

IN THE DISTRICT COURT IN AND FOR  
 WATER DIVISION NO. 3  
 STATE OF COLORADO  
 Case No. W-3345

APR 10 1975

SARLA R. GILBERT  
 WATER DIVISION

IN THE MATTER OF THE )  
 APPLICATION FOR )  
 WATER RIGHTS OF: )  
 MALCOLM G. STEWART, JR.)  
 IN ALAMOSA COUNTY )  
 FINDINGS OF FACT, CONCLUSIONS  
 OF LAW, AND DECREE APPROVING  
 PLAN FOR AUGMENTATION  
 INCLUDING EXCHANGE

THIS MATTER, having come on for hearing on April 10, 1975, upon the application of Malcolm G. Stewart, Jr., for approval of a plan for augmentation including exchange which was filed on November 29, 1974, and the Court having considered the pleadings, the files herein, and the evidence presented, FINDS:

1. Timely and adequate notice of this proceeding has been given in the manner required by law, and the Water Judge sitting in this Court has jurisdiction over the subject matter of these proceedings and over all parties affected hereby, whether they have appeared or not. No parties have appeared to object to this proceeding, and the time for filing statements of opposition has expired.

2. Applicant is the owner of the following water rights:

	<u>Ditch</u>	<u>Source</u>	<u>Decreed Amount</u>	<u>Priority Date</u>	<u>Location of Headgate (R73W, 6th P.M.)</u>
a.	Meyer Ditch	N. Zapata Creek	7.0 cfs. 19.66 cfs.	4/1/1873 5/1/1886	SE $\frac{1}{4}$ Sec. 33, T27S
b.	Old Hillside Ditch	M. Zapata Creek	1.0 cfs. 1.0 cfs.	12/31/1890 4/11/1909	NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 3, T29S
c.	Little Alta Ditch	Slag Creek	.5 cfs. .5 cfs.	12/31/1891 4/11/1909	SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 10, T28S
d.	Zapata Ditch	N. Zapata Creek	25.0 cfs.	7/1/1901	NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 32, T27S
e.	Supply Ditch No. 4	S. Zapata Creek	5.0 cfs.	7/1/1901	NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 9, T28S
f.	Zapata Ditch No. 3	S. Zapata Creek	16.0 cfs.	2/19/1909	NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 16, T28S
g.	Shady Retreat Ditch	S. Zapata Creek	3.33 cfs. 3.33 cfs. 10.0 cfs.	4/1/1879 4/1/1882 1/1/1889	NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 16, T28S
h.	Galloway Ditch	M. Urraca Creek	1.25 cfs.	5/1/1886	NE $\frac{1}{4}$ Sec. 20, T28S

	<u>Ditch</u>	<u>Source</u>	<u>Decreed Amount</u>	<u>Priority Date</u>	<u>Location of Headgate (R73W, 6th P.M.)</u>
i.	Little Frankie Ditch	M. Urraca Creek	.5 cfs. .66 cfs.	4/1/1881 9/1/1887	Sec. 17, T28S
j.	Urraca Ditch	M. Urraca Creek	.83 cfs.	5/25/1887	SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ , Sec. 18, T28S
k.	S. Urraca Ditch	S. Urraca Creek	.5 cfs.	6/1/1887	NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 19, T28S

Total Decreed Amount.....96.06 cfs.

The above-listed water rights are decreed for irrigation purposes, and have been used historically to irrigate an average of 828 acres of native hay annually, with an average annual consumptive use of 1,043 acre feet. Applicant is the only appropriator in the Zapata Creek drainage.

3. The sources of the above-listed water rights - the Zapata Creek and Urraca Creek drainages - are tributary only to the Closed Basin. They are not tributary to any surface stream, except to the extent that they recharge the Confined (artesian) Aquifer which may be considered to be hydraulically connected to the Rio Grande River. Based on current geologic and hydrologic data, waters from the Zapata Creek and Urraca Creek drainages are considered to be sources of recharge to both the Confined and Unconfined Aquifers. It is generally agreed that recharge to the Confined Aquifer from these drainages occurs east of the easternmost boundary of the confining clay layer. Waters entering the Unconfined Aquifer are utilized in irrigation, are lost by evapotranspiration, or eventually reach the "sump area" of the Closed Basin. Insufficient information is available upon which to base an estimate of the amount of water entering the Unconfined Aquifer each year from the Zapata Creek and Urraca Creek drainages. However, available records for the twenty-five year period, 1949-1973, indicate that the combined average annual flow in North and South Zapata Creeks at the point where they cross Colorado Highway 150, which lies some distance west of the easternmost edge of the confining clay layer, has been 2362 acre feet. (See Exhibit "C" attached hereto and incorporated herein by this reference.) It can be concluded, therefore, that historic recharge of the Unconfined Aquifer from the Zapata Creek drainage has been in excess of 2362 acre feet per year.

