

DISTRICT COURT, WATER DIVISION NO. 2, STATE OF COLORADO

Consolidated Cases Nos. 82CW370 (Water Division No. 1) and
82CW180 (Water Division No. 2)

FINDINGS OF FACT, CONCLUSIONS OF LAW, JUDGMENT AND DECREE

IN THE MATTER OF THE APPLICATION FOR APPROVAL OF PLAN FOR AUGMENTATION INCLUDING EXCHANGE AND PROVISION OF SUBSTITUTE SUPPLIES OF WATER OF NORTHGATE CO., A COLORADO GENERAL PARTNERSHIP, IN THE ARKANSAS AND SOUTH PLATTE RIVER SYSTEMS AND THEIR TRIBUTARIES, IN EL PASO COUNTY, COLORADO.

THIS MATTER having come on to be heard upon the application of Northgate Co., a Colorado general partnership, and the Court having considered the application, the evidence submitted herein, and the stipulations of the parties hereto, FINDS:

1. Applicant. The name and address of the applicant is Northgate Co., P.O. Box 280, Colorado Springs, Colorado 80901.

2. Jurisdiction. The application herein was filed in both Water Division No. 1 and Water Division No. 2 on October 29, 1982. The application was filed with both courts because some of the wells to be augmented will be located within the drainage basin of the South Platte River and its tributaries, thereby vesting jurisdiction in the District Court for Water Division No. 1 over the part of the augmentation plan relating to those wells, while the remainder of the wells to be augmented pursuant to this plan will be located within the drainage basin of the Arkansas River and its tributaries, thereby vesting jurisdiction in the District Court for Water Division No. 2 over the part of the augmentation plan relating to those wells. The application was published in the October resumes for Water Divisions No. 1 and No. 2.

On January 14, 1983, Applicant petitioned the Colorado Supreme Court, under Case No. 83SA19, for an order temporarily assigning the District Judge for Water Division

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No. 2 as district judge for Water Division No. 1, so that Case No. 82CW370 in Water Division No. 1 could be consolidated with Case No. 82CW180 in Water Division No. 2. The Supreme Court granted Applicant's motion on February 17, 1983, and Case No. 82CW370 in Water Division No. 1 was thereupon transferred to the District Judge for Water Division No. 2. Upon motion of Applicant, Case No. 82CW370 was consolidated with Case No. 82CW180 in this Court.

Timely and adequate notice of this proceeding has been provided in the manner required by law, and this Court therefore has jurisdiction over the subject matter of this proceeding and over all parties affected hereby, in both Water Division No. 1 and Water Division No. 2, whether they have appeared or not.

3. Parties. Statements of opposition have been filed herein by Woodmoor Water and Sanitation District No. 1 and by the State Engineer and Division Engineers for Water Divisions Nos. 1 and 2. Entries of appearance have been filed herein by District 10 Water Users Association and by Gary Construction Company. No other parties have entered their appearance in this proceeding and the time for filing statements of opposition has expired.

4. - The Development. The plan of augmentation decreed herein is intended to provide water service to 736 acres of land which Applicant owns and intends to develop as a residential subdivision known as Arrowwood IV. The land will be subdivided into lots ranging in size from 2.5 to 3.1 acres, on which a maximum of 221 single-family homes will be constructed. The development is located four miles east of the Town of Monument and includes portions of Sections 17, 19, and 20, all within Township 11 South, Range 66 West, 6th P.M., as more fully described on the attached Exhibit A (the "subject property"). Approximately 60% of the property is within the surface water drainage basin of West Cherry Creek, a tributary of the South Platte River. The other 40% of the property is located within the surface water drainage basin of Jackson Creek, a tributary of Monument Creek, which is tributary to the Arkansas River. The location of the surface water divide is shown on the attached Exhibit B.

5. Water Supply. Water service to the homes at Arrowwood IV will be provided by means of wells constructed

by the homeowners into the Dawson Arkose Formation. Each well is anticipated to serve only one single-family home, so that a maximum of 221 wells will be drilled; however, some of the wells may serve more than one home, thereby reducing the total number of wells. The water to be withdrawn from these wells is tributary groundwater, and the State Engineer has indicated that he will not approve well permits unless a decreed plan for augmentation is in effect. The purpose of this plan therefore is to provide for the replacement of depletions caused by wells at Arrowwood IV, in order to protect senior water rights, so that well permits may be secured.

