Wells in the Sangre De Cristo Ranches (SDCR)

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There are approximately 191 wells drilled in the Sangre De Cristo Ranches (out of a total of about 9,000 lots). These range in depth from 80' to 1,005'. A 100' well in the area will cost about $7,000 in 2011. A 450' well will cost about $12,500 complete. Out of these 191 wells, 170 were less than 450' deep. The other 12 wells had the following depths: 480', 500', 500', 505', 510', 575', 600', 847', 850', 850', 893', and 1005'.

Flow rates and water quality. Flow rates of 0.5 gallons per minute are enough for 99% of the households. Wells usually pump into a pressure tank equipped with a low pressure pump-on switch (20 psi) and a high pressure pump-off switch (40 psi). These tanks have capacities ranging from 10 gallons to 50 gallons. For extra low flow rates, between 0.1-0.5 gallons/minute tank should be sized at least 30 gallons (net capacity). For flow rates between 0.5 and 2 gallons/minute smaller tanks will work fine. We have been in the Blanca-Fort Garland Area for over 40 years and have never heard a complaint about water quality in the SDCR.

Pumped flow rates. A SDCR well permit comes with "augmented" water rights and allows a flow rate of 15 gallons/minute. They have set aside 4,000 such well permits for the SDCR. With these well permits, watering trees and flowers plus a small garden is allowed. Most other well permits for 5 acre lots are for "inside domestic use only". Our home and office is in SDCR Unit X is on the upslope an elevation of about 8,300' I have researched the flow rates , depth and costs for the seven wells within 1/4 mile from our place and found that the well depth were: 204', 220', 278', 330', 380' and 480'. A recent well cost, complete, for the 220' well was almost $7,000 (2010). All of these wells hit some water between 180' and 200'. Typically the well driller will say: "Your permit is for 15 gallons/minute- do you want to go deeper?" Most owners have not thought about that and will wind up with a deeper well, a larger pump and spending more money. Our neighbor with the 480' well hit about 1.5 gallons per minute at 200' but wound up with a 480' well with 5.5 gallons/minute flow rate for $13,000.

Once a well has a flow rate of at least 0.5 gallons/minute-call it good unless you have a bigger budget. Independent of the flow rate, try to get a small pump- 1-2 gallons/minute is fine.

Well Pumping Power. There are only a few power lines in the SDCR and connecting to power can be expensive. One of our neighbors spent $18,000 to bring a 2,600' underground power cable to his property in Unit X. For shorter distances, power can cost up to $12/ft. On top of that, it will take a Transformer ($1,300), a meter and panel ($500) and a electrician to hook it up for another $500. As a result, only about half of the people in SDCR are connected to the power grid. The other half use wind and solar power, stored in marine-type batteries often backed up by propane or gasoline powered 1,000-4,000 watt generator ($200-$600). A 100-watt solar panel can be purchased for under $500 and Wal-Mart in Alamosa will sell a good size marine 12-volt battery for $75. Running a well with such a system requires a low horsepower 12-volt to 30-volt DC pump. But a 12v DC to 120 v AC converter can also be used. For instance a 250' deep well usually has a "static" level 150' down. That requires a 150' lift to the surface plus another 100' to push the water into the pressure tank. For these applications,

multi- stage submersible pump with a 1/4 to 1/2 horsepower motor will be needed. These will flow at 0.5-5 gallons/minute depending on head and cost about $700 with controller. Solar System will need a minimum of three 12-volt marine batteries. A 1/2 horsepower pump has a starting load of 700 watts and will draw 100-400 watts depending on head and flow rate. Well drillers will try to sell you a much larger system. Get the smallest system available for the well depth.