4. Applicant owns the Zapata Ranch, comprising approximately 7200 acres located about 25 miles northeast of Alamosa. Applicant intends to develop 4279 acres of said land into 1850 residential lots including a 28.41 acre commercial area and a 170 acre golf course. A plat for such development, "Zapata Falls Hideaway Subdivision," has received the preliminary approval of the Alamosa County Planning Commission, and is pending final approval by the Alamosa County Board of County Commissioners. A legal description of said 4279 acres is attached hereto as Exhibit "A", and incorporated herein by this reference.

5. The water supply for said development will be furnished as follows: A total of 1671 lots and the golf course will be served by a central municipal water system utilizing water from South Zapata Creek. A 12-inch pipeline ("Zapata Pipeline") will be constructed to transport water from near the base of Zapata Falls on South Zapata Creek in the NW $\frac{1}{4}$  NW $\frac{1}{4}$  of Sec. 16, T28S, R73W, 6th P.M. to a 100,000 gallon storage tank in the SW $\frac{1}{4}$  SW $\frac{1}{4}$  NE $\frac{1}{4}$  of Sec. 9, T28S, R73W. (See proposed route of pipeline shown in applicant's Exhibit D, ~~admitted~~ admitted into evidence and

incorporated herein by this reference.) A supplemental source of water for the central water system will be provided by drilling five or more wells into the Unconfined Aquifer west of the eastern edge of the confining clay layer which traverses the development as shown on Exhibit "B" attached hereto and incorporated herein by this reference. Water in excess of the requirements of the residential units constructed on the 1671 lots served by the central water system will be transported through the distribution system for storage in a 35-40 acre ~~fact~~ reservoir ("Lake of the Falls") to be constructed in the SW $\frac{1}{4}$  SE $\frac{1}{4}$  of Sec. 31, T27S, R73W, 6th P.M. Said reservoir, which will also store water from North Zapata Creek, will be used for irrigation of the historically irrigated acreage on the Zapata Ranch.

A total of 179 lots in the southwestern portion of the development lying west of the eastern edge of the confining clay layer will be served by individual on-lot domestic wells drilled into the Unconfined Aquifer. The 28.41 acre commercial area will be served by one or more on-site shallow wells, or if insufficient water is available from on-site wells, will be served either by wells in the Unconfined Aquifer to be located within the subdivision in the SE $\frac{1}{4}$  of Sec. 30, or the E $\frac{1}{2}$  of Sec. 31, T27S, R73W, 6th P.M., or by the central water system.

6. The commercial area and 1375 of the 1850 platted residential lots will utilize individual septic systems, with 10% consumptive use. The remaining 475 lots will utilize evapotranspiration sewage systems, with 100% consumptive use. Lawn irrigation will not be permitted. The resulting annual consumptive use for the 1850 single-family residential equivalent units, assuming three persons per unit, a daily water requirement of 100 gallons per person, and 100% year-around occupancy, is estimated to be 205.80 acre feet. The annual consumptive use of the commercial area at full development is estimated to be 3.84 acre feet. The annual consumptive use of the 170 acre golf course is estimated to be 214.20 acre feet. Net evaporation losses from the 6 acre surface area of the reservoir are estimated at 19.20 acre feet annually. The resulting total projected annual consumptive use of the development, assuming 100% year-around occupancy, is 443.04 acre feet.

7. Pursuant to the plan for augmentation filed herein, applicant proposes to modify the water rights listed in paragraph 2 of these Findings so as to permit the change of place, type, and time of use of said rights to furnish a year-around municipal water supply to the proposed development as described herein, and to permit the diversion of water pursuant to each of said rights at the following alternate points of diversion:

- a) The intake of Zapata Pipeline to be constructed at a point on South Zapata Creek near the base of Zapata Falls in the NW $\frac{1}{4}$  NW $\frac{1}{4}$  Sec. 16, T28S, R73W, of the 6th P.M.
- b) Five or more wells to be drilled into the Unconfined Aquifer west of the eastern edge of the confining clay layer. The exact number and legal descriptions of the locations of such wells will be furnished to the Court when such information has been determined.
- c) 179 on-lot domestic wells to be drilled into the Unconfined Aquifer west of the eastern edge of the confining clay layer in the southwestern portion of the development. Legal descriptions of the locations of such wells will be furnished to the Court when such information has been determined.
- d) One or more wells to be drilled on the 28.41 acre commercial area in the E $\frac{1}{2}$  of Sec. 29, T27S, R73W, 6th P.M.,

or into the Unconfined Aquifer in the SE $\frac{1}{4}$  of Sec. 30 or the E $\frac{1}{2}$  of Sec. 31, T27S, R73W, 6th P.M. The exact number and legal descriptions of the locations of such wells will be furnished to the Court when such information has been determined.

