

September 8, 2003

Paula Chacon
Quay County Manager
300 South Third Street
P.O. Box 1246
Tucumcari, NM 88401

CERTIFIED MAIL
RETURN RECEIPT
REQUESTED

Re: Ute Lake Ranch Development in Quay County

Dear Ms. Chacon,

On August 14, 2003, the Office of the State Engineer received a request to review the Preliminary Re-Plat for the Ute Lake Ranch Development, a Type Two Subdivision. The proposal is a request to subdivide a tract of land on the South side of Ute Lake located within Township 12 North, Range 31 and 32 East into 135 parcels that will range from one to 23 acres in size. Each lot purchaser will be responsible for drilling their own 72-12-1 domestic well and installing their own septic tank and drain field for liquid waste disposal. This submittal was reviewed pursuant to the 1998 Quay County Subdivision Regulations and the New Mexico Subdivision Act. It is the opinion of this office that the developer's water supply proposal does **not** satisfy the requirements of the County's subdivision regulations.

WATER DEMAND ANALYSIS

The developer has not correctly quantified the maximum annual water requirements for the subdivision as required by Section 8.7.3 in the County Subdivision Regulations. The developer has estimated water requirements for indoor domestic use and landscape irrigation as 0.34 acre-feet per year (afpy) and 0.68 acre-feet per year respectively for a total of 1.0 afpy for both indoor and outdoor use. Based on an occupancy rate of three persons per household the estimated indoor use is much too high and a landscape that is xeriscaped should not require 0.68 afpy. Water conservation measures should be reflected in the water demand analysis and be consistent with the conservation measures described in the Disclosure Statement and Restrictive Covenants. Indoor and outdoor water requirements and distribution system losses (if applicable) should be quantified using the procedure described in Section 7.2 of the Office of the State Engineer's Technical Report 48 entitled *Water Conservation and Quantification of Water Demands in Subdivisions (Wilson, 1996)*. It is recommended that the developer limit the total irrigated area to 800 square feet per parcel and quantify irrigation water requirements accordingly. Water requirements expressed in gallons per square foot for various types of vegetation are presented in Appendix A of the OSE Technical Report 48.

WATER AVAILABILITY ASSESSMENT

The proposed source of water is individual domestic wells. The geohydrology report prepared for the developer by Ellis Herrington is incomplete. It does not include the level of detail necessary for reviewers to perform a thorough evaluation of the aquifer performance and drawdown effects. There are no wells logs or geologic cross-sections included in the report. An aquifer pump test was conducted on one well located in Township 13 North, Range 32 East in Section 24 about 0.5 miles south of the lake. However, while the geohydrology report indicates that the well was pumped at 18 gallons per minute and drawdown stabilized at 57 feet, the report did not include the drawdown and recovery data, or a determination of the transmissivity using a graphical analysis. The geohydrology report also states that most of the wells drilled for the proposed subdivision will be within a quarter mile of the Ute Lake and that withdrawals from the aquifer will be replenished by recharge from the lake. At the time of this writing there are no requirements in OSE regulations or in the Quay County Subdivision Regulations that applicants for domestic well permits issued under Section 72-12-1 NMSA obtain water rights to offset the effects on surface water or other wells. However, under Permit No. 2900 dated May 28, 1962, the New Mexico Interstate Stream Commission owns all of the surface water rights in Ute Lake, and any groundwater pumping that draws upon surface water stored in the lake may compromise the ability of the ISC to meet existing water supply commitments to communities in the region.¹ It will be necessary therefore, for the developer to obtain water rights for the proposed subdivision to offset the depletion on existing surface water rights. When considering this proposal, the County Commission needs to be aware that approval of this subdivision without prior approval by the OSE of a permit to transfer water rights will precipitate an action by the OSE to seek relief through the District Court. The intent of the OSE is not to curtail development, but rather, to maintain the delicate balance between water supply and demand.

The Quay County Subdivision Regulations provide no guidance with regards to when a community water system is required. However, Section 47-6-11.2(B) of the New Mexico Subdivision Act states that *“On or after July 1, 1997, before approving the final plat for a subdivision containing 20 or more parcels, any one of which is two acres or less in size, the board of county commissioners may require that the subdivider provide a copy of a permit obtained from the State Engineer, issued pursuant to Section 72-5-1, 72-5-23 or 72-5-24 NMSA 1978, or if the subdivision is located within a declared underground water basin, provide a copy of a permit obtained from the State Engineer issued pursuant to those sections, or to Section 72-12-3 or 72-12-7 NMSA 1978, for the subdivision water use.”* The purpose of this requirement is to provide centralized community water systems with sufficient water rights to meet the projected demand.

In the Ute Ranch Subdivision proposal there are more than 20 parcels and the smallest is less than two acres. The number and size of the parcels in the proposed subdivision along with the need for the developer to obtain water rights to offset the effects of groundwater pumping on Ute Lake suggests that a community water system will be required. The need for a community water system is further supported by the fact that the acquisition and transfer of surface water rights to individual domestic wells may not be practical administratively.

¹ Clovis, Elida, Grady, Logan, Melrose, Portales, Texico, Tukumcari, San Jon, and Curry, Roosevelt, and Quay Counties. Contractual agreements with these entities requires the entire annual yield of Ute Reservoir.

FIRE PROTECTION

The nearest fire station is 7.5 miles from the southern edge of the proposed subdivision and the developer has reserved a lot at the edge of the subdivision for a future fire station. The developer has not provided a letter from the local fire authority with a firm commitment to provide fire protection service to the proposed subdivision and the anticipated travel time as required by Section 8.8.1(d) of the County Subdivision Regulations.

DISCLOSURE STATEMENT AND RESTRICTIVE COVENANTS

In Item 7 of the developer's Disclosure Statement, reference is made to restrictions requiring the use of water saving fixtures and water conservation landscaping. The developer should specify the maximum amount of water that may be delivered to each parcel in one calendar year and limit the total irrigated area per parcel to be consistent with the water demand analysis. As noted above, it is suggested that the total irrigated area be limited to 800 square feet per parcel. The 800 square feet may be planted in any combination of trees, shrubs, annuals and perennials, and grasses. Non-native grasses such as Kentucky bluegrass and Tall Fescue are discouraged. Low-water-use landscaping techniques applying the principles of xeriscape should be utilized. Drip irrigation is encouraged wherever possible. Irrigation with rainwater collected by means confined to the property or with recycled household gray water is encouraged.

CONCLUSION

The water supply proposal for the Ute Ranch Subdivision does not satisfy the requirements of the Quay County Subdivision Regulations. There are minor deficiencies in the water demand analysis, fire protection plan, and disclosure statement that need to be corrected, and the water rights issue must be resolved to the satisfaction of the Interstate Stream Commission. The OSE is prepared to re-evaluate the development proposal when these items have been addressed. If you have any questions, please call Brian Wilson at 505-827-6121. To access OSE Technical Report 48 online, visit our website at:

http://www.seo.state.nm.us/publications/tech_rpts/rpt-48/rpt-48-toc.html

Sincerely,

Brian C. Wilson, P.E.
Bureau Chief,
Water Use and Conservation