES CLEAN



This is a clean and functional desague. **During irrigation** season, the desagues are flushed several times a week. Our Mayordomo is diligent in keeping the desagues clean.

## MAYORDOMO ON THE JOB



Here's Art Rodriguez on the job.

#### FLUSHING THE DESAGUE



This is the acequia's second desague. It is in a strategic location and it is very important to keep this desague open and functioning properly. The acequia is flushed into an arroyo which runs to the Santa Cruz River.

## **ACEQUIA IN NEED OF REPAIR**



This is an area where the cement liner is broken in several places. There are other areas along the acequia where the cement is broken. There is a large cottonwood tree along the acequia which may have caused the liner to break.

## **RUN-OFF CHANNELED INTO ACEQUIA**



An individual has channeled run-off into the acequia. The Mayordomo is frequently monitoring the acequia for issues such as these. Some individuals are not parciantes, yet they interfere with the functioning of the acequia.

#### A TUMBLEWEED PILE ON ACEQUIA BANK



In the Spring, tumbleweeds are numerous. The tumbleweeds lead to many problems, such as blockages and overflows of the acequia. The by-laws state that all parciantes shall keep their acequia sections free of trash and other obstructions (Article 6, Section 1).

## FENCE ON ACEQUIA BANK



This fence is too close to the acequia. The acequia's easement is described in Article 7, Section 1 of the bylaws. It states "The easement is as wide as necessary for maintenance, use and improvements".

### BROKEN ACEQUIA LINER



Several cement sections of the acequia have fallen forward. This summer one was removed because it had fallen into the acequia and was creating a blockage. The mayordomo was able to enlist the landowner and his neighbor, who are both parciantes, to help remove the cement section.

## **EROSION OF COUNTY ROAD 88**



The run-off from County Road 88 is going into the acequia. This occurred after the September 2013 flooding. Art cleaned this area by hand. He has also contacted SFC for assistance with this issue.

## **BEARTRACK**



Art took this picture of a bear track in October 2013.

### COOLING OFF ON A HOT SUMMER DAY



Our four-legged friend takes a dip in the acequia to cool off in the summer. The acequia also helps our horses, cows and goats get a cool drink during irrigation season.

## **BUCKWHEAT FIELD**

