

August 17, 2006

Randy Williams
Subdivision Coordinator
Curry County
700 N. Main Street, Suite 6
Clovis, NM 88101

CERTIFIED MAIL
RETURN RECEIPT
REQUESTED

Re: Eagle Crest Subdivision

Dear Mr. Williams:

The Water Use & Conservation/Subdivision Review Bureau of the Office of the State Engineer (OSE) has reviewed the referenced subdivision proposal pursuant to the Curry County Subdivision Regulations, Title 19, Chapter 27, Part 5 of the New Mexico Administrative Code, and the New Mexico Subdivision Act.

Based on the information provided, this office cannot determine that the subdivider can furnish water sufficient in quantity to fulfill the maximum annual water requirements of the subdivision, including water for indoor and outdoor domestic uses, and that the subdivider can fulfill the proposals in his disclosure statement concerning water, excepting water quality. Accordingly, a **negative** opinion is issued.

A staff memorandum providing the specific comments is attached for your information. If you have any questions, please call Jerry Keller at 505-827-3845.

Sincerely,

John W. Longworth, P.E.
Water Use & Conservation/Subdivision Review Bureau Chief

Encl.

cc: OSE Water Rights Division, Albuquerque Office

JK:jk

MEMORANDUM
New Mexico Office of the State Engineer
Water Use and Conservation Bureau

DATE: August 16, 2006

TO: John Longworth, P.E. Water Use & Conservation Bureau Chief

THROUGH: Mara Smith, Water Resource Master

FROM: Jerry Keller, Senior Water Resource Specialist

SUBJECT: Eagle Crest Subdivision, Curry County

SUMMARY

On July 19, 2006, the Office of the State Engineer (OSE) received a request to review the Preliminary Plat for Eagle Crest, a Type-Two Subdivision. The proposal is a request to subdivide a 240-acre parcel into 85 residential lots ranging in size from 2.01 to 3.75 acres each. The proposed water supply is individual 72-12-1 domestic wells. The property is located approximately 2 miles north of the City of Clovis on the north side of Curry Road 14, within Section 24, Township 3 North, Range 35 East, NMPM.

The water supply documents submitted to this office consist of a Disclosure Statement, Water Use and Conservation Requirements, Water Availability Assessment Report, and Plat Map.

This proposal was reviewed pursuant to the Curry County Subdivision Regulations (Regulations), Title 19, Chapter 27, Part 5 of the New Mexico Administrative Code (19.27.5 NMAC), and the New Mexico Subdivision Act (Act). The water supply proposal is not in compliance with 19.27.5.9.D.1 NMAC and Section 47-6-11-F- (1) of the Act. Accordingly, a **negative** opinion should be issued.

WATER DEMAND ANALYSIS AND WATER CONSERVATION

Attachment 2, Section C, Subsection 2-A of the Regulations limits the maximum annual water requirements for each parcel in a residential subdivision relying on individual wells or shared wells to 3 acre-feet per year. Under Item No. 17 of the Disclosure Statement the subdivider has described the maximum annual water requirements of the subdivision as 3.0 acre-feet per parcel and 255 acre-feet for the subdivision.

Updated rules and regulations on 72-12-1.1 domestic well permits were adopted on August 15, 2006 and filed under Title 19, Chapter 27, Part 5 of the New Mexico Administrative Code (19.27.5 NMAC). The updated rules and regulations replaced Articles 1-15 through 1-15.5, 1-15.7, 1-15.8, and 1-16 of the existing Rules and Regulations Governing the Drilling of Wells and the Appropriation and Use of the Ground Water in New Mexico. Under Section 19.27.5.9.D.1 of the regulations the maximum permitted diversion of water from a 72-12-1.1 domestic well permitted to serve one household shall not exceed 1.0 acre-foot per annum.

The proposal includes a detailed water demand analysis following the procedures presented in OSE Technical Report 48 (Wilson, 1996). The subdivider has quantified the annual indoor water requirements as 0.29 acre-feet per year per lot, assuming 3 persons per dwelling at 85 gallons per capita per day. The analysis assumes that all homes will use low water use plumbing fixtures, evaporative coolers and water softeners.

Two scenarios are presented for outdoor use. An estimate of 13,840 gallons per year based on a total irrigated area of 800 square feet with an average demand of 17.3 gallons per square foot. This results in a total annual demand of 0.327 acre-feet lot. A second estimate of 753,588 gallons per year is based on a total irrigated area of one acre (43,560 Square-feet) at 17.3 gallons per square foot. The total annual demand is 2.59 acre feet per parcel, which exceeds the total allowable diversion under an individual domestic well permit issued pursuant to 19.27.5 NMAC.

Under Item No. 20 of the Disclosure Statement the subdivider states that the subdivision is expected to use less than 90 acre-feet per year.

The subdivider should establish one water budget and clearly state the water budget in the Disclosure Statement.

WATER AVAILABILITY ASSESSMENT

The proposed water supply for the subdivision is individual 72-12-1.1 domestic wells. Attachment 2, Section 4.B.4, requires that for subdivisions where the source of water will be individual domestic wells the subdivider shall demonstrate a reasonably water plan.

The subdivider submitted a Water Availability Assessment Report as required by Attachment 2, Section 4.F of the Regulations. The Report contains a well log for one onsite well located near the northwest corner of the property. Three additional well logs are included for offsite wells within Section 30, Township 3 North, Range 35 East. The Report states that these wells are located immediately adjacent and to the southeast of Section 24, however these wells are located several miles southwest of the proposed subdivision and cannot be considered existing nearby wells.

The Report summarizes that the water table within the general area is expected at a depth of 368 to 383 feet and the recommended total depth of wells is 417 to 425 feet. The Report indicates that the groundwater level has been declining at an average rate of 3.5 feet per year, but may be exhibiting some localized recovery recently. It has been widely reported by the USGS and others that the High Plains Aquifer has experienced significant water level declines in this area.

Based on the expected depth to water and the recommended depth of wells, the water column in the subdivision wells may be as little as 42 feet. Applying a safety factor of 20% the available drawdown may be as little as 34 feet. Assuming no water is available below the total depth of the

well and the groundwater levels continue to decline at a rate of 3.5 feet per year, the wells may be dewatered in as little as 10 years.

Under Item No. 17 of the Disclosure Statement the subdivider states that a 40-year supply of water cannot be guaranteed from this formation. This office concurs with this conclusion and therefore, the proposal is not in compliance with section 47-6-11-F (1) of the Act.

Under Item No. 20 the subdivider states that as lands are removed from agriculture usage sufficient water for domestic usage should be available for 40+ years. It is the opinion of OSE that the developer has not provided any evidence to support this speculation.