6. Groundwater Divide. Applicant's engineers have estimated, using the best engineering information currently available, that the groundwater divide is north of the subject property, so that all of the water to be withdrawn from the Dawson Arkose wells would be tributary to Monument Creek and the Arkansas River System. The State Engineer's Office believes, however, that the groundwater divide may be coincident with the surface water divide, so that approximately 60% of the wells would be tributary to the South Platte River System and approximately 40% of the wells would be tributary to the Arkansas River System. The Court finds that the exact location of the groundwater divide in the vicinity of Arrowwood IV cannot be determined on the basis of currently available information, but further finds that this determination may be made most accurately using information obtained from the individual Dawson Arkose wells once they are drilled.

7. Water Uses. Arrowwood IV is intended to be a permanent, year-round residential subdivision. Consequently, water at the development will be used for in-house domestic purposes, and for outdoor uses incidental to home ownership, including the irrigation of lawns and the filling and maintenance of swimming pools. The protective covenants to be recorded for Arrowwood IV will limit lawn size to 2,000 square feet per residence and will restrict the number of pools to a maximum of 5% of the homes, or 11 pools in total.

8. Water Demand. In-house water demand per residence has been calculated based on an average of 3-1/2 people per unit, use of 80 gallons per day per person, and

occupancy 365 days per year, for an in-house demand of 0.314 acre-foot per household per year. In addition, irrigation water demand has been estimated using an average of 2,000 square-feet of irrigated lawn per residence, and an average annual application of 2.0 acre-feet per acre, for an irrigation demand of 0.09 acre-foot per residence per year. Furthermore, it is estimated that each residence having a swimming pool will require an additional 15,000 gallons or 0.045 acre-foot per year to maintain the water level of the pool. Based upon these assumptions total gross water demand for 221 homes will be 90.1 acre-feet per year.

9. Consumptive Use. Disposal of household wastewater at Arrowwood IV will be by means of individual septic tanks and leach fields, resulting in consumption of 10% of in-house demand, or 0.0314 acre-foot per household, for a total of 6.93 acre-feet at full buildout. Irrigation consumption has been estimated as 1.55 acre-feet per acre per year, using modified Blaney-Criddle coefficients for blue grass and using an assumption of a full water supply. Consumptive use resulting from irrigation at Arrowwood IV, assuming an average lawn of 2,000 square feet will be approximately 0.071 acre-foot per residence or 15.73 acrefeet per year at full buildout; actual depletions will be calculated on the basis of surveyed irrigated acreage. In addition, consumption of water used to fill and maintain the swimming pools has been assumed to be 100%, so that each pool will cause an average additional consumptive use of 0.045 acre-foot per year, or 0.50 acre-foot for 11 pools. Again, actual depletions will be calculated on the basis of metered diversions for use in the pools.

As homes are constructed at Arrowwood IV, the consumptive use depletions will be calculated according to the following formula:

$0.0314 \times \text{number of homes} + 1.55 \times \text{number of irrigated acres (surveyed)} + \text{metered quantity of water for pool use}$

Consumptive use at full buildout will be approximately 23.16 acre-feet per year.

10. Augmentation Supply. The augmentation supply will be provided from one or more of the following decreed,

non-tributary wells owned or to be developed by Applicant:

(a) Well No. 1-17798-F which was decreed for 121-acre feet of non-tributary water per year from the Dawson Arkose Formation by decree of the District Court in and for Water Division No. 1 in Case No. W-8269-76 on December 10, 1976. This well has been drilled and completed to a depth of approximately 1,000 feet and is located about one-quarter mile northeast of Arrowwood IV in Section 17, Township 11 South, Range 66 West, 6th P.M. at a point 100 feet South and 75 feet West of the Northeast corner of said Section 17.

(b) Well A-D-1, permit no. 22602-F, which has been permitted for 100 acre feet and decreed for a maximum of 149 acre-feet of nontributary water per year from the Denver Formation by decree of the District Court in and for Water Division No. 1 in Case No. 82CW295 on November 23, 1983. The well will be drilled to a depth of approximately 1950 feet and will be located at a point in the NW1/4NE1/4 of Section 20, Township 11 South, Range 66 West, 6th P.M., El Paso County, approximately 40 feet South of the North section line and 2100 feet West of the East section line of said Section 20.