8. Applicant is the only appropriator on the Zapata Creek drainage. Therefore, the diversion of water pursuant to applicant's South Zapata Creek rights, and by exchange pursuant to his North Zapata Creek, Middle Zapata Creek, Slag Creek, Middle Urraca Creek, and South Urraca Creek rights, at the intake of the Zapata Pipeline on South Zapata Creek as an alternate point of diversion will cause no injury to the owners or users of other water rights.

9. The withdrawals of water from the Unconfined Aquifer through the wells contemplated herein will cause no injury to other wells in the Unconfined Aquifer, or to any surface rights. The Unconfined Aquifer is tributary only to the Closed Basin, and is not hydraulically connected to the Rio Grande River or any other stream. To the extent that water entering the Unconfined Aquifer is not utilized in irrigation, it is not available for beneficial uses, as it is lost by evapotranspiration or eventually reaches the "sump area" of the Closed Basin. In fact, the policy of the State Engineer is to encourage the use of water from the Unconfined Aquifer for irrigation in order to lower its water table so that the amount of water lost through non-beneficial evapotranspiration can be reduced. Available records indicate that substantially more than 2362 acre feet of water enters the Unconfined Aquifer each year from the Zapata Creek and Urraca Creek drainages in which applicant owns decreed water rights totaling 96.06 cfs. This is well in excess of the 1043 acre feet of historic annual consumptive use resulting from applicant's use of these rights for the irrigation of 828 acres of native hay. Since the return flows from this historically irrigated acreage go to the Unconfined Aquifer only, removal of this acreage from irrigation would not benefit the Confined Aquifer, and would not make additional water available for beneficial use. For these reasons, applicant shall not be required to remove said historically irrigated acreage from irrigation.

10. If the 28.41 acre commercial area of the proposed subdivision is served by one or more wells located thereon in an area of potential recharge to both the Confined and Unconfined Aquifers, the effect on the Confined Aquifer will be minimal. The estimated annual water requirement of the commercial area is 38.37 acre feet of which 3.84 acre feet will be consumptively used. Assuming that 50 per cent of the 34.53 acre feet return flows recharge each aquifer, the net loss to the Confined Aquifer would be 1.92 acre feet annually.

11. From the evidence submitted herein, it appears that the plan for augmentation proposed by applicant will not cause material injury to the Confined Aquifer. The estimated annual water requirements of the portions of applicant's proposed development which will be supplied by the Zapata Pipeline (1196 lots utilizing non-evaporative septic systems, 475 lots utilizing evapotranspiration sewage systems, and the 170 acre golf course) are 986.46 acre feet. Of this, at full development an estimated 413.99 acre feet will be consumptively used, assuming 100 per cent, year-around occupancy. About 511.09 acre feet of the total return flows of 572.47 acre feet will be in areas of potential recharge to the Confined Aquifer. During times when, due to insufficient physical supply in South Zapata Creek at the intake of the Zapata Pipeline, the

five or more large capacity wells are used as a supplemental supply for the central water system, additional water will be withdrawn from the Unconfined Aquifer and discharged in areas of potential recharge to the Confined Aquifer.

As described above, available records indicate that an annual average of substantially in excess of 2362 acre feet of water from the Zapata Creek drainage alone crosses the eastern edge of the confining clay layer, beyond which recharge occurs only to the Unconfined Aquifer. The presence of any surface stream flow west of the eastern edge of the confining clay layer indicates that the full amount of normal recharge to the Confined Aquifer from that source has occurred.

Except in years when the runoff from the Zapata Creek and Urraca Creek drainages is such that in the absence of applicant's development their combined flow at the point where they cross the eastern edge of the confining clay layer would be less than 413.99 acre feet - the estimated maximum consumptive use by the portion of the development served by Zapata Pipeline - the development will have no adverse effect on the Confined Aquifer. Of the 19 years of record on the Zapata Creek drainage alone, this has occurred only once - in 1972. (See Exhibit "C" attached hereto.)

In such years, however, the Confined Aquifer will be benefited by the plan for augmentation proposed herein, because the development will utilize the five or more large capacity wells in the Unconfined Aquifer, rather than Zapata Pipeline, to supply its central water system, and the return flows from these wells will be in areas of potential recharge to the Confined Aquifer.

12. In order to facilitate the administration of the plan for augmentation proposed herein, measuring devices approved by the Division Engineer or his representative shall be installed at the intake of the Zapata Pipeline and on the five or more large capacity wells to be drilled into the Unconfined Aquifer.

13. Applicant's proposed wells are not located within a designated ground water basin.

14. The Court finds that by imposition of the conditions set forth in these Findings, ground water withdrawals to provide a domestic and municipal water supply to applicant's proposed subdivision will not cause material injury to any vested water rights or decreed conditional water rights in Water Division No. 3, and that by the institution of the plan for augmentation set forth herein, applicant may make the ground water withdrawals contemplated therein without the necessity of curtailing such withdrawals in times of shortage.

