

April, 2021

GRANT FUNDING OF WILD SHEEP FOUNDATION FOR SIERRA EL ALAMO

Project Title: **“Southern Water Well Drilling at Sierra el Alamo”**

Amount Awarded: \$30,000 USD
Grant Recipient: Sierra El Alamo
Project Coordinator: Jacobo Artee, President

Water is a vital liquid essential for all living things in the world, finding it in the desert is often a matter of life and death. One of the most unimaginable places to find water is the desert, and yet it is necessary for the survival of its flora and fauna. Both animals and plants need it to survive, regardless of their geographical location.

At Sierra El Álamo it is not different, water is the greatest limiting factor of animal populations and in our case of Desert Sheep, and to achieve the success of the last 3 years, several tasks and projects have been developed that have been fundamental to be able to guarantee the survival of the animals in the area described below.

- We began with the installation of 20 drinkers in different parts of the Sierra and as a first stage in the North, Northeast and Center sectors of the property, the drinkers have a capacity of 120 gallons, they are checked and cleaned weekly, as well as refilled as required. The cleanliness and quality of the water is of utmost importance to guarantee the health of the local fauna.





- With the help of specialized machinery (Bulldozer) accesses were made to the Sierra and in areas susceptible to capturing rainwater, 15 water containment borders (dams) were made, they are borders of different dimensions which were located in ravines, streams, and other basins in order to block and maintain the water for months, even until the next rainy dates (all

year round). These dams have achieved the retention of water and consequently humidity in the vicinity of them, which the flora is appreciating and It is populating new, lush green areas with more foliage, which directly favors the fauna of the area.

- A water spring was found, to which we carried out some work to be able to capture as much water as possible from it and preserve its natural state as a spring, a pond of approximately 1500 gallons of capacity was achieved, which is full and with crystal clear water, in addition the area was cleaned in about 4,000 square feet in order to obtain a natural space where they can go down to drink water and are not afraid of predators.



As mentioned above, these were some of the works carried out during the first 3 years of the project, and by 2020 it was drilled in two different points in the southern part of the sierra in order to find water and be able to build a well there, which will serve us strategically to be able to supply the drinking fountains in the central and southern areas of the sierra without the need to return to the northern area where the main settlement of the ranch is located and replenish water, this used to take about 4 hours to go back and forth.

With the construction of this well in the southern area, it will allow us to expand our network of drinkers to new areas of the southeast and southwest of the mountains, for now we will continue to fill the drinkers manually (with a truck), until we can determine which were the drinkers with higher water consumption, we do it this way in order to optimize resources.



Once we have established which were the drinking fountains with the highest consumption, we will find a way to build an elevated pond and from there send water by gravity to the different drinkers in the area.

the two wells that were drilled, only one was equipped because it was the one that gave the most water, this well is 190 feet deep and has a pumping capacity of 2000 liters (approximately 530 gallons) per day with a ½ Hp submersible solar pump. This is enough to fill the installed 10,000 liter (approximately 2,600 gallon) tank in less than 5 days, which we visit every 6 or 10 days to fill the 10 new drinking troughs that were installed in the southern area of Sierra el Álamo and some of the central area that we already had, with this growth we will guarantee that the animals that migrate to this side of the mountains also find water and do not die trying and thus guarantee the success of the conservation project and population growth, reducing the risk of mortality due to drought in the Sierra.

It must be taken into account that other species benefit from this water and not only the bighorn sheep, some of these drinkers have had to be relocated because we have not detected sheep drinking water but other species small birds, predators such as fox, coyote and wild cat mainly, as well as collared peccary, others have been more successful since other species have been sighted, such as Coues deer, mule deer and sporadically bighorn sheep and these instead of relocating them we improve them with greater capacity of tubs for storage and disposal of water, as well as adding salts and minerals for free consumption by animals in the presentation of blocks.