(c) Well A-D-2, permit no. 22603-F, which has been permitted for 57 acre-feet and decreed for a maximum of 87 acre-feet of non-tributary water per year from the Denver Formation by decree of the District Court in and for Water Division No. 1 in Case No. 82CW295 on November 23, 1983. The well will be drilled to a depth of approximately 1950 feet and will be located at a point in the NW1/4SE1/4 of Section 17, Township 11 South, Range 66 West, 6th P.M., at a point approximately 2300 feet North of the South section line and 2010 feet West of the East section line of said Section 17.

The water to be produced from each of these wells has been permitted and decreed as non-tributary water, and Applicant therefore has the right to consume such water totally and to use it for all purposes, including augmentation and replacement.

11. Initial Augmentation Plan. Applicant proposes to augment the depletions resulting from the use of water from the individual Dawson Arkose Aquifer wells by discharging non-tributary water to the surface stream system in an amount calculated to replace those depletions. Initially,

Applicant proposes to deliver to the Arkansas River System an amount of non-tributary water equal to the entire consumptive use attributable to the use of water at all homes constructed at Arrowwood IV, which amount will be calculated according to the formula set forth in paragraph 9 above, to a maximum of approximately 23.16 acre-feet at full build out of 221 homes. In addition, during the initial phase of this plan, Applicant will deliver to the South Platte River System an amount equal to the consumptive use attributable to the use of water by those homes having wells whose wellheads are located within the surface drainage basin of the South Platte River System, which amount will also be calculated according to the formula set forth in paragraph 9 above, to a maximum of approximately 13.90 acre-feet for 133 wells (60% of the total) which may be so located. In this manner, Applicant will replace 100% of the subdivision depletions to the Arkansas River System, in accord with its assumption that all of the Dawson Arkose wells on the subject property are tributary to that system, and will also replace possible depletions to the South Platte River System in order to satisfy the State Engineer's concern that some of the wells may be tributary to that system.

12. Permanent Augmentation Plan. Once the actual location of the groundwater divide is determined pursuant to paragraph 23 herein, Applicant will discontinue the double augmentation of the wells whose wellheads are located within the surface water drainage basin of the South Platte River system and will thereafter be required to provide non-tributary water only to the stream system determined to be depleted by the use of such wells. The quantity of augmentation water to be provided to each drainage basin after the location of the divide is determined shall be calculated according to the following formulas:

Augmentation water to be provided to South Platte River System =

$0.0314 \times$ number of houses served by wells determined to be tributary to the South Platte River System +(plus)

1.55 x number of acres (surveyed) irrigated by wells determined to be tributary to the South Platte River System + (plus)

Metered quantity of water diverted for pool use from wells determined to be tributary to the South Platte River System

Augmentation water to be provided to Arkansas River System =

0.0314 x number of homes served by wells determined to be tributary to the Arkansas River System + (plus)

1.55 x number of acres (surveyed) irrigated by wells determined to be tributary to the Arkansas River System + (plus)

Metered quantity of water diverted for pool use from wells determined to be tributary to the Arkansas River System.

13. Time of Consumptive Use. For purposes of determining the amount and timing of the delivery of augmentation water to the surface stream systems, irrigation consumptive use (in acre-feet per acre) has been estimated to occur as follows:

April:	0.06
May:	0.20
June:	0.33
July:	0.31
August:	0.26
September:	0.25
October:	<u>0.14</u>
Total:	1.55

It has also been assumed that in-house consumptive use will be constant over the course of the year, and that swimming pool consumptive use will occur during the months of June,

July and August. In addition, it is assumed that depletions occur to the stream during the same month as consumptive use.

14. Augmentation Points. Applicant shall determine the quantities of replacement water to be provided, using the criteria set forth in paragraphs 9 and 11 through 13 above and shall provide such replacement water on a monthly basis or at such other times as may be directed by the Division Engineers for Water Divisions Nos. 1 and 2, and at the following locations:

(a) Nontributary water to be delivered to the South Platte River System shall be discharged to an unnamed stream which is tributary to West Cherry Creek as close as possible to a point along the stream from which the north-east corner of Section 17, Township 11 South, Range 66 West of the 6th P.M. bears North 62° East, a distance of 3400 feet, more or less, or at such other point as may be agreed upon by Applicant and the Division Engineer for Water Division No. 1.