15. The Court finds, as a matter of hydrological and geological fact, that pursuant to the operation of the plan of augmentation set forth herein, there is unappropriated water available for the ground water withdrawals contemplated herein, and that no other vested water rights or decreed conditional water rights will thereby be impaired.

#### CONCLUSIONS OF LAW

The Court concludes, as a matter of law:

1. The plan for augmentation proposed herein by applicant is one contemplated by law, and if administered in accordance with this

decree will not cause material injury to any vested or decreed conditional water rights in Water Division No. 3.

2. The State Engineer may lawfully be required under the terms of this decree to administer the plan for augmentation in the manner set forth herein, to issue permits for construction of the wells contemplated herein, and in times of shortage not to curtail diversions through any of said wells.

#### DECREE

IT IS THEREFORE ORDERED, ADJUDGED AND DECREED:

1. The plan for augmentation proposed by applicant herein, as modified by the terms of this decree, is hereby approved.

2. The State Engineer in the discharge of his responsibilities with respect to the processing of applications for permits to construct and utilize the wells contemplated herein for the provision of domestic and municipal water service, without irrigation, to applicant's proposed development, shall recognize the existence and operation of the plan for augmentation approved herein, and shall not deny permits for such wells.

3. The State Engineer, the Division Engineer, and their representatives shall administer the plan for augmentation approved herein in accordance with the Findings of Fact contained herein.

4. The water rights listed in paragraph 2 of the Findings of Fact herein are hereby modified so as to change the place, type, and time of use of water diverted pursuant to said rights in order to furnish a year-around domestic and municipal water supply to the proposed development as described herein, and for the other purposes contemplated in the plan for augmentation approved herein.

5. Water may be diverted pursuant to said water rights at the following alternate points of diversion:

- a) The intake of Zapata Pipeline to be constructed at a point on South Zapata Creek near the base of Zapata Falls in the NW $\frac{1}{4}$  NW $\frac{1}{4}$  Sec. 16, T28S, R73W, of the 6th P.M.
- b) Five or more wells to be drilled into the Unconfined Aquifer west of the eastern edge of the confining clay layer. The exact number and legal descriptions of the locations of such wells shall be furnished to the Court when such information has been determined.
- c) 179 on-lot domestic wells to be drilled into the Unconfined Aquifer west of the eastern edge of the confining clay layer in the southwestern portion of the development. Legal descriptions of the locations of such wells shall be furnished to the Court when such information has been determined.
- d) One or more wells to be drilled on the 28.41 acre commercial area in the E $\frac{1}{2}$  of Sec. 29, T27S, R73W, 6th P.M., or into the Unconfined Aquifer in the SE $\frac{1}{4}$  of Sec. 30 or the E $\frac{1}{2}$  of Sec. 31, T27S, R73W, 6th P.M. The exact number and legal descriptions of the locations of such wells shall be furnished to the Court when such information has been determined.

6. Applicant shall be entitled to continue diverting water pursuant to said water rights for irrigation of the acreage historically irrigated therewith, and shall not be required to remove any portion of said acreage from irrigation.

7. In order to facilitate the administration of the plan for augmentation set forth herein, measuring devices approved by the Division Engineer or his representatives shall be installed at the intake of the Zapata Pipeline, and on the five or more large capacity wells to be constructed in the Unconfined Aquifer.

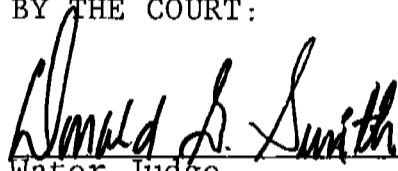
8. It is hereby further decreed that as a matter of hydrological and geological fact, pursuant to the operation of the plan of augmentation approved herein there is unappropriated water available for the ground water withdrawals contemplated herein, and that no material injury to vested or decreed conditional water rights in Water Division No. 3 will result therefrom.

9. Neither the State Engineer nor the Division Engineer or their representatives shall curtail the diversion of ground water through any of the wells contemplated in the plan for augmentation approved herein, so long as said plan for augmentation is being administered in accordance with this decree.

10. In the processing of well permit applications for the 179 individual, on-lot wells contemplated in the plan for augmentation approved herein, the State Engineer shall require each applicant, as a condition precedent to the issuance of any such well permit, to attach to his application a receipt from the Water Clerk of Water Division No. 3 for payment of the \$5.00 filing fee required under C.R.S. 1973, 37-92-302 (1) (d).

Dated this 10<sup>th</sup> day of APRIL, 1975.

BY THE COURT:

  
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Water Judge  
Water Division No. 3  
State of Colorado