(b) Nontributary water to be delivered to the Arkansas River System shall be delivered to an unnamed stream tributary to Jackson Creek as close as possible to a point along the unnamed stream from which the Northwest corner of Section 20, Township 11 South, Range 66 West, of the 6th P.M. bears West, a distance of 2640 feet, more or less, or at such other point as may be agreed upon by Applicant and the Division Engineer for Water Division No. 2. Until twenty homes are constructed at Arrowwood IV, or until 5 years after the final approval of the plat for Arrowwood IV by El Paso County, whichever occurs first, augmentation water may be provided to the Arkansas River System at this point by temporary means, such as tanker truck or temporary pipeline. Applicant shall give 48 hours notice to the Water Commissioner for Water District No. 10, prior to each discharge by tanker truck.

15. No Injury. If the plan for augmentation is operated and administered as described above, it will replace water to the Arkansas River System on an annual basis, in the amounts of depletions to that system caused by the use of water from tributary Dawson Arkose wells at the Arrowwood IV subdivision, and will also replace water to the South Platte River System, on an annual basis, in the amounts of depletions to that system which may be caused by

the use of water from tributary Dawson Arkose wells at the subdivision. Applicant will thereby insure the balancing of all such depletions and will eliminate the possibility of any injurious effect upon the owner of or person entitled to use water under any vested water rights or decreed conditional water rights in the Arkansas River System or its tributaries or in the South Platte River System or its tributaries.

16. Approval of Plan. If the plan for augmentation is operated and administered in accordance with this decree, the water to be diverted and used by Applicant which might otherwise be considered as appropriated and unavailable for use will now be available for appropriation without adversely affecting the owner of or person entitled to use water under any vested water rights on the South Platte River and its tributaries or the Arkansas River and its tributaries. The Court therefore finds that by the implementation and administration of the plan for augmentation herein approved, Applicant, or its successors or assigns, may secure permits for and use such wells without adversely affecting any vested water rights on the South Platte or Arkansas Rivers or their tributaries, and without the necessity of administering or curtailing the withdrawal of water from any such wells so long as replacement water is made available on an annual basis, in the amount of the depletions caused by use of the wells and the conditions of this decree are being met.

17. Continued Jurisdiction. The Court finds that within a period of five (5) years from the date the decree herein is modified pursuant to paragraph 23 below to include the location of the groundwater divide, experience with the operation of this plan shall have been sufficient to determine whether the decree should be subject to reconsideration on the question of injury to the vested rights of others.

18. Administration. All rights and responsibilities for administering this plan may be assigned by Applicant to an association comprised of the homeowners at Arrowwood IV. The protective covenants to be recorded for Arrowwood IV shall therefore provide for the creation of such an association and shall give it the power and authority to administer this plan. If Applicant desires to

assign the rights and responsibilities under this plan to such an association. Applicant shall also assign to the association this decree and a portion of the augmentation water rights sufficient to provide the required augmentation supply.

CONCLUSIONS OF LAW

The Court concludes as a matter of law:

19. The plan for augmentation proposed by Applicant is one contemplated by law, and if administered in accordance with this decree, will permit the depletions associated with the provision of water service to Arrowwood IV without adversely affecting the owner or user of vested water rights or decreed conditional water rights in the Arkansas or South Platte Rivers or their tributaries.

20. The State Engineer may lawfully be required under the terms of this decree:

(a) to administer and comply with the plan for augmentation in the manner set forth herein;

(b) not to curtail diversions, in times of shortage, through any wells, the depletions from which are replaced on an annual basis by the operation of the augmentation plan herein approved; and

(c) to curtail diversions at any time the development's consumptive use exceeds the net amounts of replacement water available on an annual basis under this plan for augmentation.

JUDGMENT AND DECREE

21. The plan for augmentation as found and described in all preceding paragraphs is hereby approved and paragraphs 1-20 above are hereby incorporated in this decretal portion as if set forth in full.

22. The State Engineer, the Division Engineers for Water Divisions Nos. 1 and 2, and other water administration officials shall administer and comply with the plan for augmentation as herein approved by directing Applicant to

